



OPENING DOORS TO DISCOVERY

Springer Nature
Responsible Business Report
2019

ABOUT THIS REPORT

In 2019, Springer Nature has evolved its Responsible Business reporting format to better meet the needs of key stakeholders, including:

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

This Environmental, Social and Governance Report (ESG) highlights the most material ESG issues for Springer Nature, how we monitor and manage these and our progress.

The report, which also discusses how the company aims to support the delivery of the Sustainable Development Goals (SDGs), has been prepared with reference to the standards of the Global Reporting Initiative (GRI) (see pp 23–28).

In this report, we focus on performance and activities from 1 January 2019 to 31 December 2019. Some case studies and other stories refer to activities that began before 2019. These are either ongoing projects, still relevant to our work in 2019 or relate to our most material issues.

Previous reports, and other relevant documents, can be found at www.springernature.com/responsiblebusiness



Visit our [microsite](#)



CONTENTS

02	OUR BUSINESS
03	The power of publishing
04	Supporting the SDGs
05	Focusing on what matters most
06	SUSTAINABLE DEVELOPMENT GOALS
07	Our contribution
09	OPENING UP RESEARCH
13	LIVING OUR VALUES
15	REDUCING ENVIRONMENTAL IMPACT
19	SUPPORTING OUR PEOPLE
23	KEY DATA
24	GRI INDEX

THE POWER OF PUBLISHING

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.

HOW WE DELIVER VALUE

- **Staying close to our communities:** we stay grounded in the needs of our communities, partnering with them to provide the content and solutions they need to make real and sustainable progress.
- **Being a trusted source of knowledge:** as validators and curators of the academic record for more than 175 years we pride ourselves on bringing independence and rigour to all we do.
- **Deploying advanced technologies:** our deep knowledge of our communities and how they work has enabled us to deploy advanced technologies, including artificial intelligence throughout the publishing process, to improve outcomes.

SPRINGER NATURE GROUP



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

In the research division, each year, we publish

3,000+
journals

340,000+
articles

100,000+
open access articles

13,000+
new books

Figures correct for 2019

ACCELERATING PROGRESS IN SUPPORT OF THE SUSTAINABLE DEVELOPMENT GOALS



**Stefan von Holtzbrinck,
Chairman**



A MESSAGE FROM OUR CHAIRMAN AND CEO

In 2019, the younger generation across the world made it very clear that fact-based science is the starting point when politicians, companies and citizens try to deal with the opportunities and challenges for our societies, as laid out so well by the United Nations (UN) Sustainable Development Goals (SDGs). It is this positive momentum that makes our contribution at Springer Nature – communicating peer-reviewed science and providing sound education and skills – even more visible and important.

As a publisher, whose roots are over 175 years old and whose brands stand for debate, integrity and progress, we publish thousands of articles and analysis of original research about the SDGs each year, complemented by journalistic content. This is core to our responsibility, it's in our DNA and it's close to our heart. With humility and pride we are a leading publisher in almost all of these global goals¹. **Four of the ten climate-related papers with the most media coverage in 2019 were published by Springer Nature** and both Nature Climate Change and Nature Sustainability continue to publish research of critical importance to our

understanding of climate issues and how to tackle them. **We launched an innovative technology-based pilot with the Association of Universities in the Netherlands** using machine intelligence to provide data, insights and tools to better understand how open research can help deliver the SDGs. In addition, we continue to make important connections between researchers, policymakers and practitioners by providing topical information and commentary in **Nature Energy's Policy Briefs**, forging partnerships with organisations including the WHO and UNESCO and staging events, like our successful Science on the Hill series in Washington DC (see page 8) helping to bring new perspectives together.

Just a look at the recent outbreak of the novel coronavirus (COVID-19) tells us that our editors and journalists are at the forefront of collecting and disseminating facts, helping to find and share solutions to fight this infectious disease as quickly as possible.

And on another, equally important level: in times of trade wars and geostrategic tensions, collaboration and communication in the sciences and the

humanities play a positive role, bringing the world together in the name of a brighter future for all. There is no better force than better understanding. Our 10,000 colleagues on all continents are dedicated to that endeavour.

We are making our own contribution to the SDGs by taking decisive climate action to reduce the company's net carbon emissions by around 30% in 2019 (when the impact of offsetting is accounted for) with the clear goal of being carbon neutral by the end of 2020. We are also working to reduce inequalities both within our own organisation, making progress towards our target of 45% women in senior leadership by 2023, and in the communities we work with. **We are seriously committed to improving diversity and inclusion** on editorial boards, among peer reviewers, teachers, in our commissioned content and the conferences we organise.

This report describes in more detail what we do and how we do it, but also what we stand for – now and for the future.

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

¹ Number 1 or number 2 position by publishing volume.



**Frank Vrancken Peeters,
CEO**



FOCUSING ON WHAT MATTERS MOST

Springer Nature’s responsible business strategy is governed by a steering group and committees that oversee relevant activities and communications, interacting with specialist steering groups that focus on specific areas of the strategy.

