Climate Action Report 2024

Working smarter for a *sustainable* future

ELSEVIER

Advancing human progress together

From reducing emissions to rethinking publishing, our actions reflect a *commitment* to sustainability, innovation, and a net-zero future

ELSEVIER

Contents

Fast facts

Reducing emissions

↓ 83%

Elsevier has reduced our direct emissions (Scope 1 and Scope 2 location based) by 83% since 2018.

90+

Over 90 partners have switched to providing us with electronic copies of their content, rather than transporting print copies for indexing services.

Integrity in action

86%

86% of our top 200 suppliers based on spend disclosed CO_2 data in 2024.

94%

This supplier group represents around **94%** of our total supplier spend.

We published **3 analytical reports** to drive key insights.

Office spaces

75% of energy used in our **Chennai office** now comes from renewable sources.

In 2024 our **London office** switched to a green energy supplier.

We maintained our ISO 14001 international standard for environmental management system **covering the whole company** to ensure that we continue to take proactive measures to reduce our environmental footprint.

The Elsevier Foundation

50%

Since 2021, The Elsevier Foundation has ensured **50%** of funding has been granted for projects considering climate dimensions.

Commitment to sustainability

We introduced a commitment to sustainability on our conference websites and calculate the carbon footprint of all our Elsevier organized international academic conferences.

Our performance

In 2024, our parent company, RELX updated our validated science-based targets that cover the whole RELX group including Elsevier. This included extending our targets for Scope 1 and Scope 2 to a 2030 deadline and for the first time setting targets on Scope 3 emissions and supplier engagement. The carbon performance of RELX and specifically for Elsevier is assured by EY with additional targets that cover broader environmental impacts of our operations, such as energy and waste, that are reported in the RELX annual report.

RELX has been recognized for its strong environmental, social and governance (ESG) practices. RELX is recognized as a top performer in Morningstar's *Best Sustainable Companies to Own in 2025* and ranked second in the media sector and in the top 1% in the global universe by Sustainalytics. Additionally, RELX has held a AAA rating, which is considered a "leader" for nine consecutive years by MSCI.

Elsevier emissions

Elsevier emissions	2024	2023	2018 baseline	Reduction % since 2018
Scope 1: Direct Emissions tCO_2e	463	1,075	2,737	83%
Scope 2: Location-based emissions tCO_2e	2175	2,909	12,042	82%
Scope 2: Market-based emissions tCO_2e	1,468	1,283	2,238	40%
Scope 3: CO_2e flights	5,429	5,172	19,802	76%
Total energy	6,578	10, 953	29,589	78%
Water	23,794	22,116	71,583	68%
Waste sent to landfill	17	22	345	95%

Progress towards net zero

Elsevier's direct emissions have been reduced by 83% from a 2018 baseline, marking a significant milestone in climate action. This progress brings us within reach of the Corporate Net Zero Standard which urges companies to cut emissions, usually more than 90%, before 2050. Tackling indirect emissions within our supply chain (i.e. Scope 3 emissions) was a critical focus in 2024, continued strategic focus and action will be crucial in closing the final gap and achieving full alignment with our climate goals to reach net zero by 2040.

Further information is available on our climate action program structure and governance is available in our inaugural *2022 Climate Action report*.

