

THE POWER OF KNOWLEDGE



OPENING DOORS TO DISCOVERY

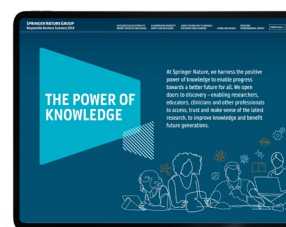
At Springer Nature, we harness the positive power of knowledge to enable progress towards a better future for all.

ABOUT SPRINGER NATURE GROUP

Research and learning are the cornerstones of progress, which is why we open doors to discovery – enabling researchers, educators, clinicians and other professionals to access, trust and make sense of the latest research, to improve knowledge and benefit future generations.

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Wherever you see a thumbnail image, click through to access more content on our website.

Explore Springer Nature's progress in sustainability in 2020 on our [microsite](#) and find other relevant reports and documents at www.springernature.com/SustainableBusiness

ABOUT THIS REPORT

Our Sustainable Business report highlights the most material environmental, social and governance (ESG) issues for Springer Nature, how we monitor and manage these and our recent progress.

This report, which also discusses how the company aims to support the delivery of the Sustainable Development Goals (SDGs) (see pages 9–12), has been prepared with reference to the standards of the Global Reporting Initiative (GRI) (see pages 32–38).

In this report, we focus on performance and activities from 1 January to 31 December 2020. Some case studies and other stories refer to activities that began before 2020. These are either ongoing projects, still relevant to our work in 2020 or relate to our most material issues. Our reporting covers entities that are part of the Springer Nature Group – see page 35 of this report for more detail of entities covered.

Content showcase

Values and Corporate Responsibility



[Discover](#)

Springer Nature publishes original research, education and professional content across a wide spectrum of topics, including many relevant to sustainability. Throughout this report where you see a box like this we highlight an example of recently published work relevant to the content on the page.

Values and Corporate Responsibility, published by our imprint Palgrave in 2020, discusses the principles that underpin corporate social responsibility (CSR).

SPRINGER NATURE GROUP KEY FACTS

EMPLOYEES

10,000

COUNTRIES OF OPERATION

50+

NETWORK OF EDITORS

~90,000

PEER REVIEWERS

750,000+

RESEARCH SUBMISSIONS PER YEAR

1 MILLION+

VISITS TO OUR CONTENT PLATFORMS PER DAY

3 MILLION+

OUR DIVISIONS



RESEARCH

Advancing Discovery

- Books
- Journals
- Author and discovery solutions
- Healthcare



EDUCATION

Advancing Learning

- Language learning
- Schools curriculum
- International curriculum
- Higher education



PROFESSIONAL

Advancing Achievement

- Medicine
- Transport
- Engineering
- Business management

OUR STRATEGIC APPROACH TO SUSTAINABILITY

During 2020, Springer Nature reviewed and updated its strategy for action as a Sustainable Business, building on successes and learnings from the previous three years.

The strategy review considered material issues for reporting in the context of the framework of the GRI and in consultation with external sustainability specialists. We took into account the changing external environment (including the impact of the COVID-19 pandemic) to ensure that we continue to reflect emerging concerns of stakeholders, including:

- institutions, researchers and educators we work with
- our employees

- our shareholders.

As a publisher, we are situated at the centre of an extensive network of authors, researchers, editors, educators, funders and policymakers. Responsibility is one of our core values (see page 19) and we strive to act as a sustainable and ethical business, committed to addressing our operational environmental impacts.

We believe that our biggest positive impact can be through the content we publish and the conversations that we can convene. This is why our strategy begins with the influence that we can have on and in society.

Over the next three-year period, these areas will be the key drivers of our sustainable business initiatives and our reporting.

WE HAVE STRUCTURED THIS REPORT IN LINE WITH THE FOUR PRIMARY AREAS OF FOCUS:



IN 2020 WE PUBLISHED:

3,000+
JOURNALS

372,000+
NEW RESEARCH ARTICLES

13,000+
NEW BOOKS

100
NEW SERIES OF EDUCATION TEXTBOOKS, USED BY 30 MILLION+ STUDENTS

Content showcase

How Do Companies Respond to Environmental, Social and Governance (ESG) Ratings?



The open access (OA) article How Do Companies Respond to Environmental, Social and Governance Ratings, published in the Journal of Business Ethics in January 2020, examines how companies respond and take action based on ESG ratings, drawing on interviews with companies in Italy.

Read the article [here](#)



THE POWER OF KNOWLEDGE TO ACCELERATE SOLUTIONS



**Stefan von Holtzbrinck,
Chairman**



A MESSAGE FROM OUR CHAIRMAN AND CHIEF EXECUTIVE OFFICER

2020 was a year like no other: the COVID-19 pandemic affected all our lives and showed unequivocally the importance of a research ecosystem that can operate at its most efficient, with researchers working hard to understand and fight the disease, sharing findings rapidly in both preprints and peer-reviewed papers.

Our teams made great efforts to help speed up the process of discovery while providing robust, peer-reviewed scientific results and giving oversight and context. We published over 24,000 new peer-reviewed COVID-19 research articles within months and more than 6,000 articles were made available on our preprint platform. More than 70,000 relevant articles or book chapters were made freely available, as well as training courses for nurses specialising in respiratory diseases. Technology teams created solutions to ensure not only access to our research content, but also to guarantee a seamless workflow experience for those scientists who were forced to work outside of their institutions.

All of this underlines the importance of open science – the practice of open and early sharing of results together with

the underlying data – when tackling the biggest challenges for humanity. Without passion, agility and technology, without the full power of global collaboration, vaccines could not have been developed in such record time.

With schools closed and face-to-face training and events not possible for much of the year, there have been significant challenges for our education and professional divisions. Our teams have been resilient and creative, developing tools and training to help teachers around the world deliver lessons remotely.

Accelerating solutions to urgent global challenges is the first pillar of Springer Nature's updated sustainable business strategy and we continue to do this by putting great emphasis on the UN Sustainable Development Goals (SDGs). Since the goals were first published in 2015, Springer Nature has published more than 300,000 relevant articles or book chapters, which collectively have been downloaded more than 750 million times.

The need to do more to tackle inequalities became even more pressing in 2020. Springer Nature's diversity, equity and inclusion strategy has been revised and

strengthened, including a greater focus on anti-racism. We continue to make good progress towards our target that women make up 45% of our senior leadership tiers by 2023.

We are pleased to report that Springer Nature is now net carbon neutral for emissions related to its offices, fleet and flights (scopes 1, 2 and partial scope 3). This year our emissions have fallen significantly, mainly due to a reduction in business travel. We have purchased green electricity for our sites globally and we have compensated for emissions using verified carbon credits (see page 24).

This report includes much more detail on progress made in support of our people, our customers and our communities in 2020. We are immensely proud of all colleagues for their special efforts in times of stress and uncertainty. We end the year as a more resilient and more sustainable business. And as a publisher with a purpose, we look into the future with optimism and resolve.

**Stefan von Holtzbrinck, Chairman,
and Frank Vrancken Peeters, CEO**



Frank Vrancken Peeters, CEO



FOCUSING ON WHAT MATTERS MOST

Our sustainable business strategy is governed by a steering group, which includes members of the management board and executive team, as well as committees that oversee relevant activities and communications. These committees interact with specialist steering groups that focus on specific strategy areas.

In 2020, we updated our sustainable business strategy and reviewed and reconsidered our governance approach.

OUR GOVERNANCE APPROACH

Supervisory Board

Sustainable Business Steering Group

Related groups guide our actions on the following material issues:

Environment	Editorial and publishing policies
Culture, values and community	Governance, risk and compliance
Business partner risk management	SDG publishing
Diversity, equity and inclusion	Reporting and communications

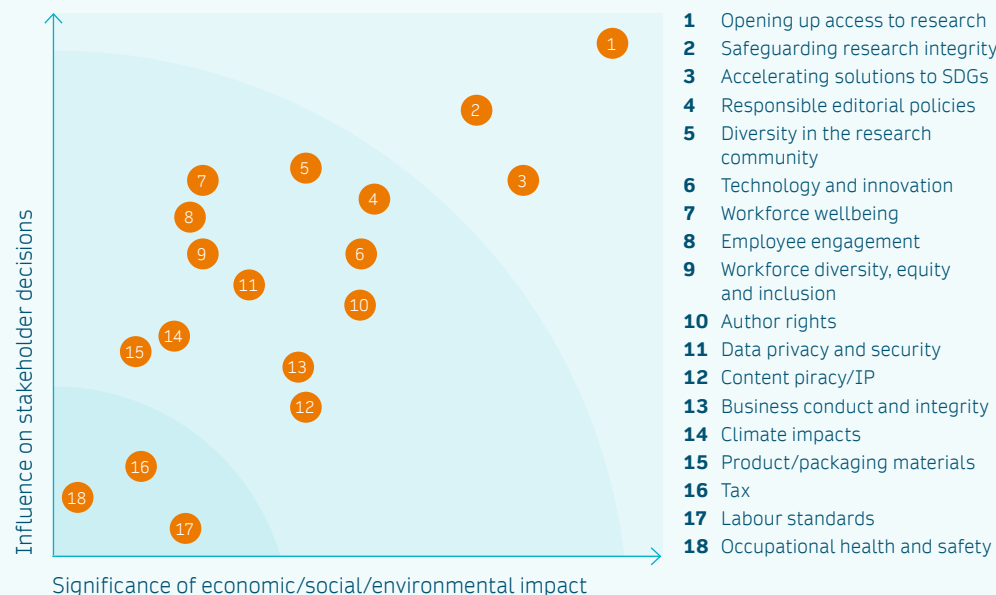
The issues deemed most material in 2020 are outlined in the materiality matrix. We report progress in each of the areas on the matrix, actively managing those highest priority issues that are subject to internal monitoring.

The ongoing transition to open access (OA) publishing and the trend in opening up research more broadly, as well as the need for rigorous processes to assure research integrity, continue to be some of the most material issues for Springer Nature (read more about this issue on page 13).

The importance of research in accelerating progress towards the United Nations (UN) Sustainable Development Goals (SDGs) and how publishers can support this, is a priority (read more on pages 9–12).

Our auditor, EY, performed a limited assurance engagement on selected non-financial indicators in the area of diversity (pages 17–18) and carbon reporting (pages 22–25), and key data (page 28–29) in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised). Their full statement can be read on page 30.

MATERIALITY MATRIX



Content showcase

CSR, Sustainability, Ethics & Governance



[Discover](#)

The CSR, Sustainability, Ethics & Governance book series, published by Springer, offers an overview of management approaches to sustainable business strategies.

[Read the first chapter here](#)

COVID-19: RESPONDING TO A GLOBAL CRISIS

The COVID-19 pandemic has affected every business during 2020. Springer Nature has had to respond on multiple levels: transitioning to largely remote working by our staff and partners, supporting employee morale and wellbeing during a challenging time, and enabling researchers to accelerate understanding of the pandemic itself.

SUPPORTING OUR COLLEAGUES

The pandemic created an unprecedented business continuity challenge. Our first priority was our employees. The vast majority of roles were able to rapidly move to remote working when needed.

Employee wellbeing has been our focus since Springer Nature's global crisis

management team was activated in January, triggered by the first lockdowns in China where we have two offices and hundreds of staff.

As the crisis escalated from local to global, we delivered clear and responsive communications. We created a simple but effective colour-coded system as guidance on office closures, working from home arrangements and business travel to all colleagues. We built dedicated COVID-19 pages on our intranet, which received over 460,000 views from our global workforce.

Our CEO, Frank Vrancken Peeters, delivered regular video messages and company-wide newsletters, reaching 75% of colleagues on average each week. Our

management team delivered Q&A webinars and hosted informal virtual coffee breaks, bringing together colleagues from every level and part of the business to encourage conversations and connections.

We ran regular polls and surveys to understand how people were coping, responding swiftly when needed. In November, our global Pulse engagement survey (see page 20) asked questions related to the pandemic: 90% felt satisfied with the crisis response and 89% rated communications highly. We provided equipment for home offices and additional flexible support for parents and carers, including reduced working hours and additional holiday.