In 2018, we determined the issues that are most material to Springer Nature, when considering stakeholder concerns and their impact on our business, with reference to the GRI framework. Our report includes those issues deemed to be of high or medium materiality. These are reviewed annually and adapted to ensure that they remain responsive to emerging stakeholder concerns. The issues deemed most material in 2019 are outlined in the matrix.

The highest priority issues are actively managed and subject to internal monitoring. We report progress in each of the areas on the matrix. The ongoing transition to open access 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. The importance of research in accelerating progress towards the SDGs, and how publishers can support this, has become an area of greater focus for us in 2019.



OVERSIGHT: SPRINGER NATURE SUPERVISORY BOARD

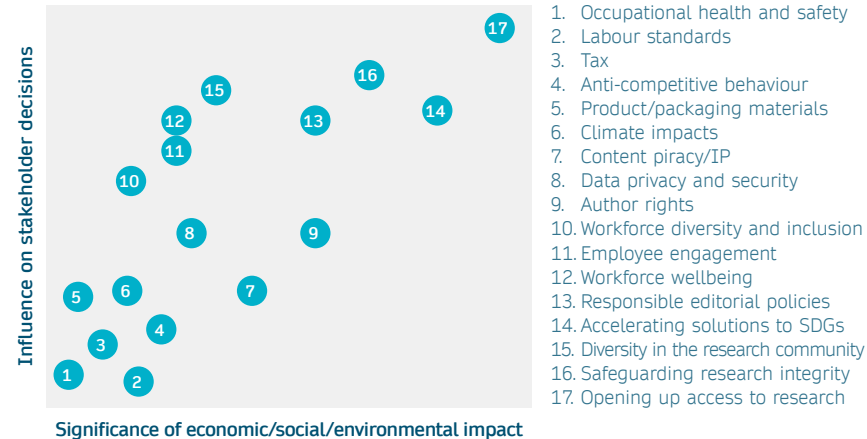
STEERING GROUP: MANAGEMENT BOARD AND EXECUTIVE SPONSOR (CEO)

Environment committee	Culture, values and community committee	Reporting and communications
<ul style="list-style-type: none"> Review material issues, identify owners and set action plans. Embed data collection processes and metrics. Advise on reporting content. Explore opportunities to involve staff. 	<ul style="list-style-type: none"> Review and respond to material issues. Oversee framework for charitable contributions. Advise on reporting content. Explore opportunities to involve staff. 	<ul style="list-style-type: none"> Review material issues and compliance requirements. Oversee strategic framework. Articulate policies. Deliver reporting requirements.

Other steering groups guide activity related to specific material issues, including:

- business partner risk management
- diversity and inclusion
- editorial and publishing policies
- governance, risk and compliance
- SDGs publishing.

MATERIALITY 2019 MATRIX



SPRINGER NATURE AND THE SUSTAINABLE DEVELOPMENT GOALS

The 17 Sustainable Development Goals (SDGs), ratified by all members of the UN in 2015, set out an agenda for global sustainable development, which it is hoped will be delivered by 2030 through the achievement of **169 specific targets**. This will require academia, business and policymakers to work together to address the world's most pressing problems.

We use the SDGs as a framework to consider our potential impacts – both positive and negative – and how we manage them. This includes material impacts on the environment and society.

In 2019, we launched the Springer Nature SDG Programme, building on our former Grand Challenges programmes. The Springer Nature SDG Programme aims to connect researchers tackling societal challenges with the policymakers and practitioners who can build on these insights and contribute to improving progress.

HOW SPRINGER NATURE HAS AN IMPACT ON THE SDGs

SUPPORTING AND AMPLIFYING THE SDGs

- Our books, journals and magazines share the latest research that addresses the challenges of sustainable development.
- We are committed to opening up research and sharing it widely to reach the audiences that need it.
- We publish research that makes an impact on policymakers and business leaders.

INNOVATING TO SUPPORT THE SDGs

- We connect research with communities who need it to advance progress, through new partnerships and ways of collaborating.
- Our approach is interdisciplinary: we know that the natural and applied sciences, social sciences and humanities all have a role in finding long-term solutions to sustainable development aims.
- We continuously invest and innovate to provide the research community and our customers with new services and technologies, improving the process of sharing discoveries globally.

ACTING AS A RESPONSIBLE BUSINESS

- We have set targets to increase diversity and inclusion and reduce our environmental impacts, and are creating networks to build an empowered and fulfilled workforce.
- We are reducing the impact Springer Nature has on the environment by cutting our carbon footprint, using sustainably sourced papers in our products and minimising plastics in the distribution of our products.
- We are an active presence, working with and participating in the research and education communities to which we belong.

OUR CONTRIBUTION TO THE SDGs

We have identified three focus SDGs where we believe we can make a distinctive difference with our content and community actions, and an additional group which are particularly relevant to how we manage our operational impacts.