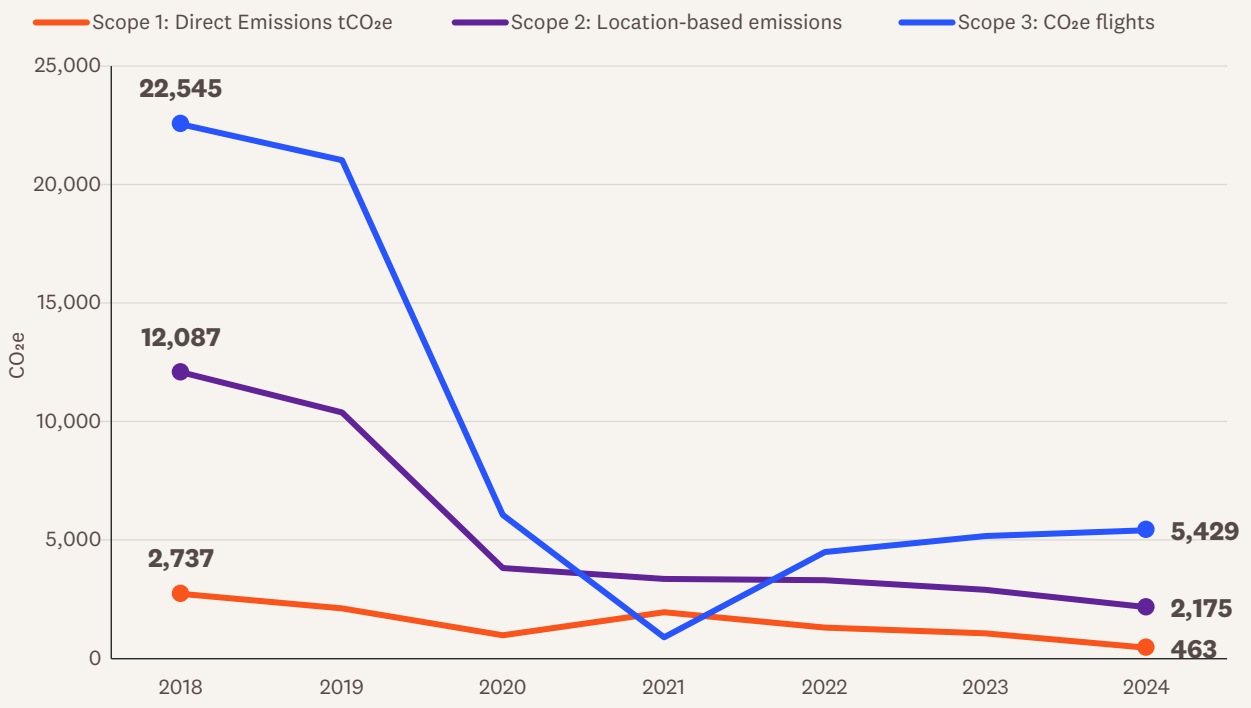
Cutting carbon across our operations

40% reduction
in print journal emissions since 2018

75%
of Chennai office energy now comes from renewable sources

50+
international conferences now calculate carbon footprint

Elsevier's emissions 2018–2024

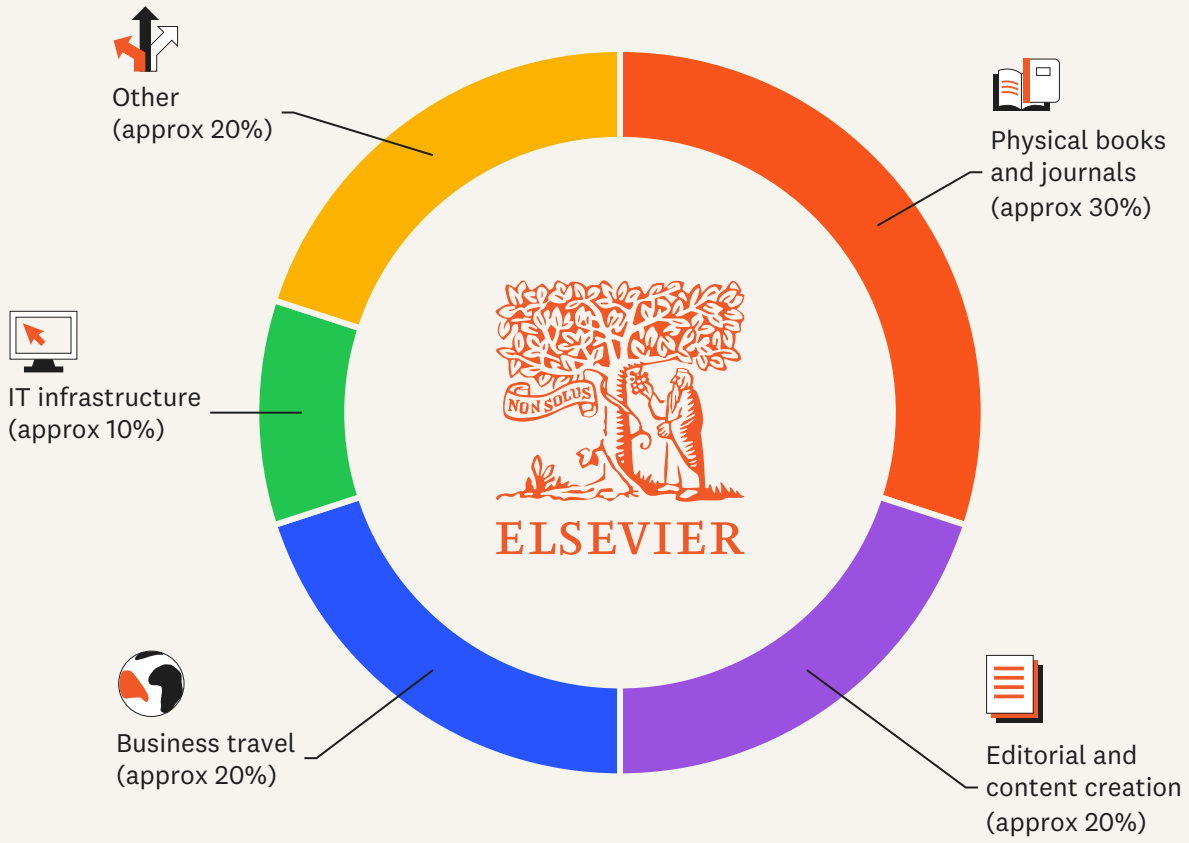


Reducing our impact

Working smarter and being efficient

Over the past three years, consistent progress has been made to reduce our direct emissions, as seen in our reported Scope 1 and 2 figures, as we continued to integrate sustainability into our operational decisions based on the analysis on our full carbon footprint, conducted in 2022.

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.
This carbon footprint was estimated in 2021.

Key activities for 2024

Print impact of journals

We continue to make progress to reduce emissions from print journals, having achieved a 40% reduction from 2018 primarily by reducing free print copies at exhibitions and by working with our editors and society partners to move journals to e-only. Additionally, in 2024 we further helped to streamline production and improve our efficiencies (i.e. saving resource use) by standardizing paper types and converting printing to inkjet.

Optimizing delivery of physical books and journals

Distributing printed copies of journals and books between offices, warehouses and readers has a carbon impact. Although most these processes are not under our direct control, in 2024 we launched an initiative to help calculate the sustainability impact and identify actions that could be taken to reduce emissions. In the first instance, our Content and Data sourcing team have helped over 90 content partners, who send content to us for indexing, to transition away from print to electronic delivery methods. This helps reduce the need to use air freight and further reduce the need for print copies. As we work with our partners to adapt business practices, the project provides a concrete example of how sustainability is being integrated into our operations and business decisions.