ADAPTING AND LOOKING TO THE FUTURE

A major concern of colleagues was to understand how our future working practices would evolve once the pandemic is over. By the end of the summer, we had created a set of 'new normal' working policies to combine the 'best of both worlds'. This will allow more flexible homeworking options, a 'virtual-first' approach to meetings, reduced business travel and a new vision for how we will use our offices.

WORKING WITH OUR COMMUNITIES

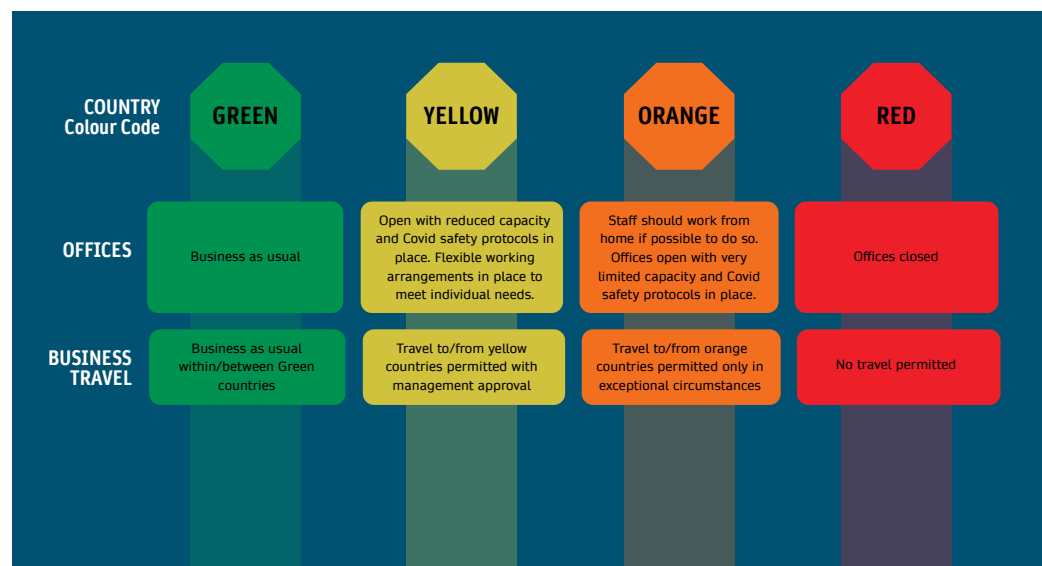
The research and education communities have been at the forefront of the response to COVID-19 from the start.

POOLING KNOWLEDGE

The first research papers on the new virus were submitted to journals in early January. By the end of that month, Springer Nature had invoked its own emergency protocol for Public Health Emergencies of International Concern and begun to make thousands of relevant research articles free to access via a dedicated [coronavirus content hub](#).

By the end of 2020, we had made available more than 70,000 relevant articles and book chapters and published more than 24,000 new COVID-19 research articles. We delivered digital copies of all this content to the World Health Organization and to the Office of Science and Technology Policy in the US, and we signed and complied with the Wellcome Trust's statement on [Sharing research data and findings relevant to the novel coronavirus \(COVID-19\) outbreak](#), which aimed to ensure rapid access to emerging findings that could aid the global response.

We also confirmed our support for research being made available via preprint services before journal publication.



COVID-19: RESPONDING TO A GLOBAL CRISIS CONTINUED

SUPPORTING REMOTE ACCESS

During lockdowns, we supported librarians, researchers, students and teachers working from remote locations to ensure they had ongoing and seamless access to our platforms (see page 16).

We created free-to-access training and other resources for medical professionals, accessible via sites such as nursing.nl and springermedizin.de. ÄrzteZeitung provides ongoing updates in German for general practitioners on a daily basis, and twice a week in its print edition.

CONTINUING EDUCATION

To support learners and teachers alike, Macmillan Education gave free access to digital resources and provided other tools

to connect educators and their pupils in both our English Language Teaching and Curriculum businesses. This included a Distance Teaching and Learning Hub entirely dedicated to supporting teaching from home and offering online interactive training sessions.

Resources (such as Macmillan Practice Online and Macmillan eReaders) were also made freely available to teachers and students for six months. In addition, **Onestopenglish** was made free for all users for the remainder of the academic year.

In higher education, we provided free online access to more than 500 key textbooks across all our eBook subject collections.

COUNTERING DISINFORMATION

The proliferation of deliberate misinformation, together with misguided, inaccurate or incomplete information, continues to be a significant issue throughout the pandemic – particularly as this information often spreads faster than accurate reporting.

To counter this, we provide access to fact-based journalistic and opinion content in *Nature* (for researchers and research leaders) and *Scientific American* (for the wider public), including dedicated coronavirus podcasts, which – when combined – had more than 1.2 million downloads during 2020.

“The COVID-19 pandemic... has been an international call to arms for the scientific and medical communities. The collaborative nature of the response has generated impactful results with unprecedented speed.”

Maia Norma, MD/PhD student, Brigham and Women's Hospital at Harvard Medical School, USA and Nature biomedical engineering author

“We started the course [through Macmillan Teacher Campus] in March 2020 and a week later we had to stay at home until lockdown was eased. Macmillan bought laptops for us, they bought routers for us and even loaded monthly data for us in order to be trained online.”

Mamikilebeka Chauke – Principal, Mpepile Early Learning Centre, Rustenberg, South Africa

24,000+

NEW COVID-19 ARTICLES PUBLISHED

70,000+

COVID-RELATED ARTICLES MADE FREE-TO-ACCESS

36,000+

NEWS ARTICLES GENERATED FROM 92 PRIORITY RESEARCH PAPERS

2.3 MILLION

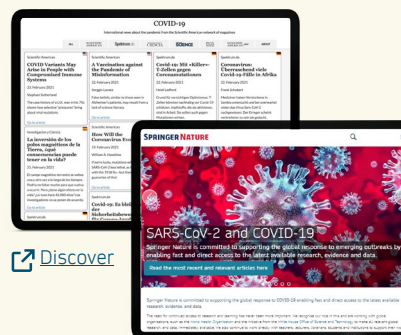
SUBSCRIBERS OF THE NATURE BRIEFING DAILY NEWS ROUNDUP

7.3 MILLION

AVERAGE MONTHLY VISITORS TO NATURE.COM

Content showcase

Springer Nature's COVID-19 content hub



Springer Nature's COVID-19 content hub was launched in January 2020 and provides free direct access to original research and data relevant to the pandemic. Our international science magazines also share trusted science news in multiple languages.

To find out more
springernature.com/coronavirus
sciam.international/coronavirus

ACCELERATING SOLUTIONS TO URGENT SOCIETAL CHALLENGES

SPRINGER NATURE AND THE SUSTAINABLE DEVELOPMENT GOALS

The 17 **SDGs**, ratified by all members of the UN in 2015, set out an agenda for global sustainable development. To help achieve the goals by 2030, 169 targets have been set, addressing urgent societal challenges, including poverty, climate change and inequality.

In 2020, the UN acknowledged that progress towards the goals is not yet advancing at the speed or scale required. By describing the next 10 years as the 'Decade of Action', the UN called for the acceleration of sustainable solutions – which will require academia, business and policymakers to work together to address the world's most pressing problems.

At Springer Nature, we believe that research and education have a fundamental role to play. We use the SDGs to help us consider our potential impacts – both positive and negative – and how we manage them. We believe that our most significant impact is through our publishing activity, which helps bring to light and disseminate important knowledge related to the SDGs.

While we are already a leading publisher of research into almost all of the SDGs, our aim is to be the publisher of choice by

connecting researchers tackling societal challenges with the policymakers and practitioners who can build on these insights and contribute to progress. And in our Education business we help to develop curriculum content that builds critical thinking and global citizenship skills.

Since the SDGs were launched in 2015, Springer Nature has published more than 300,000 articles or book chapters relevant to the SDGs, and these have been downloaded more than 750 million times. Between 2015 and 2020 the volume of SDG-relevant content published by Springer Nature increased by more than 72%.

In 2020, Springer Nature was an early signatory of the **UN SDG Publishers Compact**, launched by the UN in collaboration with the International Publishers' Association to inspire action in the publishing industry.



SPRINGER NATURE AND THE SUSTAINABLE DEVELOPMENT GOALS CONTINUED

ACCELERATING DELIVERY OF THE SDGs

SUPPORTING AND AMPLIFYING

Our books, journals and magazines share the latest findings on the challenges of sustainable development. We are committed to opening up research and have published studies that demonstrate that research published **via gold (immediate) OA** has increased societal impact.

INNOVATING

We create opportunities to connect research with those who need it to advance progress – including policymakers and practitioners – by building on the convening power of brands such as *Nature* and *Scientific American*.

ACTING SUSTAINABLY

We model best practice, live up to our corporate value of responsibility and learn from the research we publish by acting to minimise climate change and environmental impacts in our operations and supply chain.

SINCE 2015,

SPRINGER NATURE HAS PUBLISHED MORE THAN 300,000 ARTICLES OR BOOK CHAPTERS RELEVANT TO THE SDGs. THESE HAVE BEEN DOWNLOADED MORE THAN 750 MILLION TIMES.

HOW WE SUPPORT THE SDGs

While we publish research related to all 17 of the SDGs, we have identified three focus Goals where we believe Springer Nature can make a distinctive difference, and an additional group which are particularly relevant to our operational impacts:



OUR FOCUS SDGs

SDG 4: Quality Education Target 4.7

We amplify sustainability research, sharing it widely so that it can have maximum impact within the research and education communities, for our own employees and in wider society.

SDG 13: Climate Action Target 13.3

We play our part in climate action by publishing the latest climate research and managing our operational impacts. In 2020, we achieved net carbon neutrality for emissions associated with our offices, fleet and flights.

SDG 17: Partnerships for the Goals Target 17.6

We are a leader in open access, connecting researchers, policymakers and practitioners who are collaborating to solve the world's greatest challenges.

OUR OPERATIONS ALSO IMPACT:

SDG 5: Gender Equality

SDG 9: Industry, Innovation and Infrastructure

SDG 15: Life on Land

SPRINGER NATURE AND THE SUSTAINABLE DEVELOPMENT GOALS CONTINUED

OPEN ACCESS CONTENT FOR NON-ACADEMIC AUDIENCES

We believe that open research benefits not only the research community, but society as a whole – particularly when that research relates to the SDGs.

Springer Nature participated in a [joint project](#) to explore how open research enables more widespread use of academic content, in partnership with the Association of Universities in the Netherlands (VSNU), the Dutch University Libraries and the National Library consortium (UKB) and technology partners Digital Science.

Results of the project so far include the development of a [new public classifier](#) to identify research related to each of the SDGs, and [research](#) which demonstrates that publishing via gold (immediate) OA significantly increases the reach of research to non-academic audiences (including policymakers and the general public). In 2021, the partners will launch a new toolkit to help researchers maximise societal relevance of their research.

MAKING IMPACTFUL RESEARCH AVAILABLE TO A WIDER PUBLIC

Research published in Springer Nature's journals addresses some of the biggest challenges expressed in the SDGs. We believe it is vital to communicate the outcomes clearly and with a wide public where it may have policy implications.

Examples in 2020 included:

- **The [pan cancer analysis of whole genomes](#):** this landmark in cancer research was the culmination of more than a decade of work undertaken by over 1,300 researchers, shared in a collection of 22 papers, published across five of our journals. The project aimed to illuminate cancer-causing alterations, patterns of evolution and gene regulation as well as to develop tools for analysis. The datasets and publications are open to all for further exploration.
- **Sustainable solutions to end hunger:** published in partnership with the [Ceres2030](#) consortium, a series of evidence-based reviews gives decision makers the information they need to drive change towards SDG 2: Zero Hunger. An [immersive feature](#) in *Nature* complements the primary research published in *Nature Food* and *Nature Sustainability*.
- **The ocean in humanity's future:** in collaboration with the High Level Panel for a Sustainable Ocean Economy, research commissioned by 14 heads of state and government, was taken through *Nature's* expert peer review process adding robustness and independence to the findings. This collection was published across the Nature Portfolio and includes an [immersive feature](#) and [world view](#) from the Prime Minister of Norway.