In addition, we publish research related to all 17 Goals. Through our publishing programmes, we seek to connect that content with those who are best placed to use it in enabling the achievement of the SDG targets.

In 2019, we published content, hosted events and participated in high-level discussions to advance knowledge related to many of the SDGs. Examples include:

- Science on the Hill, which takes place in the US Congress and convenes researchers and policymakers to discuss prominent scientific issues. The 2019 event focused on plastic waste.
- We launched the **China New Development Awards**, which recognise Chinese authors of scholarly books that have made an exceptional contribution towards delivering the SDGs.

- As official supporters of the UN's Global Goals Week, Springer Nature and our flagship magazine Scientific American seek to amplify the importance of sustainable development ambitions to reach a wider audience.
- An internal engagement campaign, intended to better explain the SDGs and how a publisher can support them, reached more than 7,000 of our employees. Seven workshops were held over the year, bringing together people from different parts of the company to consider how we can better support the research community on specific topics.

While we are developing specific approaches and measures for each of our focus SDGs, our work and existing initiatives mean that we are already having an impact.

HOW WE SUPPORT THE SDGs



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 community, 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, and will become a carbon-neutral company by the end of 2020.

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 10: Reducing Inequalities

SDG 15: Life on Land

OUR CONTRIBUTION TO THE SDGs – CASE STUDIES FROM ACROSS SPRINGER NATURE



TARGET 4.7

SUPPORTING EDUCATION FOR SUSTAINABLE DEVELOPMENT AND SUSTAINABLE LIFESTYLES



Mathematical Association of Botswana Science and Maths fair.

STEM for societal impact in Botswana

Macmillan Education in Botswana is working to inspire future generations of researchers, and equip them to tackle social and economic challenges, through its sponsorship of the Mathematical Association of Botswana's national science and maths fair.

The fair, which attracts more than 600 high school-age students from across the country, aims to actively engage young people in science, technology, engineering and maths (STEM) by showing how studies in these fields can solve real-world challenges.

Students are set a problem to solve using a range of skills from mathematical problem solving, to ecology and statistics, and must explain how their work could be used in everyday life. In 2019, teachers attended a special workshop focused on STEM career coaching, student mentoring and advice for science projects, which aimed to help build their skills and knowledge so they can guide learners and help them to research and design meaningful projects.

In 2019, we donated over

97,000

books to schools and community groups.



TARGET 13.3

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



Colleagues shared their environmental commitments.

Engaging employees to take climate action

During 2019, Springer Nature expanded its Green Office Network, which now has more than 100 members in more than 15 countries. Volunteers identify locally relevant approaches to reducing environmental impacts and supporting wider employee engagement.

In New York, the group's efforts in removing single-use plastics and upgrading recycling waste streams led to the office being awarded the 'Ocean Champion' badge from non-profit Oceanic Global.

#MyGreenCommitment, a company-wide employee engagement programme to encourage colleagues to share actions they are personally taking to reduce their impact on the environment, was highly commended in the Camden and Islington Sustainability Awards in the UK.

Our Green Office Network has more than

100 MEMBERS

in 19 locations.



TARGET 17.6

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



Mohammed Yahia, Executive Editor, Nature Middle East, speaking at SpotOn conference in Cairo.

Connecting researchers across continents

During 2019, Springer Nature raised the profile of the role that the research community has in addressing the SDGs.

Our SpotOn conference brings together researchers and science communicators to discuss topics related to open access and research policy, technology and communication. The 2019 event took its inspiration from SDG17, with the intent to create more international collaboration and discussion on important areas related to the SDGs.

Simultaneous conferences were held in London and Cairo, and broadcast live via Facebook. Topics included: crossing global borders with research technology; decolonising research; and supporting diversity initiatives in global research communication.

Science on the Hill, an event series that Springer Nature holds in Washington DC, brings research topics to US policymakers, and in 2019, addressed the issue of plastic waste. Scientific American shared parts of the discussion via a **podcast** which has been downloaded and listened to more than 40,000 times.

We award travel grants to researchers who may be working in countries where research funding is scarce. In 2019, we awarded three grants of €2,500 to researchers from Ghana, India and Argentina to support their travel to an international conference in 2020.

OPENING UP RESEARCH

At Springer Nature, we are proud of our history in open research and open access (OA) publishing, and are committed to transitioning our journal portfolio to OA.

Open research is reshaping how researchers communicate and collaborate, and is advancing the pace and quality of discovery. Our vision is of a future where every element of the research process is instantly available, discoverable, usable, re-usable and widely shareable – from protocols through to data, from code to metrics, and of course, to research results.

This ‘open future’ will speed up the advancement of science and academic research, facilitate increased interdisciplinary collaboration and support an evidence-based approach to the Sustainable Development Goals (SDGs).

In addition to open access, we offer several tools and services to make it easier for authors and institutions to access, share, use and re-use research and data.