Additionally, we continue to optimize print product with the aim to avoid overproduction and excess inventory. To do this approximately 83% of our journals have a zero warehousing policy and across our portfolio we have enabled print on demand, delivering orders within 2–4 days after initial dispatch. These actions help to cut down on the energy use in the warehouses and reduce potential waste.

Supplier engagement

In 2024, we continued to advance our Supplier Carbon Reduction program. This dedicated program is tasked with assessing our Scope 3 emissions, encouraging suppliers to set SBTI-aligned targets and ensuring we can meet our ambition to be net zero by 2040. After onboarding 73% of our top 200 suppliers based on eligible spend in 2023, we were encouraged to see 86% of our top suppliers disclosed CO_2 data in 2024. This supplier group represents around 94% of our total supplier spend. To further embed this into our procurement processes, our supplier contract templates now feature a sustainability clause to provide further incentives to set and report on SBTI aligned carbon targets.

Academic Conferences

Annually Elsevier organizes over 50 international conferences. In 2024, each conference website highlights our commitment to sustainability and in 2024, we have calculated the carbon footprint for each completed conference. This is helping the team to make sustainable choices in operational elements such using venues who have signed up to the Net zero Carbon Events pledge, choosing low carbon menus, digital signage, recycling poster boards and exhibition booth. Additionally, careful selection of venue locations is made prioritizing locations that help lower attendee travel emissions such as ensuring public transportation connections.