OUR PROGRESS IN 2020

68

SDG CHAMPIONS ACROSS THE COMPANY

5

DEDICATED SDG CONTENT HUBS LAUNCHED

8

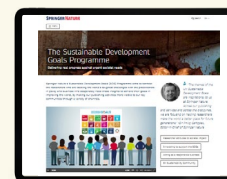
SDG CONTENT WORKSHOPS

2,400+

NEW SDG-RELATED BOOKS PUBLISHED

Content showcase

Springer Nature's SDG publishing programme



The SDG Programme landing page directs researchers and others towards relevant and timely research, blogs and other content relevant to many of the Sustainable Development Goals.

Visit the content hub [here](#)

[Discover](#)

SPRINGER NATURE AND THE SUSTAINABLE DEVELOPMENT GOALS CONTINUED



TARGET 4.7 SUPPORTING EDUCATION FOR SUSTAINABLE DEVELOPMENT AND SUSTAINABLE LIFESTYLES

We believe that education is key to the success of the SDGs. Springer Nature's impact in this area extends across all parts of our business. Through our research publishing, we disseminate robust data and novel research on sustainability, while in our education and professional divisions we give the learners of today the knowledge they need to create a better tomorrow.

Macmillan Education contributes to SDG 4: Quality Education. In particular, we make a difference to Target 4.7, to ensure that all learners acquire the knowledge and skills needed to promote sustainable development. Identifying a gap in teaching materials, Macmillan Education has developed a set of tools to help authors and editors to deliver global citizenship education, setting out standards, learning outcomes, guidance and example activities. Education materials are also developed carefully to present the world more equitably, in written content, image selection and activities, starting with diversity and inclusion guidelines for editors.

Our science journalists play an important role in accurate reporting of research developments to policymakers, other decision makers and the wider public, and this reporting makes a real impact. In 2020, the Association for British Science

Writers (ABSW) presented its best feature award to a *Nature* article by Gayathri Vaidyanathan about endangered tiger populations in India; the piece also helped influence how India carries out tiger counts. This was one of 27 journalism, design and multimedia awards presented to *Nature* in 2020.



TARGET 13.3 IMPROVE EDUCATION, AWARENESS RAISING AND INSTITUTIONAL CAPACITY ON CLIMATE RISK REDUCTION

We aim to contribute to progress towards Target 13.3. Springer Nature is committed to raising awareness of climate risk and the action needed to reduce it and other environmental impacts of the company.

The COVID-19 pandemic has had immediate and long-term impacts on the environment, both positive and negative. Throughout, we have continued our mission to publish up-to-date research on climate change, sharing it widely. Across all our imprints, we published more than 5,400 research articles related to SDG 13 during 2020².

Along with our sister companies within the Holtzbrinck Publishing Group, we organised a series of talks with industry experts to shed light on the global impact of COVID-19. Professor Corinne Le Quéré FRS CBE spoke to employees about the implication of the pandemic for climate change. Colleagues heard about the latest research – later featured in the Altmetric

Top 100 annual list of research that most captured the public's imagination in 2020 – and were able to pose their own questions. For more information on how Springer Nature has addressed its own climate impacts in 2020, see pages 22–25.



TARGET 17.6 ENHANCE REGIONAL AND INTERNATIONAL COOPERATION ON AND ACCESS TO SCIENCE, TECHNOLOGY AND INNOVATION

Springer Nature is uniquely placed to bring together international experts and thought leaders, inspiring cooperation and collaboration. In 2020, we instigated and partnered in events and initiatives to raise the profile of cutting-edge research, drive discussion and forge connections to enable greater global impact.

At the UK's largest artificial intelligence (AI) and technology conference, COG-X, we led and participated in a series of

virtual panel discussions on the impact of research under the theme “How do we get the next 10 years right?”

We also co-hosted a virtual conference with the UN Sustainable Development Solutions Network (SDSN): **Science for a Sustainable Future**. The event explored how scientists and policymakers around the world could collaborate more effectively to drive the action needed to achieve the SDGs by 2030. The event has been viewed more than 850 times by a global audience from more than half the countries in the world. A white paper, published jointly by Springer Nature and the UN SDSN, setting out key recommendations for policymakers and practitioners, scientists and researchers, scientific journals and academic institutions to facilitate this collaboration will be published in 2021.

Content showcase

Global stage



Discover

Global Stage is a language and literacy course for young learners which is built around UNESCO's Global Citizen Education. It supports students' growth into competent speakers and writers of English and responsible citizens, fully prepared to succeed as the leaders of tomorrow.

Read a sample [here](#)

²Digital Science (2018-). Dimensions available from <https://app.dimensions.ai>. Accessed on 5 January 2021, under licence agreement.

OPENING UP RESEARCH



At Springer Nature we are firmly committed to an open research future where every element of the research process is immediately available, discoverable, understandable, usable, reusable and widely shareable – core components enabling the wider drive for open science across the whole research cycle.

Delivering this vision will speed up the advancement of science and academic research, facilitate increased collaboration and interdisciplinary research and support an evidence-based approach to pursuing all research outcomes, especially the UN SDGs.

OA research is key to this vision and is an area where we continue to drive change: through commercial transition, practical approaches, technology enablement and development of suitable policies.

Springer Nature is the most comprehensive OA publisher in the world: we have published more immediately OA content than any other publisher – more than 900,000 open access articles by the end of 2020 and over 1,000 open access books – and we offer authors a large choice of publication options across all academic disciplines.

90%

OF THE CONTENT PUBLISHED BY SPRINGER NATURE IN COUNTRIES WITH NATIONAL TRANSFORMATIVE AGREEMENTS IN PLACE WAS PUBLISHED VIA THE GOLD OA ROUTE

TRANSFORMING ACCESS

We have pioneered transformative agreements as a mechanism for accelerating open access at scale since 2014. Transformative agreements enable researchers to publish immediately OA and to access more subscription articles, under one agreement at the institution or national level.

In 2020, we signed with German institutions the world's largest transformative agreement by article volume, and our agreement with the University of California – the largest in North America at the time of signature – set the US on the path to gold (immediate) OA.

Recent data shows that national transformative agreements lead to a far quicker uptake of OA publishing options among researchers than author choice alone. **Data released in 2020** showed that up to 90% of the content published by Springer Nature in eight countries with national transformative agreements in place during 2019 was published via the gold OA route.

As **OA research is cited more than subscription content**, these countries are not only opening up their research, but their authors are benefiting from greater

reach, use and re-use of their content, meeting the expectations of researchers, institutions and funders.

EXTENDING OA TO ALL JOURNALS

We play an active role in debates about the direction of OA Policy. Springer Nature is committed to enabling immediate access to final (or 'version of record') peer-reviewed research. We believe this is the only viable and sustainable path to open science, which will, in turn, improve the speed, reproducibility and efficiency of the whole research process. Over the past two years, we have been working with **cOAlition S** to accelerate this transition, making all of our subscription and hybrid research journals transformative.

In 2020, we announced that all our journals would be **Transformative Journals**, putting our entire portfolio on the path to OA. This includes the highly selective Nature Portfolio where we have announced both the first transformative agreement including these titles and launched a pilot to provide authors the chance to publish in one of a number of these journals whilst only submitting once, hence reducing the time the process takes and increasing efficiency for all. All Springer Nature journals are compliant with the requirements of **Plan S**.

OPENING UP RESEARCH CONTINUED

INTELLECTUAL PROPERTY

It is important that we protect our authors against any infringement of their intellectual property, while considering the sensitivities and concerns of the research community. We proactively identify, monitor and act against potential infringements, ensuring that any threats are targeted, disrupted and, where possible, countered.

Together with other stakeholders, Springer Nature is exploring how to address the harm caused by pirate sites, such as Sci-Hub, and helping higher education establishments protect themselves against cybercrime through the **Scholarly Networks Security Initiative** (SNSI). Any concerns about online piracy or physical counterfeiting can be reported to our **anti-piracy team**.

EARLY SHARING AND ENHANCED ACCESS

In 2020, the benefits – and risks – of disseminating research prior to peer review (or ‘early sharing’) have come to the fore. To accelerate research into COVID-19, many publishers have actively encouraged early sharing via preprints.

During 2020, Springer Nature increased its investment in **Research Square** to a majority share. Research Square’s multidisciplinary preprint platform offers every Springer Nature author a route to share their research as a preprint. Research Square now hosts more than 50,000 preprints, over 4,000 of which relate to COVID-19.

Research Square allows authors to gain from the benefits of early sharing, such as establishing priority of findings, citing a preprint in funding and other applications as evidence of progress and to satisfy growing funder mandates to preprint their work. This is especially important for early-career-stage researchers, improving work through community input, gaining visibility and early citation.

In 2020, following a year-long pilot, we entered into a long-term syndication partnership with professional networking site ResearchGate, the most highly used specialist platform for scientists and researchers. This partnership provides Springer Nature content directly to researchers on a major platform that they use for collaboration and networking, improving the discoverability of their work. It supports our commitment to provide a seamless experience so researchers can access articles they need while maximising engagement with their peers.

THE HIGHEST STANDARDS

We strive to ensure that all published content meets best practice editorial and ethical standards. We aspire to the highest levels of integrity in research and publishing, seek to identify errors and misconduct, transparently and rapidly correcting the published record where necessary.

The Springer Nature Research Integrity Group (SNRIG) works with authors, editors, staff, reviewers and the wider research community to maintain high editorial standards and prevent misconduct, guided by the principles of the Committee on Publication Ethics (COPE) and our own Code of Conduct for Editors.

124,000+

NEW OPEN ACCESS ARTICLES

In 2020, the SNRIG reviewed more than 1,400 cases (from among the more than one million article and book submissions received). The most frequently reported issues were plagiarism, duplicate submissions and publications and problems with authorship, data, ethics and research participant consent. If issues are confirmed, we will act by publishing corrections, editor’s notes, expressions of concern or, in very serious cases, retracting articles.

Our Editorial Advisory Group works with SNRIG to ensure that policies and practices keep up to date with changes affecting research, including technology developments and ethical concerns. Recent rapid developments of new technologies such as AI, facial recognition and biometrics, have led us to review our policies related to informed consent, which are shared transparently **on our website**.

USING TECHNOLOGY TO ADVANCE DISCOVERY AND LEARNING



TRANSFORMING RESEARCH PUBLISHING

The print-to-digital transition has been well under way in research and education publishing for many years. Today, a majority of Springer Nature's revenues (and more than 90% of research revenues) come from digital products and services.

We believe that technology will help us to unlock the power of knowledge faster, for more people, at a lower cost and with a smaller impact on our planet.

Using technology, we are transforming the ways in which the research community engages with, and are supported by, the publishing workflow – a process that publishes hundreds of thousands of manuscripts and academic books each year. We have developed our own tools to automate parts of this process, including research and author services, which allow us to quickly and easily create fully formatted and quality-checked manuscripts. Machine learning AI has enabled automated language editing tools, speeding up manuscript assessment and reducing rejections.

In 2020, our technology enabled us to deliver over three billion online article and book chapter downloads from our platforms, 50% more than in 2019 – that's 15 article or book chapter downloads for each of the approximately 200 million

university students and researchers in the world. We also delivered digital copies of our content to over 1,000 partners to enable its efficient discovery on our platforms, or its access and use on their platforms.

Over the past 15 years, improvements such as these have reduced the average time from acceptance to publication by 60%, saving valuable time for the hundreds of thousands of academics we work with. We're exploring ways to automatically match papers with peer reviewers based on expertise and availability and embed technology tools to conduct automated plagiarism and ethics checks.

Book publishing is also being transformed by new technology: embedded multimedia connects textbooks and online courses; while AI creates summaries of the most current and relevant research from across an entire subject area and supports greater personalisation, with collections designed for each reader.