These tools include:

- **In Review**, which opens up the submission, review and editorial process for authors and enables early sharing of research
- a partnership with **ResearchGate** that enables seamless discovery and an enhanced reader experience

- **SharedIt**, our free content sharing initiative that enables authors, subscribers and media partners to create shareable links to content.

A LEADER IN OPEN ACCESS

Springer Nature has been at the forefront of OA for nearly 20 years. We believe that all published primary research should be open to all, as soon as possible, enabling researchers and others worldwide to easily and immediately read, use and build on it.

We are proud to be the most comprehensive OA publisher in the world: we have published more immediately open articles than any other publisher – more than 800,000 articles by the end of 2019 – and we offer authors a large choice of journals across all academic disciplines in which to publish.

Analysis shows that open access articles in hybrid journals were downloaded, on average, 1.6 times more by users at academic institutions and four times more by users overall, compared with non-OA articles, extending the reach and influence of the **research**.

OPENING UP RESEARCH CONTINUED

We know that some stakeholders face OA adoption challenges. This is why we try to find solutions that will not only help us enable greater take-up of OA, but help others to do the same in a way that is sustainable for all. Below are three examples of how we are solving specific problems.

1. SOME ACADEMIC DISCIPLINES MAY LACK OA FUNDING

The transition to OA can be hampered by a lack of available funds for article processing charges (APCs). Transformative deals solve this problem by centralising funding for APCs, thereby allowing any researcher from a participating institution, regardless of their discipline, to publish their research openly.

We were the first to sign such an agreement and are now an industry leader in transformative deals. During 2019, we announced the world's largest transformative OA agreement by number of articles, which will enable researchers from 700 German academic institutions to publish up to 13,000 open access

articles in the vast majority of the Springer Nature portfolio – around 2,500 journals – and read the full contents of those journals. Our experience shows that these arrangements accelerate the transition to OA: in countries where we have such agreements in place, more than 70% of authors publish their research openly with us.

Learn more about different publishing routes.

2. THE TRANSITION IS NOT HAPPENING FAST ENOUGH

Our proposal for transformative journals is designed to enable all journals in a publisher's portfolio to transition to full OA. By setting clear targets for OA growth, transparently reporting on OA metrics and pricing, and increased advocacy of the benefits of OA to stimulate author demand, all journals should be able to get on the road to OA.

By continuing to allow for non-OA articles, such journals would also provide a publishing outlet for authors whose countries or funding bodies are not yet in a position to fund OA.

3. FUNDING AVAILABILITY AND THE CHALLENGE OF REPURPOSING BUDGETS

We know that enabling OA is challenging, not least because of the different budgets and funding pools involved. During the transition, managing the complex funds and reporting can be burdensome on higher education institutions and their librarians.

We're committed to sharing best practices and working with funders, libraries and researchers to better understand and connect funding sources. We've commissioned white papers to help all involved determine how we can individually and collectively navigate the transition and share the underlying data. We offer services such as our **free open access support service** to make it easier for our authors to discover and apply for funding to aid their use of OA options.

We have a duty to our authors, to our communities and to all of society to communicate new understanding and findings as widely and as quickly as possible. OA research publishing is our most powerful means of doing this.



First OA journal brand

**SCIENTIFIC
REPORTS**

nature research

Biggest OA journal globally

**nature
communications**

Most cited highly selective
OA journal in the world

HOW OA INCREASES VISIBILITY

JOURNAL ARTICLES

4x | **1.6x**
more downloads | more citations

2.5x
more Altmetric attention

Find out more about how open access increases the visibility of research on our [website](#).

OPENING UP RESEARCH CONTINUED



Our Research Integrity Group investigated more than

1,300

cases in 2019, from around 1 million submitted papers.

SHARING EXPERIMENTAL DATA

According to research conducted by Figshare, in association with Digital Science and Springer Nature, “increased impact and visibility of my research” and “public benefit” are the top two reasons researchers give for sharing data. There is also growing **evidence of a citation advantage associated with sharing data** that is linked to an article, with a recent study showing an associated average citation increase of 25%.

We believe that research data should be easy to find, access and build on. We continue to collaborate with partners, repositories and the research community to promote and support open standards. However, we know that sharing data can be a time consuming and complex task for researchers. Springer Nature has launched new support services to help researchers, institutions and funders manage and store data. We partner with the **Initiative for Open Citations** to ensure authors have access to their citation data, and with **Scholix**, which facilitates the sharing of information about links between data and literature.

Authors can describe and share their research data with a wider audience through **Scientific Data**, our open data journal.

THE HIGHEST STANDARDS OF RESEARCH

One of the most effective ways to advance discovery is to improve the integrity and speed of the publishing process, for the benefit of the whole research community.

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

As a member of the Committee on Publication Ethics (COPE), Springer Nature is guided by COPE principles when handling cases of research and publication misconduct. Our own Code of Conduct for Editors is aligned with these guidelines and best practice recommendations and sets out our standards.