Digital emissions

Cloud servers are more energy efficient than running Elsevier owned servers, and in 2024, we migrated our final product, Aries, over to the cloud. To date this has helped to save 4,000t CO_2e in Scope 2 emissions. As our cloud server estate grows, we continue to be mindful of the sustainability implications and will account for these emissions as part of our Scope 3 emissions.

Gen AI

While physical journals still account for most of our current carbon footprint, we are also considering how new Gen AI products launched last year can already integrate sustainability and energy efficiencies into their ongoing development. While the methodology for calculating the lifecycle emissions of gen AI products is still not fully developed, we are pleased to participate in industry products looking to define a common way to calculate impact. These include DIMPACT's working group on Gen AI and STM's task and finish group looking at the carbon impact of digital journals. Additionally, within our organization, we have started to pilot ways to track energy use and energy intensity of gen AI within our products. While we expect Gen AI deployment within our products to have an impact on energy consumption, initial estimates suggest that in 2024, it is currently a small proportion of Elsevier's total footprint.

Decoding Digital

Pioneering standards for digital emissions in publishing

With 90% of our revenue coming from digital products, understanding the digital carbon impact is essential — but complex. In 2024, Elsevier helped lead an industry-wide effort through our trade body, STM to address this gap. A new working group was formed to develop a simple standardized model for calculating emissions from digital journals.

Aligned to the DIMPACT methodology, this initiative marks a crucial step toward consistent, transparent reporting of digital emissions across the publishing industry.

Offices and facilities

In 2024, we continued to uphold our ISO 14001 certification for Environmental Management Systems (EMS) across the whole company. Alongside maintaining this standard, we placed a strong focus on improving energy and utility efficiency across our global offices.

A key area of progress has been the consolidation of office space, reflecting the shift to hybrid working and the resulting reduced need for dedicated office environments. In Amsterdam, we streamlined our operations into three floors. These changes are expected to deliver annual reductions in both energy consumption and city heating usage.

In Chennai, our energy procurement strategy now ensures that 75% of our office energy comes from renewable sources. We also consolidated IT rooms, enabling a 50% reduction in air-conditioning capacity.

In the U.S., we focused on balancing energy efficiency with comfortable working conditions. We implemented ongoing monitoring to ensure that lighting is only active during occupied hours, helping to minimize utility use. We also reduced our physical footprint by closing our smaller Berkeley office and relocating our Washington office to a more compact space. Additional improvements included replacing the water heater in our Cambridge office with a more energy-efficient model and ensuring that all office printers are energy-certified.

Through these targeted efforts, we continue to align our operations with our sustainability goals while supporting efficient, flexible work environments.

Sustainability mindset

A key enabler of our sustainability efforts continues to be cultivating a sustainability mindset within our offices. Our ongoing colleague engagement through local Green Teams provides meaningful opportunities for employees around the world to get involved — whether through beach clean-ups in Amsterdam, green-themed quizzes, or participating in global webinars and learning sessions.

Our UK offices also took part in Earth Hour, a global initiative organized by the World Wildlife Fund that encourages individuals, communities, and businesses to switch off non-essential electric lights to raise awareness about energy conservation.

Participation was further supported by the RELX “Environmental Good Catches” program, which encourages colleagues to take simple but impactful actions — such as turning off lights, adjusting temperature settings, and reducing water usage — to help prevent waste and promote sustainable workplace habits.

Empowering people

Empowering action for a sustainable future

At Elsevier, we support researchers and healthcare professionals by combining quality information with advanced tools to drive insights and better decisions — for science, health, and society.