We continue to innovate. The **Nature Index Artificial Intelligence supplement**, published in December, included summaries of research articles created using AI and looked more broadly at AI in scholarly publishing. It also investigated emerging AI applications, such as in detecting deep fakes, drug discovery and recognising bias in facial recognition.

TRANSFORMING RESEARCH PUBLISHING CONTINUED

REMOTE ACCESS DURING LOCKDOWNS

Researchers want their digital interactions with us to be fast, simple and convenient. In late 2019, Springer Nature was the first publisher to implement **SeamlessAccess**, and was one of the five founding publishers to develop **GetFTR**, enabling users to find and use research seamlessly via different devices, on and off campus. This proved a timely development given mandatory lockdowns and increased homeworking.

During the earliest stages of the pandemic, our technology teams identified several patterns as researchers struggled to access content remotely. For example, content usage was initially reduced, and evidence indicated that authorised users were returning on different browsers – from home – and being denied access.

A cross-functional group rapidly developed an approach to support researchers. Persisted Access uses data stored within a researcher's browser to provide institutional verification. It was rolled out in March to prevent authorised users from hitting unnecessary paywalls, while easily accessing research from anywhere with authentication from Springer Nature for 90 days. As a result, denials for previously authenticated users fell by 70%, saving researchers time and leading to an immediate growth in research usage across our platforms. More than 13 million researchers have benefited from Persisted Access across **nature.com** and **SpringerLink**.

Content showcase

The Encyclopedia of Sustainability Science and Technology Series



The Encyclopedia of Sustainability Science and Technology Series is a resource for scientists and engineers in developing and applying technologies to address sustainability.

Access some example content [here](#)



VALIDATION AND DISTRIBUTION



SUBMISSION



PEER REVIEW



ACCEPTANCE



PUBLICATION

IMPROVING THE ACCESSIBILITY OF OUR CONTENT

We value all of our users and customers equally and strive to create products that meet different needs and requirements. Our inclusive culture drives our ambition to increase and improve accessibility across the business in all that we publish. In 2020, we started employing accessibility specialists to help support teams to improve the accessibility of our products and, in 2021, we will create an accessibility steering group to advise, guide and review our progress across Springer Nature, to make our content more accessible to all. We are committed to improving user experience and significantly increasing user-experience research with participants with a disability (working towards a longer-term aim of 20% representation).

SAVING TIME FOR AUTHORS AND RESEARCHERS

By using new technology, we are streamlining the submission process for authors, already reducing the time it takes for researchers to submit a

manuscript by 33%, down from 90 minutes to 60 minutes.

To maintain the academic quality and rigour of manuscripts we have invested in enhanced quality control processes to partially automate the experience. We support the author by assisting during the submission process, for example, extracting details from the manuscript to auto-fill the submission form, and enabling transfers for papers to more suitable journals to reduce duplicated efforts. Our rights process and payments for OA authors are completely digital and set up to automatically match authors with agreed funding bodies to simplify and speed up the workflow.

Since 2018, we have reduced the time to publication by 25%. Our intention is, that through this investment in advanced technologies, the publishing experience will continue to improve for researchers, becoming automated and flowing straight from acceptance to publication, immediately reaching hundreds of thousands of researchers.

CHAMPIONING DIVERSITY, EQUITY AND INCLUSION



MAKING CHANGE HAPPEN

We believe that diversity, equity and inclusion (DEI) are essential to achieving our mission of opening doors to discovery. We recognise that systemic barriers to equality exist and so we want to play our part. By acting purposefully we will achieve meaningful change.

DEI is one of our highest strategic priorities and is reflected both in the public commitments we've made and the company values that guide our actions. Our DEI strategy has two main streams: an internal focus on our organisation; and another external view into the research, education and professional communities that we are part of.

GOVERNANCE APPROACH

Our DEI Council, comprising senior leaders and members of our employee networks, provides a single governance structure to support our DEI ambitions. The Council aligns and coordinates all our internal and external DEI activities.

DIVERSITY, EQUITY AND INCLUSION AT SPRINGER NATURE

We want everyone at Springer Nature to contribute their best and thrive, creating a diverse and inclusive culture with structures that support equitable opportunities for merit-based success.

In 2018, we set a target that by 2023, 45% of global leaders in the top three tiers of the organisation should be women, rising from a baseline of 39%. We have made progress year-on-year, meeting the target during the course of 2020, and ending the year at 43%.*

We know there is more to do. In 2020, we built on our progress by strengthening and further developing our DEI strategy. We've taken a holistic approach, by not prioritising any specific identity group, while focusing on certain crucial topics, including anti-racism.

7

EMPLOYEE NETWORKS

31

LOCAL CHAPTERS

1,400+

MEMBERS

499

PEOPLE ATTENDED EIGHT
DEI TRAINING SESSIONS
FOR SENIOR LEADERS

>9,000

PEOPLE COMPLETED ADDRESSING UNCONSCIOUS
BIAS AND WORKPLACE HARASSMENT
E-LEARNING MODULES

*Data in this paragraph was reviewed by our auditors – please see audit statement on [page 30](#).

MAKING CHANGE HAPPEN CONTINUED

In 2021, as the next stage in our three-year strategy, we plan to:

- Develop and announce appropriate targets to measure and increase race, ethnicity and international representation, in our leadership teams, both globally and locally.
- Introduce inclusive leadership training for senior leaders, as well as online training and additional learning resources on anti-racist and inclusive behaviours for all employees.
- Mandate and track use of our hiring checklist to ensure equitable and fair hiring processes for women and other underrepresented groups.
- Launch new mentoring programmes to increase career opportunities for parents and caregivers and for those from regions currently underrepresented in leadership.
- Conduct a voluntary inclusion survey to measure internal experiences throughout the organisation.
- Work with DEI advocates to empower and upskill employees.
- Continue to collaborate with supporting organisations and external partners (such as Stonewall UK and the Historically Black Colleges and Universities (HBCU) Foundation).

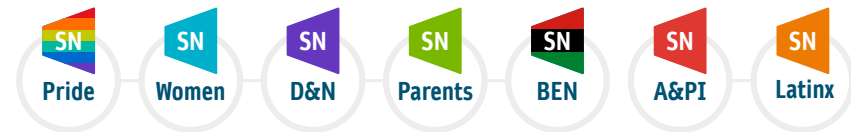
EMPLOYEE NETWORKS

We believe that our people can support each other through strong internal employee networks. We allocate budgets for network projects and events, developing a formal governance structure and guidance resources and providing advice on strategy and approach.

We recognise the valuable expertise and perspective the networks provide, actively creating processes and opportunities for members to contribute to real business solutions. In 2020, we launched three new networks:

- SN Asians & Pacific Islanders (SN A&PI) connects Asian and Pacific Islander employees in the US, creating an open forum to share cultural experiences.
- SN Black Employees Network (SN BEN) aims to build a support community for black employees, improving representation at all levels and creating internal awareness of topics and issues that impact the black community, in our industry, locations and areas of influence.
- SN Latinx US provides a forum for networking and professional development, including recruitment, for the Latinx community at Springer Nature and in the wider publishing industry.

WE HAVE FIVE GLOBAL EMPLOYEE NETWORKS AND TWO US NETWORKS



CHAMPIONING DIVERSITY, EQUITY AND INCLUSION IN OUR COMMUNITIES

As a global publisher, we have a responsibility to use our influence to push for positive change and we take that responsibility seriously. We commit to championing diversity, equity and inclusion in the communities we serve. We will work to eliminate barriers to creating, discovering and using knowledge, and support equitable outcomes in learning and advancing scholarship – from young learners to PhD-level and beyond.

Given our scale and reputation, we have identified areas where we will take action ourselves and where we will work in partnership with our communities. For example, the **Nature Conferences Diversity and Code of Conduct Policy** sets out expectations about diversity within the organising committees and speakers at Nature Conferences and commits us to monitor and report our efforts. In addition, the Policy sets out appropriate conduct expectations and includes a process for reporting harassment and other unacceptable behaviour.

Springer Nature was shortlisted for the Inclusivity in Publishing Award at The London Book Fair International Excellence Awards 2020.

RESPONDING TO THE BLACK LIVES MATTER MOVEMENT

The killings of several black people in the US during 2020 gave added focus to the issue of systemic racism, and specifically anti-black racism. Our greatest impact can be through the content that we publish: amplifying underrepresented voices and sharing relevant research. We created a Black Lives Matter portal, including free-to-access content related to systemic racism, police brutality and related topics. By the end of 2020, it had been accessed more than 56,000 times.

In June 2020, Springer Nature donated \$50,000 to the Historically Black Colleges and Universities (HBCU) Foundation. The Foundation provides scholarships, internships and career opportunities to students attending HBCUs.

LIVING OUR VALUES



SUPPORTING OUR PEOPLE

Springer Nature colleagues, spread across 50 countries, are a diverse workforce whose needs and interests we actively support.

Springer Nature comprises many internationally dispersed and globally organised teams. In 2020, we replaced our leadership principles with 'Ways of Working' for all of our employees. The Ways of Working express the qualities that we believe are necessary to deliver Springer Nature's mission of opening doors to discovery and honour our four values:

CODE OF CONDUCT

We are all responsible for maintaining a safe and respectful workplace free from discrimination, harassment, unwanted physical contact, intimidation and bias. In our **Code of Conduct** for employees, which was updated in 2020, we set out expectations that all employees are treated fairly and respectfully by their managers and colleagues. All staff must affirm their commitment to this Code annually.

OUR VALUES AND WAYS OF WORKING



PARTNERSHIP

Trust each other and engage to build strong relationships – inviting and respecting different perspectives, working well together and recognising the contributions of all.



INTEGRITY

Deliver on our promises and priorities and inspire through our actions. Be a role model for others – fair, respectful and true to ourselves.



DRIVE

Activate change and accelerate our potential. Be agile and adaptable, open to new ideas and embrace opportunities to develop and succeed.



RESPONSIBILITY

Do the right thing for all our communities and champion diversity, equity and inclusion. Play your part in ensuring we act as a responsible business, driving sustainable progress and recognising the ideas and opinions of all.

SUPPORTING OUR PEOPLE CONTINUED

We provide our people with mandatory values and conduct training, updated each year, including modules on anti-harassment and unconscious bias. In 2020, more than 96% of employees completed this training.

EMPLOYEE ENGAGEMENT

2020 saw unprecedented challenges, and we have prioritised employee engagement and wellbeing through this period (see pages 7–8). As well as regular surveys and check-ins with employees throughout the crisis, our main employee Pulse engagement survey, which is used to monitor employee engagement globally, was held in late 2020. Building on the previous survey in 2018, it looked at key areas, including whether colleagues:

- Understand how Springer Nature plans to achieve its goals.
- Can get help from teammates and colleagues.
- Have opportunities to learn and grow.
- Are able to successfully manage work–life balance.
- Feel proud to work at Springer Nature.
- Would recommend Springer Nature as a great place to work.

Given the backdrop of the pandemic, the levels of engagement and commitment to the organisation were notable.

76% of colleagues participated in the survey. 80% said they were happy working for Springer Nature, with an overall scoring of 77 (taking into account unfavourable as well as favourable ratings), three points above a global benchmark from multiple companies and sectors.

Scores related to pride, collaboration and willingness to recommend Springer Nature as a place to work were all high and similarly above benchmark scores. Colleagues also told us that they were very willing to put in extra effort to help Springer Nature succeed. Areas where scores were lower or more variable depending on the part of the business – and so will be considered for action in 2021 – include work–life balance, and opportunities for development and growth.

EMPLOYEE WELLBEING, HEALTH AND SAFETY

Our global health and safety policy governs our management of both mental and physical health risks.

As our workplaces are primarily office based, ergonomics and wellbeing are the primary concerns. We already have extensive procedures in place to reduce these risks to the lowest level we can, and these are kept under constant review. Access to higher risk areas such

as plant rooms or roof access points is tightly controlled and only permitted for relevant employees who have completed appropriate training or have received required instructions.