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. It does this by:

- providing resources (including training) on publication ethics issues
- promoting the adoption of best practice by all stakeholders, including ethical conduct, reporting and research evaluation
- investigating potentially unethical practices while ensuring all involved are treated fairly
- advising editors on appropriate actions when unsound publications or unethical practices are found.

In 2019, the SNRIG looked into more than 1,300 cases (from among the more than 1 million article and book submissions received). The most frequently reported issues were plagiarism, duplicate submissions and publications, and problems with authorship, data or the peer-review process. If issues are confirmed, we take action by publishing editors’ notes, expressions of concern or, in very serious cases, retracting articles.

OPENING UP RESEARCH CONTINUED

Our Editorial Advisory Group works with SNRIG to ensure that policies and practices are up-to-date with changes affecting research, including technology developments and ethical concerns. Recent rapid developments of new technologies such as artificial intelligence, facial recognition and biometrics – some of which have the potential for misuse, especially with regard to vulnerable populations – have led us to review our policies related to the informed consent of research participants. **Policies are shared on our external website.**

Peer review lies at the heart of the research process and is central to the integrity of the academic record. We work with more than 750,000 peer reviewers, ensuring that our authors' works stand up to the highest levels of scrutiny. We support our editors-in-chief, editorial board members, section editors, peer reviewers and authors by providing guidance and systems.

GLOBAL RESEARCH AND EDUCATION

We 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 donate textbooks and equipment through partnerships with organisations like Books2Africa – giving more than 97,000 textbooks during 2019. 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. We also offer **article processing charge waivers** to papers whose authors are based in low-income countries.

COPYRIGHT AND PROTECTING INTELLECTUAL PROPERTY

We believe that authors should retain copyright and receive clear credit for any work published in our books or journals. From 2019, we have required only an exclusive Licence to Publish from authors for the primary research we publish.

Find out more about copyright and licensing on our website.

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 take action against potential infringements to ensure that any threats to the intellectual property rights of our authors are targeted, disrupted and, where possible, closed down.

Together with other stakeholders, Springer Nature is exploring how to address the harm caused by pirate sites, including Sci-Hub, and working to help higher education establishments protect themselves against cybercrime by participating in the Scholarly Network Security Initiative. Any concerns about online piracy or physical counterfeiting can be **reported to our anti-piracy team.**



Macmillan Education books donated to Milimani Girls Secondary School, Butere, Kenya

LIVING OUR VALUES

Our strong set of common values enable us to act responsibly.



Our Codes of Conduct, one for employees and one for business partners, give us the framework we need to support our values. We want our people to discuss and debate issues related to business ethics in our supply chain, and expect our senior leaders to set the example by participating in our global governance, risk and compliance network.

Compliance with the laws and regulations that impact our business is essential. This means that:

- we abide by all applicable laws, even if this could put us at a business disadvantage
- where national laws are more restrictive than our own rules, we expect our local business leaders to be aware of and respect these laws to ensure local compliance
- when local laws are less restrictive than our own rules, we expect our colleagues and representatives to follow our own guidelines and policies.

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 and customers who don’t wish to contact us directly can use Speak-Up, a confidential whistleblowing system independently hosted by Business Keeper AG. Our supervisory board reviews the most significant reports twice per year.

In 2019, we received a total of 211 reports, of which 142 arrived via Speak-Up. Although we have seen a slightly lower number of total reports than the 233 received last year, a higher proportion of the reports related to areas covered by our Code of Conduct (2019:153, 2018:132). These have been addressed by our governance, risk and compliance team with the remainder being redirected to more relevant departments to address the issues raised. The most common topics reported on were questions relating to anti-bribery and corruption policies, conduct towards others and privacy and confidentiality.

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

LIVING OUR VALUES CONTINUED

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 designed to protect our systems, commercially sensitive information and other customer and staff data. These include embedding 'security first' principles into our application development process, and rolling out security initiatives at the infrastructure and server levels.

TAX STRATEGY

As a responsible taxpayer, we recognise the need to pay our fair share of tax in the jurisdictions in which we operate. These contributions include corporate income, indirect and employment taxes. Our tax strategy is published on our [website](#).

PREVENTING CORRUPT PRACTICE

In our Education business, our work on government and NGO-funded projects is among our most challenging and rewarding: bringing quality education products to children in developing communities.

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

In 2018, we became aware of two unconnected allegations of potential unfair behaviour relating to agreements between competitors co-ordinated via publishers' associations. During 2019, we completed a full internal review of our participation in those associations and have cooperated with enquiries from the relevant authorities.

Throughout 2019, we improved our training and the processes and controls we have in place to monitor levels of contact with competitors and support our commitments. We will continue this through 2020.

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. 177 suppliers were included in our Labour Standards audit programme (2018: 172). Our annually updated Modern Slavery Statement sets out how we monitor and address these areas in more detail.

In our research publishing activities, we require explicit consent for any research that involves the use of clinical, biomedical or biometric data from human subjects. Consent must be obtained without any form of coercion and with participants' explicit understanding of the purpose for which their data will be used.