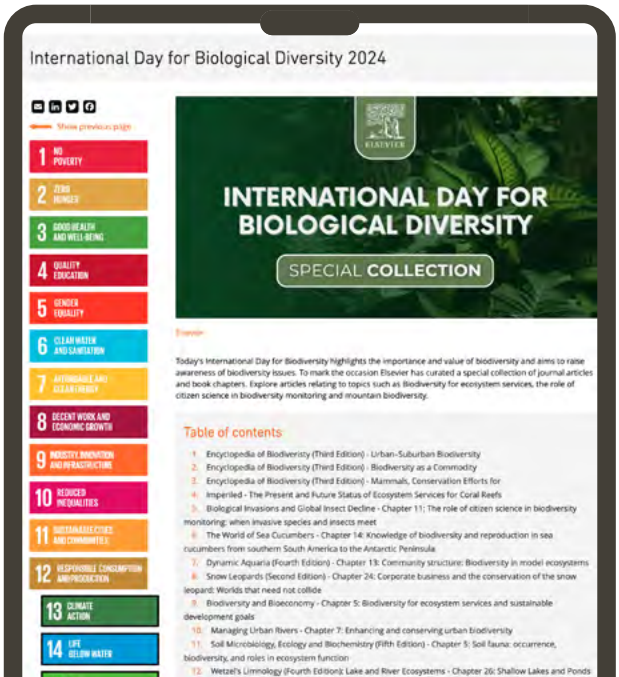
Through our products and services, we contribute to environmental progress by informing debate, guiding policy, and supporting innovation. By empowering our colleagues and communities, we're helping to drive collective action toward a more sustainable future. Here are a few highlights from 2024.

From research to results: highlights from 2024

Showcasing research

Every year, the SDG Resource centre hosts a special collection of impactful science and research. In 2024, another 16 curated collections were launched that features collections for World Environment Day, International Day for Diversity and World Water Day. Discover the collections here.

And read more here: SDG Resource Centre Special Collections: Year in review.



Tracking the climate crisis through a Health lens

The Lancet published their *2024 Countdown on Health and Climate Change*, which monitors the evolving health profile of climate change and provides an independent assessment of the delivery of commitments made by governments worldwide, under the Paris Agreement. The content, either open access or free to read, covers 53 indicators, drawing on the expertise of 122 scientists and health practitioners, across 57 collaborating organisations worldwide.

Cell Press and the global response to climate change

In 2024, Cell Press flagship journal *One Earth* highlighted critical climate science insights, such as accelerating methane emissions, and offered recommendations to strengthen corporate climate commitments. Additionally, Cell Press has several journals, such as *Joule* and *iScience* who support climate action by publishing interdisciplinary research and amplifying scientific knowledge. In 2024, Cell Press launched a new title *Cell Reports Sustainability*, that is focused on topics such as wildfire management, energy system decarbonization and coral reef restoration.

Supporting the energy transition

Our journal and book teams remain committed to supporting a net-zero future by promoting climate-focused research. In 2024, our journals portfolio grew to over 160 titles in environmental sciences, renewable and clean energy. Submissions to these journals increased by 26% compared to 2023, highlighting rising scientific interest in the future of energy. Additionally, several journals published special issues addressing key renewable energy topics, such as national pathways to net-zero emissions, building-integrated renewable solutions, and technological advancements in energy systems.

In our books portfolio, we continue to advance our "energy with purpose" mission, releasing several authoritative books that including *Renewable Energy Systems, 3rd Edition* by Henrik Lund, which offers a comprehensive methodology for integrating fluctuating renewable sources into fully decarbonized societies. We also featured global experts, Ronald DiPippo, Andrew Chiasson, and Luis Carlos Gutiérrez-Negrín in the "*World We Want*" podcast. They discussed their Elsevier published book, the 2nd edition of *Geothermal Power Generation*, and how their work aligns with the UN sustainable development goals.

The Energy Books team also actively engaged with the international research community by participating in events like the EuroSun 2024 conference. At this event, Elsevier hosted a publishing workshop aimed at assisting researchers in effectively disseminating their work on renewable energy topics, thereby fostering collaboration and knowledge sharing.

Case study

Elsevier: Balancing Engagement and Environmental Responsibility

While Elsevier aims to reduce internal air travel through responsible travel targets, we also value in-person connections with partners at events and panel sessions. Acknowledging the environmental impact of such gatherings, we took steps to address our indirect footprint.

In 2024, we made a donation to Trees for All on behalf of 24 panel speakers from events organized with Times Higher Education and QS. This contribution supports the planting of 48 trees in reforestation projects in the Netherlands and Indonesia. Each speaker received a certificate recognizing this effort.