We strive to support our colleagues' wellbeing and to raise awareness of the impact of mental health issues. In the UK, US, Germany, New Zealand, Australia and countries in Southern Africa we make services available so that employees can access confidential support or advice on issues such as finances, stress or health and wellbeing. COVID-19 has presented additional challenges to mental and emotional wellbeing, including social distancing and isolation. We increased our communication in order to support those working remotely, including weekly CEO video messages and weekly online polls that gauged how well our colleagues were coping. Our existing employee networks were mobilised to listen and share challenges specific to particular groups, helping senior management to develop and quickly deploy parent/carer-friendly policies, and connecting people with colleagues in similar circumstances to support wellbeing.

In 2019, Springer Nature signed the Time to Change Pledge – a UK national initiative to raise awareness and remove stigma associated with mental

80%

**OF COLLEAGUES SAID
THEY ARE HAPPY TO WORK
FOR SPRINGER NATURE**

health. While this multi-stakeholder programme will come to an end in March 2021, we remain focused on providing tools for managers to have supportive conversations in the workplace and encouraging more open discussions around mental health. In the UK, a group of 15 trained wellbeing champions provide mental health support and resources. This included a programme of virtual activity in 2020 to support colleagues through the pandemic.

We have developed a health and safety management system for internal recording of incidents across our sites. Information is reported regularly to senior management to consider any trends or actions that may be required to reduce the possibility of similar incidents reoccurring. The accident frequency rate in the locations where it is reported is 1.44 per million hours worked.

MANAGING RISKS THROUGH OUR SUPPLY CHAIN

Integrity is a key value for Springer Nature. We have Codes of Conduct for employees, business partners and editors. These give us the framework we need to support our values through every part of our supply chain.

We want our people to put our Code of Conduct into practice and to discuss and debate issues related to integrity, both within Springer Nature and also in our supply chain.

Compliance with the laws and regulations that impact our business is essential. This means that all employees and business partners are expected to:

- Abide by all applicable laws, even if this could put us at a business disadvantage.
- Be aware of, and respect, national laws when they are more restrictive than our own rules, to ensure local compliance.
- Follow Springer Nature's global guidelines and policies when local laws are less restrictive than our own rules.

ACTING ETHICALLY

Our employees and business partners are encouraged to raise any questions or concerns as soon as possible. Our message is: "If you see something – say something". Any authors, suppliers, editors or customers who don't wish to

contact us directly can use Speak-Up, a confidential whistle-blowing system independently hosted by Business Keeper AG. Our supervisory board reviews the most significant reports twice a year.

In 2020, we received a total of 128 reports, of which 87 arrived via Speak-Up. Although there were fewer reports than the 211 received last year, the reduction was mostly seen in the more routine enquiries rather than material concerns. These reports have been addressed by our governance, risk and compliance team with the remainder being redirected to more relevant departments. The most common topics reported on were questions relating to conduct towards others and compliance with regulations.

Springer Nature's independent ombudsman, Dr Thomas Thiekoetter, can be contacted directly or through the **Speak-Up system**.

DIGITAL SECURITY AND DATA PROTECTION

We aim to be a data-driven and customer-centric organisation, offering valuable services and insights. We recognise the potential risks to customers, staff and company reputation if we don't ensure the security of our data and systems.

We have therefore established several technical and organisational measures to protect our systems, commercially sensitive information and other customer and staff data. These include embedding 'privacy by default and design' and 'security first' principles into our application development process. We have introduced new security initiatives at infrastructure and server level, and substantially invested in training our staff.

TAX STRATEGY

We commit to contributing a fair share of tax. We structure our tax affairs efficiently, in line with legislation and customary practice in the jurisdictions where we operate, and do not tolerate tax planning that might give rise to a tax result contrary to the letter and clear intentions of the regulation and legislation. We subscribe to initiatives that increase tax transparency. The average tax rate currently of the Springer Nature Group is approximately 30% and we do not expect material changes in the mid-term. Our tax strategy for the year ended 31 December 2020 is published **on our website**.

PREVENTING CORRUPT PRACTICE

We operate a zero-tolerance policy for any corruption involving our employees or supply chain and recognise our role in ensuring that the funds committed to projects are not diverted or misused. We must also ensure that public procurement rules are respected, and that competition is fierce but fair.

In 2020, we reviewed our engagement with industry associations internationally. We are implementing a training programme and approval process to make sure the extent of our interactions with competitors in these forums is understood and well controlled.

RESPECT FOR HUMAN RIGHTS

We follow the UN Global Compact, the OECD Guidelines for Multinational Enterprises and the standards issued by the International Labour Organization and expect our business partners to do the same. In 2020, our labour standards audit programme was impacted by the COVID-19 pandemic and lockdown restrictions. Around half of planned audits were completed with the remainder postponed to 2021. Our modern slavery act statement for the year ended December 2020 is published **on our website**.

ENVIRONMENT

REDUCING ENVIRONMENTAL IMPACTS

ACTING ON CARBON

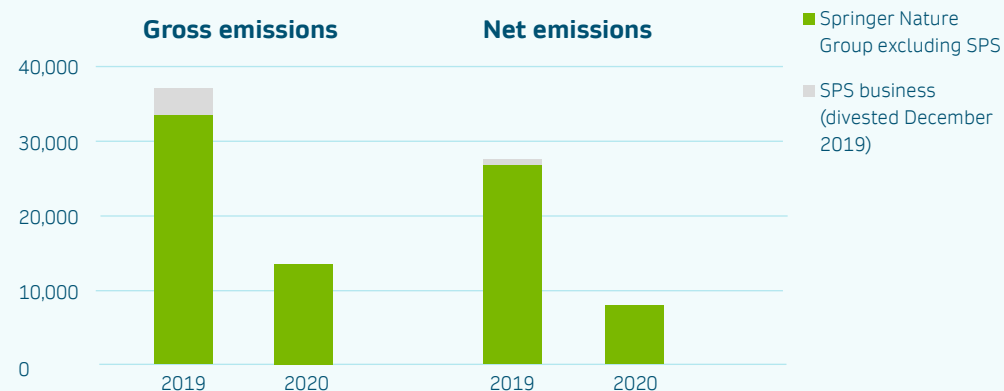
In 2020, Springer Nature became, for the first time, net carbon neutral taking into account emissions associated with our offices, fleet and flights (scopes 1, 2 and partial scope 3). We achieved this by purchasing green energy, reducing our energy consumption and by offsetting other carbon emissions.*

We report our carbon footprint in three ways: gross carbon emissions (2020: 13,663 tonnes of CO₂ equivalent (tCO₂e)); net carbon emissions, calculated to include the reduction in emissions from buying renewable electricity (2020: 8,086 tCO₂e);

and net carbon emissions with the effect of purchasing carbon offsets applied (2020: zero tCO₂e).*

At the end of 2019, we divested Scientific Publishing Services Private Ltd (SPS), a publishing services division based in India. SPS had accounted for approximately 11% of our total energy use and 9% of our gross carbon emissions in 2019. Renewable electricity certificates were purchased for all electricity used by this business. In charts in this section relating to energy and carbon, to allow fair comparison between years, the SPS portion of our carbon footprint is shown separately,

GREENHOUSE GAS EMISSIONS (TONNES CO₂E)



Net figures includes supplier-sourced green electricity and purchase of additional renewable electricity certificates; excludes offsets.

*This paragraph was reviewed by our auditors – please see audit statement on [page 30](#).

REDUCING ENVIRONMENTAL IMPACTS CONTINUED

in grey. All figures comparing the 2020 environmental footprint to earlier years exclude SPS unless stated otherwise.

After accounting for the divestment of SPS, the impact of the COVID-19 pandemic is clear in all our environmental data for 2020. With many offices and warehouses closed or having restricted occupancy for parts of the year, total energy use in our buildings decreased by 18%. Emissions related to business travel saw the greatest reduction, falling 78% overall, and fleet vehicle emissions dropped by 44%. Together, these changes were responsible for a 59% reduction in our gross carbon footprint, before the purchase of green electricity and renewable electricity certificates (RECs) is accounted for, compared with 2019.

We were already purchasing green electricity backed by RECs via our power suppliers for offices in Austria, Germany, the Netherlands, Spain and the UK, as well as renewable energy certificates for our sites in India. In 2020, we expanded this to cover electricity usage at around 140 sites across 38 countries. For 15 sites where it was impractical to buy RECs, due to such small volumes, and for all other outstanding emissions, we have purchased carbon offsets (see page 24). Once RECs are considered, the net carbon reduction since 2019 is 70%.

COMPANY IMPACTS

Buildings

Offices and warehouses



Office paper



Heating/
cooling



Electricity



Water



Waste

and associated carbon emissions (scope 1 and 2 emissions)

Transport

Springer Nature fleet

and associated carbon emissions (scope 1 and 2 emissions)



Company cars



Company vans

Printing

SUPPLY-CHAIN IMPACTS

Utilities for serviced offices and sites (unmetered usage) and third-party data centres



Heating/
cooling



Electricity



Water



Waste

Business travel

and associated carbon emissions (scope 3 emissions)



Flights

Production paper



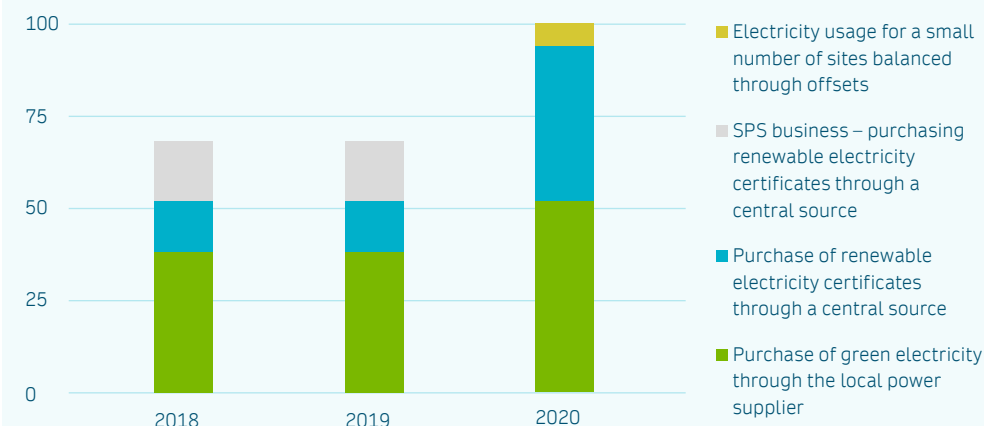
While business travel is expected to increase in 2021–2022, our ‘new normal’ policies (see page 7) set out the expectation that we learn lessons from virtual working during the pandemic, to aid a long-term sustainable reduction in emissions from travel, compared with 2019 and earlier.

IN 2020,

SPRINGER NATURE BECAME, FOR THE FIRST TIME, NET CARBON NEUTRAL TAKING INTO ACCOUNT EMISSIONS ASSOCIATED WITH OUR OFFICES, FLEET AND FLIGHTS.

GREEN ELECTRICITY PURCHASING

(%)



REDUCING ENVIRONMENTAL IMPACTS CONTINUED

CARBON COMPENSATION

We have purchased certificates in order to compensate for 8,086 tonnes of carbon related to our offices, fleet and flights that we are not yet able to reduce in other ways.

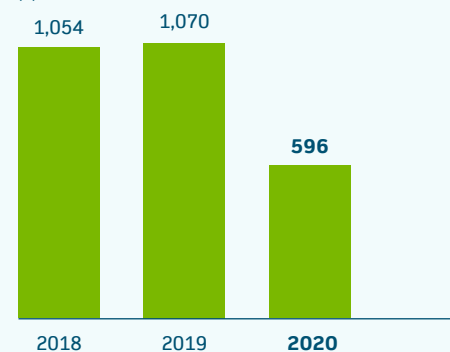
In 2019, an advisory group of senior managers and sustainability experts in the business developed our approach to carbon offsetting. The group agreed that offsetting was an appropriate approach to mitigate those emissions we have limited scope to reduce, such as essential business travel. Any offsetting project we engage with must generate independently verified carbon savings that would not have otherwise occurred. Projects should reflect the global nature of our business, have a positive social impact (with emphasis on projects that are designed with local communities rather than for them), and – in order to reflect the paper used in our supply chain – should include forestry projects.