We achieve this by requiring authors to certify that such consent has been obtained, supplying documentary evidence of consent when needed and supporting our editors in identifying and managing submissions of concern.



REDUCING ENVIRONMENTAL IMPACT

Our greatest contribution to the environment is to support informed decision-making by individuals, policymakers and business leaders based on credible research.



Over the past twelve months, concerns about the urgency to address climate change have increased.

This is why we have identified SDG 13: Climate action as a focus area. Our publishing can help to improve education, raise awareness and build knowledge on climate change mitigation, adaptation and impact reduction. In support of these aims we will:

- promote climate research to policymakers and business leaders through our published research and specific events.
- become net carbon neutral in our direct operations and for business flights by the end of 2020
- work with our employees to target Springer Nature's own climate impacts, while running campaigns internally to raise awareness of how individual choices can make a difference
- manage Springer Nature's other material impacts on the environment, particularly related to our printed products.

ACTING ON CARBON

Although Springer Nature is not an energy-intensive company, we believe that climate change calls for all companies to examine their carbon footprint and we will become net carbon neutral by the end of 2020. We report both *net* carbon emissions, calculated to include the reduction in emissions from buying renewable electricity, and *gross* carbon emissions, which does not. We state the emissions balanced through carbon offsetting separately. Both gross and net emissions are down compared with 2018 because of lower air travel, the reduced size of the company car fleet, rationalisation of office space and energy efficiency. When carbon offsetting is taken into account, the overall net carbon footprint is reduced by around 30%; excluding carbon offsetting the reduction was around 10%. The total amount (MWh) of renewable electricity purchased is slightly lower compared with 2018 as increased energy efficiency has reduced the amount of electricity used in the countries where we purchase renewable power.

REDUCING ENVIRONMENTAL IMPACT CONTINUED

BUSINESS TRAVEL

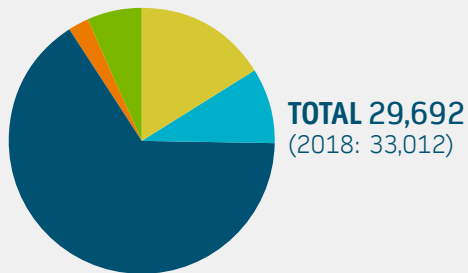
Flights are the single largest contributor to the company’s carbon footprint. In 2019, we have promoted ways for colleagues to reduce their air travel, highlighting routes where taking the train is a viable alternative to flying and making better use of teleconferencing facilities to reduce the need for travel. The management board has committed to reducing their trips by plane, by amending their international meeting schedule.

However, flying is still essential for managing our international teams and to ensure that we maintain strong relationships with researchers, educators and other customers. Therefore, we have chosen to use high-quality offsets to balance 7,000 tonnes of CO₂e in 2019, equivalent to approximately 36% of our flights, or 24% of our total net carbon emissions.

OUR BUILDINGS

We operate from offices and warehouses, most of which are leased, so we have limited scope to alter the building fabric. Instead, we target energy efficiency improvements relating to the office fit out, adjustments to the heating and cooling systems, and behavioural change. For example, electricity use fell around 5% in our office in Cairo, Egypt, following the installation of LED lighting; and an upgrade of the air conditioning system in our office in Pune, India contributed to a reduction in electricity use of around 5% despite this office doubling its hours of operation in the second half of the year. In 2020, we will be piloting a simple energy protocol with our Green Office Network to help identify further local measures to improve energy and resource efficiency.

NET GREENHOUSE GAS EMISSIONS (TONNES CO₂e)* 2019



SCOPE 1: 4,847 (2018: 5,645)

SCOPE 2: 2,691 (2018: 3,093)

SCOPE 3:

Flights: 19,473 (2018: 21,550)

Leased building services: 717 (2018: 663)

Transmission and distribution of energy: 1,965 (2018: 2,060)

* See footnotes 8 and 9 on page 22.

OUR APPROACH TO CARBON BALANCING

In 2019, we convened an advisory group, comprised of senior managers from corporate functions and chief editors from some of our sustainability and climate-related publications, to consider 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.

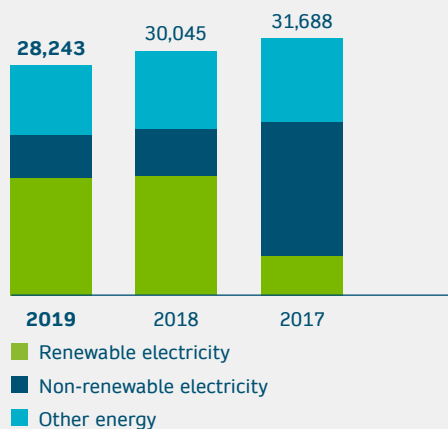
In 2019, we supported two projects. CommuniTree (Nicaragua) gives local farmers the chance to earn more from reforesting their land with indigenous trees than deforesting it. In our second project, Carbon Tanzania works with the indigenous Hadza tribe and Tatoga Pastoralists in the Yaeda Valley to reduce uncontrolled deforestation by securing land rights for local communities and creating designated farming zones to reduce conflict.