Driving key insights: highlights from Elsevier analytical reports

Global Biodiversity Research 2024

In 2024, Elsevier published *Biodiversity Research in 2024: A Global Perspective with a Focus on Latin America*, offering a comprehensive analysis of global biodiversity research trends. The report highlights Latin America's exceptional contribution, with research activity three times the global average and 8.5% of studies influencing policy documents. Brazil and Mexico emerge as regional leaders, collectively producing 58% of Latin America's biodiversity research. Notably, 51% of the region's studies involve international collaboration, underscoring the global interconnectedness of biodiversity challenges. The report emphasizes the critical role of biodiversity research in shaping effective environmental policies and the importance of inclusive, collaborative efforts to address the biodiversity crisis.

View from the Top

This report captured insights from over 100 global academic and funding leaders, revealing that 80% prioritized demonstrating societal impact, including on climate change, though only 43% felt well prepared to do so. It highlighted the need for better tools and strategies to bridge this readiness gap.

Towards the 4th Generation University

In collaboration with Eindhoven University of Technology, this report explored how universities can evolve into hubs of innovation that address societal challenges like climate change. It emphasized integrating academic institutions within local innovation ecosystems to drive regional economic growth and sustainability.

Collaboration: highlights from Elsevier's industry and sector engagements

Times Higher Education Global Sustainable Development Congress

Elsevier hosted a pivotal workshop titled *"Beyond 2030: How Science, Innovation and Industry Can Deliver a Sustainable Future."* This session convened global leaders from academia, industry, and policy to explore strategies for advancing sustainability beyond the 2030 SDGs. This workshop underscored the critical role of collaborative efforts in achieving a sustainable future beyond 2030, aligning with Elsevier's commitment to supporting global sustainability initiatives.

Driving innovation

In 2024, the Publishing 2030 Accelerator, supported by Rachel Martin (co-founder) and Michiel Kolman (Chair) received the International Publishers Association (IPA) Innovation in Publishing Award at the 34th Publishers Congress in Guadalajara. This recognition honored the initiative's collaborative efforts to drive sustainability in the publishing industry through innovative practices such as calculating the carbon footprint of individual books, exploring distributed printing networks, and reimagining revenue accounting to incorporate environmental considerations. The award highlights the Accelerator's role in fostering systemic change and promoting sustainable development within the global publishing sector.

Industry leadership

Elsevier also continued to work within our industry to share our journey and help discuss key challenges at various forums. In 2024, this included helping to program the London Book Fair sustainability summit, participating in the programming at Frankfurt Book Fair, compiling a report on the carbon footprint of the Portuguese publishing market presented at the flagship Book 2.0 event in Lisbon.

"it is not about what we do, it is about how we do it".

Dawn Freshwater
Vice Chancellor, University of Auckland

Spotlight on the Elsevier Foundation

In 2024, the Elsevier Foundation advanced climate action through several impactful initiatives focused on sustainable innovation, gender equity, and community resilience in the Global South.

1. **Chemistry for Climate Action Challenge**
   The Foundation awarded $25,000 grants to two winning projects that addressed climate challenges through green chemistry solutions. Dr. Mokgadi Hlongwane's project in South Africa enhanced the resilience of medicinal plants critical to traditional healthcare, while Dr. Pooja Singh's initiative in India developed biodegradable sanitary products from invasive water hyacinth, tackling both waste management and women's health.

2. **TWAS-Elsevier Foundation Grants for Gender Equity and Climate Action**
   Seven women-led teams from countries including Benin, Bolivia, Ghana, Mozambique, and Zimbabwe received grants of approximately $25,000 each. Their projects ranged from mangrove restoration to sustainable land management, emphasizing the role of women in developing community-based climate solutions.

3. **Climate Women Training Program**
   In collaboration with TWAS and the Chinese Academy of Sciences, the Foundation supported the Climate Women program, providing 15 women scientists from the Global South with training in climate diplomacy, leadership, and research skills. This initiative aimed to empower women scientists to contribute effectively to climate action in their regions.

4. **Climate Care Champions Initiative**
   Partnering with Swasti, the Foundation launched the Climate Care Champions program in India, equipping frontline health workers with the knowledge and skills to manage health impacts of extreme weather events, thereby enhancing community resilience to climate change.

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