In 2020, we supported CommuniTree, in Nicaragua, a project certified by Plan Vivo which gives local farmers the chance to earn more from reforesting their land with indigenous trees than deforesting it.

RESOURCE USE

After accounting for the divestment of SPS, water and office paper use, and waste generation, were reduced by 48%, 61% and 44% respectively, largely as a consequence of our employees working from their homes during the pandemic. Office paper tends to be bought in bulk at the beginning of the year, and so excess stock has been stored in our offices. We continue to make processes such as invoicing and expense management paperless, where local regulation allows. We have also continued our drive to remove or reduce plastic wrapping on books and journals that are shipped to customers, retaining this wrap only in exceptional circumstances and testing alternative types of wrapping.

TOTAL SITE WASTE (T)[†]



[†] See footnote 14 on [page 29](#).

PRINTED PRODUCTS

The majority of our journals and books are already published in digital-only formats and the transition away from paper copies has continued at pace in 2020. We have significantly reduced the number of hard copies of journals, replacing print subscriptions with digital versions. The impact of COVID-19 on educational institutions has also had an impact on our print volumes.

For customers who still rely on physical copies, our printed products required 24,105 tonnes of paper in 2020, a decline of around 25% since 2019. We continue to increase our use of print on-demand services, which helps us to reduce over-printing. All our products are printed by third-party suppliers, and our **paper policy**, which is shared on our website, requires that only paper sourced from known, legal and responsible sources is used in our products. Papers must be graded three or five stars in the Publisher Database for Responsible Environmental Paper Sourcing (PREPS), or certified by one of the Programme for the Endorsement of Forest Certification (PEFC), Sustainable Forestry Initiative (SFI), or the Forest Stewardship Council (FSC) standards.

We survey our largest printers to determine compliance with the paper policy. In 2020, among surveyed printers, compliance was 98%, an increase from 2019, when the figure was 90%. This increase reflects additional training and supplier outreach about Springer Nature's paper policy. There continues to be small amounts of paper supplied where we are not currently able to demonstrate sustainability as the paper is ungraded by PREPS. We are working with vendors to get PREPS ratings for all stocks.

Reducing our reliance on print has also lowered the impact of distribution and shipping. Volumes of shipped printed products reduced significantly, due to the pandemic: 17% fewer physical books and 18% fewer physical journals, were shipped in 2020 as compared with 2019.

ENCOURAGING BEHAVIOURAL CHANGE

We are committed to raising awareness about climate change impacts and mitigation, including with our approximately 10,000 colleagues. A global Green Office Network of employees volunteer to support environmental initiatives in their locations.

REDUCING ENVIRONMENTAL IMPACTS CONTINUED

A survey of network members in 2020 identified resources that colleagues need to take action. In June we launched a Green Building Checklist, a guide to help colleagues identify tools and techniques to make our offices greener, such as lighting sensors, temperature controls and clear waste labelling. Despite the restricted access to sites, by year-end eight offices had used the checklist to identify simple and cost-effective options.

Colleagues shared ideas about how to minimise their personal environmental impacts while working from home. With increased virtual working, the network was able to connect across countries and locations more than in the past. One campaign, run by the Heidelberg chapter, created an upcycling challenge, encouraging colleagues to give older items a new purpose and save on unnecessary waste. The network across India organised a nature and wildlife photography contest.

In November 2020, a cross-company Green Week included a range of activities, talks and workshops to promote sustainability, raising awareness of and discussing the company's progress in reducing its carbon footprint and environmental impacts.



ENVIRONMENT POLICY

A new group-wide Environment Policy was developed in 2020 and will be rolled out in 2021. It sets out expectations for colleagues and other stakeholders on the most material environmental impacts covered in this report.

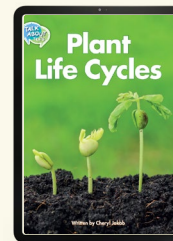
THE CLIMATE PLEDGE

In 2021, Springer Nature became a signatory to The Climate Pledge, a multistakeholder initiative calling on businesses to be net zero carbon by 2040 and requiring annual reporting of carbon emissions, as provided in this report.

Content showcase

Building climate knowledge at every stage of learning

We support SDG 13.3, raising awareness of climate change and related issues across all parts of our publishing portfolio, from books aimed at the youngest learners, to higher education textbooks and journals for specialist researchers. Talk About Texts helps young learners develop literacy skills through real-world topics including wildlife and the environment. The Global Business Environment offers an introduction to the global business environment with a focus on sustainability issues that challenge businesses today. Nature Climate Change publishes the latest research on the climate crisis.



Talk About Texts

[Discover](#)



The Global Business Environment

[Discover](#)



Nature Climate Change

[Discover](#)

OUR SUPPORT FOR COMMUNITIES



As one of the world's largest publishers of education content, we know that we can have a significant positive impact on the communities we serve. We also recognise the need to invest in education and research in places where it is needed, but may be unaffordable, with the aim of reducing the knowledge gap between higher and lower income countries.

We are founder partners of Research4Life, which offers subscription research content to scholars in low- and middle-income countries for free or at low cost and in 2020 we made a three-year commitment to support the Friends of Research4Life to enable improved content discovery, access and use in these countries.

Sustainable OA requires its own funding, usually in the form of article processing charge (APC) payments or transformative agreements. These can be difficult to finance in low- and middle-income countries and in some research disciplines, so Springer Nature operates an APC waiver and discount policy. In 2020, our fully OA journals waived fees of over €13.5 million to authors in financial need, including €4.8 million for articles with corresponding authors based in countries or regions on the World Bank's list of low- and lower-middle-income countries.

We donate textbooks and equipment through partnerships with organisations like Books2Africa and we give the residual value from recycled paper produced by recycling our obsolete stock in Mexico.

DONATIONS

In 2020, we gave approximately €624,000 in donations and sponsorship to charities and organisations that align with our corporate social responsibility approach.

During 2020, our Macmillan Education Iberia team worked hard to support the most vulnerable in their communities. Macmillan Education Iberia has been collaborating with the Balía Foundation for Children (Fundación Balía por la Infancia) since 2013. The Foundation aims to increase social inclusion for vulnerable young people through socio-educational assistance.

The pandemic lockdown meant that the children and teens the Foundation supports were forced to continue their studies online. Macmillan Education Iberia offered the tutors the same educational resources available to teachers, providing access to digital licences for products to support their tutor groups and donating textbooks, teacher packs and over 200 story books.

OUR SUPPORT FOR COMMUNITIES CONTINUED

They gave the Foundation financial support to employ a native English-speaking teacher to help the children during the school year, and also licences for bMaker, an interactive, digital learning platform that teaches children about new technologies, robotics and programming.

SPRINGER NATURE SATURDAY SCHOOL GOES ONLINE

Since 2014, Springer Nature has supported a Saturday school, offering English and Maths tuition to 7–12 year olds in the London King's Cross area. The Springer Nature Saturday School is run by Civitas Schools, an organisation that provides tuition to children who are working below the expected level for their age, and particularly supports children from low-income families. Springer Nature funds the school's teachers, resources and provides a space for teaching. However, when the Springer Nature offices closed due to the pandemic, Civitas adapted quickly: transferring their teaching online within four weeks, making use of freely available technology. This was possible thanks to the goodwill of parents, and the commitment of teachers who contacted parents directly, planned online lessons and rapidly learned how to use new technology and online resources.

At the start of the term 65% of the spring cohort was able to take part in online learning – a higher number than expected. Over time, online attendance grew to match classroom attendance.

RECOGNITION IN HEALTHCARE

The Springer Medizin Charity Award, founded in 2009, recognises and commends organisations and initiatives that provide free healthcare and medical support to those in need in Germany.

In 2020, this was awarded to three organisations for their voluntary contributions to healthcare and medical

assistance. Each received a prize fund, and their work was showcased in various specialist publications, increasing visibility. The winners were announced at a virtual gala, broadcast from the Axica Congress and Convention Centre, Berlin.

SUPPORTING YOUNG PEOPLE'S MENTAL HEALTH IN INDIA

Macmillan Education India supports the mental health and wellbeing of students, helping them cope with the pressure of exams and to manage anxiety during their education. Macmillan Education has partnered with leading healthcare organisation, Fortis School Mental Health

Programme, for over seven years, jointly conducting free workshops in schools around the country.

In 2020, Macmillan Education reached out to more than 1,000 schools in India offering stress management sessions for teachers and study skills sessions for students. During the pandemic, dedicated sessions on Mental Health and Wellbeing were held in order to address the extra challenges faced by teachers in India. The curriculum has recently been translated into Hindi and distributed free of charge to local educators.

PRIZE

RECIPIENT

1st

Impf Dich – provides science-based education on vaccination in Germany.

2nd

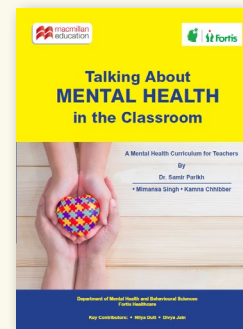
Düsseldorf Association Kids – campaign to teach school children how to live a healthy lifestyle.

3rd

The Patient Companion Project – enables volunteers to visit elderly patients, with support from the Böblingen District Council.

Content showcase

Talking about Mental Health in the Classroom



Macmillan Education, in alliance with Fortis Healthcare, developed a mental health curriculum and life skills programme for children. Schools and teachers are empowered with resources and training to help children learn essential life skills, build resilience and nurture help-seeking behaviour for their overall mental wellbeing.

Find out more [here](#)

 [Discover](#)

KEY DATA

	2018	2019	2020
Economic			
Revenue (€ billion)	1.66	1.72	1.63¹
Our research content			
Proportion of journal content published immediate (gold) open access (OA) (%) ²	29	30	33
Number of new OA articles published ²	92,400	101,900	124,200
Number of fully OA books	651	923	1,250
People			
Number of full-time employees (headcount) ³	12,927	9,753	9,522
Number of full-time employees (FTE) ³	12,596	9,365	9,124
Number of employees by continent (headcount) ³			
Europe	5,509	5,098	4,939
North America	1,097	1,071	1,057
Latin America	860	808	770
Asia	5,564	2,474	2,422
Africa	232	225	235
Oceania	115	77	99
Gender split – management board (% men/women) ⁴	83/17	80/20	67/33*
Gender split – tiers one to three (% men/women) ⁴	61/39	59/41	57/43*
Social impact			
Cash donations and sponsorship (€ thousands) ⁵	875	857	624
Compliance			
Proportion staff undertaken Code of Conduct training (%) ⁶	97	99	96

- 1 Full year revenues for 2020 were impacted by the effects of COVID-19, especially in the education and professional divisions. The research division remained resilient.
- 2 Includes research journal and review article content only, published in fully open access journals or within hybrid journals. Excludes editorials and opinion pieces.
- 3 Springer Nature sold Scientific Publishing Services (SPS) on 31 December 2019. Figures for 2019 exclude around 3,400 colleagues from SPS who exited with this sale.
- 4 On 31st December of the respective year.
- 5 These estimated figures come from group-wide research and information taken from financial systems, and include funds given in donations and sponsorships to charities and non-profit organisations to support projects and programmes that align with our aims.
- 6 Percentage of staff registered for relevant eLearning.