The Hadza tribe in the Yaeda Valley monitoring deforestation and grazing encroachment on Hadza homelands.

REDUCING ENVIRONMENTAL IMPACT CONTINUED

ENERGY USE (MWH) FOR SITES WHERE WE HAVE OPERATIONAL CONTROL*



* Excludes outsourced datacentres and unmetered utilities (i.e. services charged as part of a landlord fee).

In 2019, we bought renewable electricity equivalent to around 75% of our global electricity purchasing, backed by international renewable energy certificates (I-RECs), guarantees of origin or via a green tariff.



REDUCING RESOURCE USE

To reduce office paper use, we are moving to paperless processes. This includes increasing our online invoicing, where local regulation allows, and piloting paperless expense receipt management.

Several of our offices have been removing single-use plastics and upgrading bins to encourage more recycling. Our Green Office Network of environmentally conscious employees raises awareness of greener office behaviours, such as reducing printing and correctly separating waste. In November, the Oceanic Global charity presented our New York office with its 'Ocean Champion' badge, in recognition of work to eliminate single-use plastics and improve waste management practices in the office space. The New York team is now working on next steps to make further improvements.

PRINTED PRODUCTS

The proportion of our products that are printed has been steadily declining as more of our content moves online. For our remaining printed products, we are working to reduce the negative impacts of paper production and plastic packaging waste. In 2018, we reported on our work to ensure that the paper we use came from sustainable sources, and in 2019, this work has continued, overseen by the group's Environment Committee.

RESPONSIBLE PAPER USE

Our printed products required 31,553 tonnes of production paper in 2019, a small decrease against the previous year. 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 requires them to only use paper graded 3 or 5 stars in the Publisher's Database for Responsible Environmental Paper Sourcing (PREPS). This means paper must be sourced from known, legal and responsible sources.

TOTAL PAPER USE (T)

	2019	2018
Office paper	87	106
Production paper	31,553	32,178

For 2018, Springer Nature was able to confirm that more than 80% of the paper used by printers for its products was in compliance with our responsible paper sourcing policy. In 2019, we increased the number of surveyed printers, and 90% compliance was achieved, representing a marked improvement. 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 ENVIRONMENTAL IMPACT CONTINUED

The weight of scrappage has increased compared to 2018. In 2019, we implemented new more aggressive inventory operating metrics supported by greater use of print-on-demand production, which resulted in eliminating older stocks while still successfully donating a large amount to a charity which distributes books to communities in need in Africa and to another charity in Mexico which raises funds by selling old books to paper recycling companies.



REDUCING PLASTIC PACKAGING

We have been working to reduce the volume of packaging across our portfolio. Some of our printed journals and books are wrapped in plastic for distribution to ensure that they reach their destination in good condition.

In 2019, we stopped wrapping all but the largest research books (where damage is more likely if unwrapped), reducing the number of units wrapped by 1.2 million. Some journals are already distributed without wrapping and we are researching alternatives where wrapping is still required. There are many challenges to this due to our global production and distribution, the availability of different alternative wrapping types, the durability of this packaging and the

wide variations in local waste and recycling facilities available to our customers around the world. The Education division reduced plastic wrapping of most of its products in 2018, except for books series which needed to be kept together. In 2019, they have continued to seek further reductions. Two million plastic wallets for CDs (provided for teaching materials in countries where downloads are not possible or practicable) have been replaced by paper alternatives.

COMMUNICATION FOR CLIMATE CHANGE

Through our publishing, we help to improve education, raise awareness and build knowledge on climate change mitigation, adaptation and impact reduction. We believe this is where Springer Nature, as a global research and education publisher, has a specific role to play.

COVERING CLIMATE NOW

In September 2019, we joined more than 300 other media outlets in publishing climate-related articles in the lead-up to the UN climate summit, as part of the Covering Climate Now project. The project asks journalists to work together to ensure that climate change news is treated with appropriate urgency, given the narrowing window for action.

'CLIMATE SAVERS - LIFESAVERS'

In Germany, Springer Pflege has joined 63 other companies taking part in the Viamedica Foundation's project 'Climate Savers - Lifesavers'. This project promotes simple measures to reduce the carbon impact of healthcare. Using an online Climate Saving Tool, employees can see the carbon saved by simple changes such as switching off unnecessary lighting and drinking tap water instead of mineral water. Employees can also team up to foster friendly competition between the 'climate savers'.



Nature's 19th September issue was filled with climate change-related research and news to coincide with the UN's climate conference taking place in New York.

SUPPORTING OUR PEOPLE

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

Springer Nature comprises many internationally dispersed and globally organised teams. Our Code of Conduct and leadership principles set out our expectations: that all employees are treated fairly and respectfully by their managers and colleagues.