KEY DATA CONTINUED

	2018	2019	2019 Restated without SPS ⁷	2020
Environment⁷				
Energy use				
Total energy (MWh) ⁸	32,967	31,267	27,701	22,594
Renewable energy (%) ⁹	46	47	41	57
Overview of carbon neutral target¹⁰				
Greenhouse gas emissions, gross (tonnes CO ₂ e)	40,445	36,907	33,473	13,663*
Greenhouse gas emissions, net (tonnes CO ₂ e) ¹¹	30,952	27,728	27,104	8,086*
Carbon balance (tonnes CO ₂ e) after purchase of carbon offsets	30,952	20,728	20,104	0*
Emissions within scope of carbon neutral target¹²				
Scope 1 (tonnes CO ₂ e)	5,645	4,847	4,298	2,960*
Scope 2 (tonnes CO ₂ e)				
Location-based emissions	11,578	10,894	8,084	5,286*
Market-based emissions ^{13, 14}	3,093	2,691	2,691	543*
Scope 3 (tonnes CO ₂ e)				
Flights	21,551	19,473	19,398	4,303*
Leased building services (location-based emissions)	1,671	1,693	1,693	1,114*
Leased building services (market-based emissions) ¹³	663	717	717	280*
Emissions intensity (per unit of revenue)				
Gross emissions per million Euros (tonnes CO ₂ e)	24	21	N/A	8
Net emissions per million Euros (excludes offsets) (tonnes CO ₂ e)	19	16	N/A	5
Resource use				
Total water usage (cubic metres)	117,852	121,790	95,495	49,399
Total site waste production (t) ¹⁴	1,054	1,070	1,060	596
Proportion office waste separated from general waste streams (%) ¹⁵	39	52	51	39
Office paper (t)	106	87	85	33
Production paper (t)	32,178	31,553	31,553	24,105
Production waste (t) ¹⁶	1,276	1,762	1,762	980

*Data was reviewed by our auditors – please see audit statement on [page 30](#).

- 7 2019 data is provided as previously reported, including the SPS business which was divested in 2019, and also restated removing SPS to allow a more like-for-like comparison with 2020 data. Carbon emissions data relating to SPS are also shown in the chart on page 22. We collect primary data for our largest sites (those with more than 100 employees). Approximately 70% of energy consumption, 76% of associated gross carbon emissions and 80% of resource use is therefore based on actual data. Data for the remaining locations is extrapolated based on average values.
- 8 This figure includes energy used by sites where we have operational control, our serviced sites and major outsourced data centres.
- 9 This figure relates to both green electricity purchased directly through the electricity provider, for our sites and one major outsourced datacentre, and additional renewable energy certificates purchased via a broker for electricity used at other sites.
- 10 In 2020, Springer Nature set a target to be carbon neutral for our offices, fleet and flights. Scope 1 emissions include those associated with the use of stationary diesel, natural gas, fleet and refrigerant gases. Scope 2 emissions include those associated with the purchase of electricity, district heating and the use of electric vehicles. All figures exclude emissions relating to properties leased by Springer Nature to third parties, and the transmission and distribution of electricity. Additionally, the 'outside of scopes' ('biogenic' part of biofuels) emissions are estimated at 51 tonnes.
- 11 For location based emission reporting, we apply the following hierarchy of emission factors:
1. Regional or subnational grid average where a recent factor is readily available and
 2. National production figures sourced from the International Energy Agency (2020).
- | Factor Source | Country |
|---|---|
| Umwelt Bundesamt, Strom- und Wärmeversorgung in Zahlen (2020). | Germany |
| Department for Business, Energy & Industrial Strategy, Greenhouse gas reporting: conversion factors 2020. | UK |
| The most recently published regional or subnational grid factors available from the national government. | Argentina, France, Japan, Mexico, Singapore, Switzerland, Taiwan, Thailand, USA and Vietnam |
| United Nations Framework Convention on Climate Change, Standardized baseline – Grid emission factor for Southern African Power Pool, Version 01.0 (2018). | Botswana, eSwatini, Lesotho, Namibia and South Africa |
| European Environment Agency, Greenhouse gas emission intensity of electricity generation (2020 edition) | All other European operations |
| IEA, Emission Factors (2020 edition) | All other operations |
- 12 Includes supplier-sourced green electricity and purchases of additional renewable electricity certificates; excludes offsets.
- 13 Market-based emissions figures include the carbon benefits of purchasing supplier-sourced green electricity and additional purchases of renewable energy certificates (RECs).
- 14 Figures relate to typical office and warehouse waste streams and exclude recycling of unsold product and damaged production paper and recycling of construction wastes.
- 15 This indicator was reported for the first time in 2019; 2018 figures are based on data records and extrapolation. The indicator relates to waste that has been separated for recycling, reuse, production of biofuels and composting. It does not include waste that has been sent to incineration (such as in energy-from-waste facilities) or landfill. This indicator relates to a sample of our largest ('core') offices. Data for our largest warehouses shows these mainly have paper and packaging waste, which is sent for reuse and recycling.
- 16 Unsold product and unusable production paper is recycled.

INDEPENDENT AUDITOR'S LIMITED ASSURANCE REPORT

TO SPRINGER NATURE AG & CO. KGAA, BERLIN

We have performed a limited assurance engagement on selected non-financial indicators in the area of diversity and carbon reporting (hereafter 'sustainability disclosures') within the Sustainable Business Report of Springer Nature AG & Co. KGaA for the reporting period from 1 January 2020 to 31 December 2020 (hereafter 'the report').

Our engagement exclusively relates to selected sustainability disclosures marked with *. Our engagement did not include any sustainability disclosures for prior years.

A. MANAGEMENT'S RESPONSIBILITY

The legal representatives of the company are responsible for the preparation of the sustainability disclosures in the report in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (hereafter 'reporting criteria').

This responsibility includes the selection and application of appropriate methods to prepare the report as well as making assumptions and estimates related to individual disclosures which are reasonable in the circumstances. Furthermore, the legal representatives are responsible for such internal controls that they have considered necessary to enable the preparation of a report that is free from material misstatement, whether due to fraud or error.

B. AUDITOR'S DECLARATION RELATING TO INDEPENDENCE AND QUALITY CONTROL

We are independent from the company in accordance with the provisions under German commercial law and professional requirements, and we have fulfilled our other professional responsibilities in accordance with these requirements.

Our audit firm applies the national statutory regulations and professional pronouncements for quality control, in particular the by-laws regulating the rights and duties of Wirtschaftsprüfer and vereidigte Buchprüfer in the exercise of their profession (Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer) as well as the IDW Standard on Quality Control 1: 'Requirements for Quality Control in audit firms' (IDW QS 1).

C. AUDITOR'S RESPONSIBILITY

Our responsibility is to express a limited assurance conclusion on sustainability disclosures in the report based on the assurance engagement we have performed.

We conducted our assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): 'Assurance Engagements other than Audits or Reviews of Historical Financial Information', issued by the International Auditing and Assurance Standards Board (IAASB). This Standard requires that we plan and perform the assurance engagement to obtain limited assurance about whether sustainability disclosures have been prepared, in all material respects, in accordance with the reporting criteria. In a limited assurance engagement, the assurance procedures are less in extent than for a reasonable assurance engagement and therefore a

substantially lower level of assurance is obtained. The assurance procedures selected depend on the auditor's professional judgment.

Within the scope of our assurance engagement, which has been conducted between November 2020 and March 2021, we performed amongst others, the following assurance and other procedures:

- Inquiries of employees regarding the sustainability strategy, sustainability principles and sustainability management of Springer Nature AG & Co. KGaA,
- Inquiries of employees responsible for the preparation of sustainability disclosures in order to assess the sustainability reporting process, the data capture and compilation methods as well as internal controls to the extent relevant for the assurance of sustainability disclosures,
- Identification of likely risks of material misstatement of the sustainability disclosures,
- Inspection of relevant documentation of the systems and processes for compiling, aggregating and validating sustainability data in the reporting period and testing such documentation on a sample basis,
- Inquiries and inspection of documents on a sample basis relating to the collection and reporting of the sustainability disclosures,
- Analytical evaluation at group level and on the level of selected sites regarding the quality of the sustainability disclosures,
- Evaluation of the overall presentation of the sustainability disclosures.

INDEPENDENT AUDITOR'S LIMITED ASSURANCE REPORT CONTINUED

D. ASSURANCE CONCLUSION

Based on our assurance procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that selected non-financial indicators in the area of diversity and carbon reporting in the Sustainable Business Report of Springer Nature AG & Co. KGaA for the period from 1 January 2020 to 31 December 2020 has not been prepared, in all material respects, in accordance with the reporting criteria.

E. INTENDED USE OF THE ASSURANCE REPORT

We issue this report on the basis of the engagement agreed with Springer Nature AG & Co. KGaA. The assurance engagement has been performed for the purposes of the company and the report is solely intended to inform the company as to the results of the assurance engagement and must not be used for purposes other than those intended. The report is not intended to provide third parties with support in making (financial) decisions.

F. ENGAGEMENT TERMS AND LIABILITY

The 'General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (German Public Auditors and Public Audit Firms)' dated 1 January 2017 are applicable to this engagement and also govern our relations with third parties in the context of this engagement (www.de.ey.com/general-engagement-terms). In addition, please refer to the liability provisions contained there in no. 9 and to the exclusion of liability towards third parties. We assume no responsibility,

liability or other obligations towards third parties unless we have concluded a written agreement to the contrary with the respective third party or liability cannot effectively be precluded.

We make express reference to the fact that we do not update the assurance report to reflect events or circumstances arising after it was issued unless required to do so by law. It is the sole responsibility of anyone taking note of the result of our assurance engagement summarised in this assurance report to decide whether and in what way this result is useful or suitable for their purposes and to supplement, verify or update it by means of their own review procedures.

Munich, 6 April 2021

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Nicole Richter
Wirtschaftsprüferin
(German Public Auditor)

Yvonne Meyer
Wirtschaftsprüferin
(German Public Auditor)

GLOBAL REPORTING INITIATIVE CONTENT INDEX

We are using the GRI framework as a reference for our reporting as we believe this is the most appropriate approach for communicating effectively with our stakeholders at this time.

GRI INDICATOR	DESCRIPTION	DETAIL
102-1	Name of the organisation	Springer Nature Group
102-2	Activities, brands, products and services	Springer Nature is a leading publisher of research, educational and professional content. We add value to our communities by providing digital and print content in the form of journals, books and databases primarily to academic and governmental institutions, corporate customers and individuals. Pages 2–3 of this report and https://group.springernature.com/gp/group/about-us provide further overview of business areas and brands.
102-3	Location of headquarters	Registered office: Heidelberger Platz 3, 14197 Berlin, Germany
102-4	Location of operations	Springer Nature has offices in more than 50 countries. In 2020, our largest markets by number of employees are India, Germany and the UK. Please see https://group.springernature.com/gp/group/about-us/locations-contact
102-5	Ownership and legal form	Please see https://group.springernature.com/gp/group/about-us and https://group.springernature.com/gp/group/about-us/corporate-governance
102-6	Markets served	The content we publish is available in more than 180 countries. For further information on the sectors we serve, please see https://group.springernature.com/gp/group/about-us/research-business https://group.springernature.com/gp/group/about-us/education-business https://group.springernature.com/gp/group/about-us/professional-business
102-7	Scale of the organisation	As at 31 December 2020: Springer Nature employed over 9,522 (headcount) people and 9,124 (FTE) people. In 2020, we handled more than 1 million article submissions and published around 372,000 articles across almost 3,000 journals and 13,000 books. We have published more open access research than any other publisher. Our content platforms were visited more than 3 million times every day.
102-8	Information on employees and other workers	Please see pages 19–20 of this report. The vast majority of our company's activities are performed by permanent employees. Temporary staff include seasonal workers in warehouses, to assist with peak seasons.

GLOBAL REPORTING INITIATIVE CONTENT INDEX CONTINUED

GRI INDICATOR	DESCRIPTION	DETAIL
102-9	Supply chain	<p>As a global business, Springer Nature has an international supply chain.</p> <p>Direct goods and services include: global production (pre-press, print, paper), global distribution (transport and shipping, postage, warehousing and logistics).</p> <p>Indirect goods and services include: IT (hardware, software, services, fixed/mobile telecoms), marketing, travel and events, external agencies and communications, auditing, consulting/outsourcing/offshoring.</p>
102-10	Significant changes to the organisation and its supply chain	In 2020, Springer Nature took a majority interest in Research Square and this site is now included in primary data collection.
102-11	Precautionary principle or approach	Our identification and management of our key sustainability risks is informed by the latest science, and we support a precautionary approach to environmental challenges.
102-12	External initiatives	Key external initiatives that we engage with, as relevant to our environmental, social and governance (ESG) impacts include: BookChain Project, Charta der Vielfalt, CLOCKSS, Committee on Publication Ethics (COPE), the International Chamber of Commerce UK Committee on Corporate Responsibility and Anti-Corruption Policy, Klimaretter-Lebensretter, Knowledge Quarter, the Publishers Association Inclusivity Action Plan, Research4Life, Research on Research Institute (RoRI), the San Francisco Declaration on Research Assessment (DORA), SDG Publishers Compact, Stonewall UK Diversity Champions, The Transparency Forum (hosted by the UK's Health Research Authority), UK Reproducibility Network (UKRI), Urban Partners for King's Cross, Euston and St Pancras, Valuable 500.
102-13	Membership of associations	<p>This non-exhaustive list includes associations which are important for Springer Nature to represent company interests and where our staff take a leading role.</p> <p>Research Division: Association of Learned and Professional Society Publishers (ALPSP), Associação Brasileira de Editores Científicos (ABEC), Börsenverein des Deutschen Buchhandels, CHORUS, CrossRef, De Mediafederatie, National Information Standards Organization (NISO), Open Access Scholarly Publishers Association (OASPA), ORCID, The UK Publishers' Association, Research4Life, the Scholarly Networks Security Initiative, Society for Scholarly Publishing (SSP), STM.</p> <p>Education Division: Association of Publishers – India, Camara Argentina del Libro, Cámara Nacional de la Industria Editorial, Confederation of Indian Industry, PASA, Polish Chamber of Books, Egyptian Publishers Association.</p> <p>In addition, parts of our Professional Division are members of relevant associations to their markets in Germany, France, the Netherlands and Austria.</p>
102-14	Statement from senior decision maker	See page 5 of this report.
102-16	Values, principles, standards and norms of behaviour	See pages 19–20 of this report and Springer Nature's Code of Conduct: www.springernature.com/codeofconduct-EN
102-18	Governance structure	https://group.springernature.com/gp/group/about-us/corporate-governance Also see page 6 of this report.

GLOBAL REPORTING INITIATIVE CONTENT INDEX CONTINUED

GRI INDICATOR	DESCRIPTION	DETAIL
102-40	List of stakeholder groups	See page 4 of this report. Our materiality matrix captures issues raised by stakeholder groups including the research community, authors, editors, librarians, research funders, employees and investors.
102-41	Collective bargaining agreements	Springer Nature recognises the importance of open communication and engagement between workers and managers regarding working conditions. We respect our employees' legal rights to freely associate, organise and bargain collectively without fear of harassment, intimidation, penalty or reprisal. We require our business partners to do the same with their own employees, as stated on page 5 of our Business Partner Code of Conduct . In markets where collective bargaining is inhibited by law or by custom, we provide other means for employees to provide collective feedback and receive a considered response, such as town halls, works councils and employee representation forums.
102-42	Identifying and selecting stakeholders	We define our stakeholders as those parties who can have an impact on our business or who are impacted by our business. Our key stakeholders are those with the greatest impacts, i.e. the institutions, researchers and educators we work with; our employees; and our shareholders. We engage actively with these groups.
102-43	Approach to stakeholder engagement	We use a variety of means to engage with stakeholders. This engagement is not carried out specifically as part of the report preparation process but as part of our general management approach, and summaries are reviewed as part of the materiality approach. For example: <ul style="list-style-type: none"> • We engage with our global workforce through our annual Pulse engagement survey (see page 20 of this report). Please also see GRI102-41. • We engage with institutions, researchers and educators mainly at conferences, client meetings, via editorial boards, library advisory boards and other events. • We engage with others in our industry on environmental issues through the quarterly meetings of the BookChain project and as part of the UK Publishers Association Sustainability Taskforce.
102-44	Key topics and concerns raised	Examples of topics raised by key stakeholders: <p>Institutions, researchers and educators:</p> <ul style="list-style-type: none"> • Accelerating solutions to urgent societal challenges. • Opening up research. • Responding to COVID-19. • Using technology to advance discovery and learning. • Championing diversity, equity and inclusion in our communities. • Living our values. <p>Employees: Employee engagement.</p> <p>Shareholders: Shareholders require us to report ESG data annually.</p> <p>See page 6 of this report for our full list of material issues.</p>

GLOBAL REPORTING INITIATIVE CONTENT INDEX CONTINUED

GRI INDICATOR	DESCRIPTION	DETAIL
102-45	Entities included in the consolidated financial statements	Reporting covers entities that are part of Springer Nature Group: Springer Nature AG & Co. KGaA and its subsidiary companies. It is referred to through this report as 'Springer Nature', 'the company' or 'the organisation'. Please see https://group.springernature.com/gp/group/about-us for more information.
102-46	Defining report content and topic boundaries	<p>We define the content of our reporting based on the process outlined in GRI 101, applying the principles of stakeholder inclusiveness, sustainability context, materiality and completeness. Issues are identified and prioritised based on stakeholder engagement during the year, sustainability concerns raised in wider society (influence on stakeholder decisions) and the concerns of expert communities and the results of impact assessment (significance of economic/social/environmental impacts). The matrix is reviewed and approved by the Culture, Values and Community Committee. In 2020, an additional external view was provided by a specialist sustainability consultancy.</p> <p>Due to the nature of our business, many of our material impacts are indirect, occurring in our supply chain or through the use of our content. We consider our whole value chain when defining the boundaries of each material issue.</p> <p>Please see page 6 of this report.</p>
102-47	List of material topics	Please see page 6 of this report.
102-48	Restatements of information	To ensure fair comparison of data year-on-year, we restate figures from previous years if there is a significant change to our data gathering processes, methodology or estimation approach. Data has not been restated compared to that published in 2019, although year-on-year comparison statistics exclude the divested Scientific Publishing Services (SPS) business, as indicated in the accompanying text.
102-49	Changes in reporting	Assets and employees of the SPS business, which was sold at the end of 2019, are no longer included in our data.
102-50	Reporting period	Calendar year 2020.
102-51	Date of most recent report	Springer Nature's report covering calendar year 2020 was published in April 2021. Our previous report was published in March 2020, covering calendar year 2019.
102-52	Reporting cycle	Annual.
102-53	Contact point for questions regarding the report	Enquiries can be sent to the Responsible Business team at communications@springernature.com or to Corporate Affairs, Springer Nature, The Campus, 4 Crinan Street, London N1 9HW.
102-54	Claims of reporting in accordance with the GRI Standards	We believe that providing a GRI-referenced report is the most appropriate approach for communicating effectively with our stakeholders at this time.
102-55	GRI content index	GRI content index.
102-56	External assurance	Our auditor, EY, performed a limited assurance engagement on selected non-financial indicators in the area of diversity and carbon reporting marked in the data tables on pages 28–29 of this report with * in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised). Their full statement can be read on page 30 of this report.

GLOBAL REPORTING INITIATIVE CONTENT INDEX CONTINUED

Material topics

MATERIAL TOPIC	GRI INDICATOR	DESCRIPTION	DETAIL
All	103-1	Explanation of the material topic and its boundary	See page 6 of this report for an explanation of our material issues. Unless stated otherwise, the reporting boundary applied to economic issues is Springer Nature Group. For environmental issues, it is all Springer Nature operations worldwide (fleet, offices, warehouses, business flights), and for labour issues, it is all Springer Nature employees worldwide.
All	103-2	The management approach and its components	See page 6 of this report for an overview of how we manage our material issues. Details of relevant policies, commitments, targets and activities are given by topic on pages 7–27 of this report. Details of responsibilities, resources and grievance mechanisms, where this differs from the overall approach outlined on pages 7–27 of this report, are given per material issue in this Content Index.
All	103-3	Evaluation of the management approach	See page 6 of this report for an overview of how we evaluate progress on our material issues. Any variation in approach for a particular material issue is stated by topic on pages 7–27 of this report.
Diversity in the research community and accelerating solutions to SDGs	203-2	Significant indirect economic impacts	<p>Our role in facilitating access to research, education, vocational training and professional development supports a wide range of industry sectors.</p> <p>We go further by supporting the participation of researchers from lower income countries and other underrepresented groups in the global research community, for example, through our membership of Research4Life and provision of article processing charge (APC) waivers. Please see page 26 of this report for more information.</p> <p>We have a specific focus on research for the SDGs, supporting sustainable development. Please see pages 9–12 of this report.</p>
Anti-corruption	205-1	Operations assessed for risks related to corruption	We regularly assess all Springer Nature operations for risks related to corruption. We engage in sales to governments and institutions funded by governments and NGOs in both our Research and Education divisions. This includes working with curriculum development, the submission of our products to government authorities for approval and submissions to tender processes. We issue specific training relating to these activities in addition to including anti-bribery and anti-corruption as a topic in our all-staff training. Please see pages 19–20 of this report for information about the Code of Conduct and training.
Anti-competitive behaviour	206-1	Anti-competitive behaviour	Following the decision of the Spanish Competition Authority (Comisión Nacional de los Mercados y la Competencia, CNMC), as outlined in our 2019 Responsible Business report, we have identified relevant staff and rolled out training regarding cooperation via publishers associations.

GLOBAL REPORTING INITIATIVE CONTENT INDEX CONTINUED

MATERIAL TOPIC	GRI INDICATOR	DESCRIPTION	DETAIL
Product/packaging materials	301-1	Materials used by weight or volume	<p>The tonnage of paper used to produce our printed products is reported on page 24 of this report, where you can also find out more about our policies for responsible sourcing of paper. As we increasingly distribute content digitally this issue is becoming less material over time. We do not have centralised data on the use of packaging materials for all of our products. See page 24 of this report for our work on reducing the impact of product packaging.</p> <p>We do report production waste generated from our warehouses, which includes spoiled printing papers, unsold product and any packaging applied by our suppliers which is removed at our warehouses. Data for our largest warehouses shows this paper is sent for recycling.</p> <p>At the site level, we track the usage of inputs that may be locally significant, including office paper and drinking/sanitation water use and waste generated (see page 24 of this report).</p>
Climate impacts	305-1	Direct (Scope 1) GHG emissions	Please see pages 22–25 and key data table on page 29 of this report.
	305-2	Energy indirect (Scope 2) GHG emissions	Please see pages 22–25 and key data table on page 29 of this report.
	305-3	Other indirect (Scope 3) GHG emissions	Please see pages 22–25 and key data table on page 29 of this report.
	305-5	Reduction of GHG emissions	Please see pages 22–25 and key data table on page 29 of this report.
	305-6	Emissions of ozone-depleting substances (ODS)	Please see reporting of fugitive gases under Scope 1 (page 22 of this report).
Workforce health and safety	403-6	Promotion of worker health	Please see page 20 of this report.
	405-1	Diversity of governance bodies and employees	By 2023, we are aiming for 45% of employees in the top three tiers of the organisation to be women. See pages 17–18 of this report for reporting against this target and other initiatives. We do not report age diversity data, nor gender diversity data for other employee categories as this data is held at the local level and in some cases subject to confidentiality constraints.
Labour standards	414-2	Negative social impacts in the supply chain and actions taken	Please see our Modern Slavery Statement 2020 on this page: www.springernature.com/modernslaveryactstatement-EN
Data privacy and security	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Springer Nature has not received any substantiated complaints relating to customer or employee privacy this year.
Opening up access to research			Springer Nature has published more open access research than any other publisher – more than 900,000 articles in total, to date. Our approach is outlined on pages 13–14 of this report and the metrics in the data table on page 28 of this report.
Diversity in the research community			Please see pages 17–18 of this report.

GLOBAL REPORTING INITIATIVE CONTENT INDEX CONTINUED

MATERIAL TOPIC	GRI INDICATOR	DESCRIPTION	DETAIL
Safeguarding research integrity			Please see page 14 of this report.
Tax			Please see our tax strategy disclosure at www.springernature.com/taxstrategy-EN
Author rights			Please see page 14 of this report.
Content piracy/IP			Please see page 14 of this report.



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