We are all responsible for maintaining a safe and respectful workplace free from discrimination, harassment, unwanted physical contact, intimidation or bias. We provide our people with mandatory values and conduct training, updated each year, which includes modules on anti-harassment and unconscious bias. In 2019, more than 99% of employees completed this training. We have also recently launched a global anti-discrimination and anti-harassment policy.

EMPLOYEE ENGAGEMENT

In 2018, we conducted our first global Pulse engagement survey: a short, targeted employee 'health check' that indicated how people were feeling. The Pulse Survey results, supported by open comments, helped us identify what our people care about most. The management board has taken responsibility for action on four identified global priorities:

1. BUILDING BELIEF AND TRUST IN OUR FUTURE

In 2019, around 200 senior leaders helped to create a new mid-term strategy, which was presented in a series of detailed and open webinars, videos and strategy documents to build a greater understanding of and trust in future direction.

2. WORKING CONDITIONS

Around 37% of all open comments in the Pulse Survey related to 'working conditions', including salary and workload. In response, an in-depth salary review and benchmarking has followed in some countries, with potential for corrections where needed. In the Research Publishing division, we have begun to expand a 'job families' programme, aligning similar roles to clarify skills and experience expectations at each level, which enables people to identify potential next steps in their career development and ensures fair salary decisions.

SUPPORTING OUR PEOPLE CONTINUED

3. TEAMS AND COOPERATION

The comments highlighted a greater need for cooperation both within teams and across locations and businesses. Focus groups in team, business or location groups, have helped to identify ways to encourage greater collaboration and to improve awareness of the roles of different people and teams across the company.

4. CAREER DEVELOPMENT

Our ONE Talent Development and Performance Framework, already in place in many locations, will be rolled out company-wide in 2020. This framework will give us a universal performance process, supported by online training and development tools, to encourage and facilitate feedback conversations on objective-setting, performance evaluation and development planning throughout the year.

The Pulse Survey results also helped us to identify areas of improvement or interest for specific business areas and locations, with action plans developed for each.

LOOKING AFTER OUR PEOPLE

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

Our workplaces, consisting of offices and a small number of warehouses, are relatively low-risk with respect to physical safety, with the majority of incidents relating to minor slips, trips and falls.

We support local wellness initiatives. For example, in the UK, US, Germany and China, we provide a confidential employee assistance service to employees and their families when they need advice or support on issues related to stress, finances or health and wellbeing.

DIVERSITY AND INCLUSION

We play an active role in promoting and celebrating diversity both through our publications and across our company.

Springer Nature is a diverse organisation, with a wide geographical spread; 57% of our workforce are women. But the gender and geographical balance decreases with seniority and varies by region. We value local and regional market knowledge: most of our management teams have been hired locally and come from the region in which they work. In 2018, we set a target that by 2023, 45% of those global leaders in the top three tiers of the organisation will be women. At the end of

2019 the figure was 41%. **One third of the company's newly expanded executive team are women.**

A key focus in 2019 was the development of our diversity and inclusion (D&I) strategy for the next three years. We plan to drive measures in several key areas, including:

- committing to equitable recruitment, promotion and succession that draws on a diverse talent pool
- focused talent development that recognises structural inequities and differential experiences
- developing a shared understanding of individual responsibility for inclusion

- creating internal awareness and external visibility for D&I
- nurturing employee networks as strategic resource for input into D&I initiatives and overall business strategy.

We have also introduced a D&I recruiting checklist for hiring managers and HR professionals to help guide an inclusive recruiting process.

In November, Springer Nature signed the **Charta der Vielfalt**, the German Charter of Diversity, joining more than 3,000 companies who have made a commitment to internally advancing D&I. In 2019, we also became a member of Stonewall UK's Diversity Champion programme.

TIME TO CHANGE PLEDGE

We know that mental health issues can and do affect people at all levels. We are determined to support colleagues and to tackle any associated labelling or discrimination. In 2019, Springer Nature became the first research publisher to sign the Time to Change Pledge – a commitment to end mental health discrimination in the UK workplace. Find out how we've demonstrated this commitment on our [website](#).



Sir Philip Campbell, Editor in Chief, Springer Nature, signs the Time to Change pledge.

SUPPORTING OUR PEOPLE CONTINUED

EMPLOYEE NETWORKS

2019 saw the launch of three new employee networks, in addition to SN Pride, our network for the LGBTQ+ community which launched the previous year. The new networks are:

- **SN Women:** a forum to promote gender equality and enable women across Springer Nature to achieve their personal and professional ambitions.
- **SN DEN (Disabled Employee Network):** aims to help and connect employees with disabilities or impairments acting as a unified voice on issues relating to disability.
- **SN Parents** supports employees balancing a professional life with child-raising, through cultivating professional development opportunities for parents and creating an open-minded and supportive working environment.

MENTORING

In 2019, we completed two mentoring pilot programmes. The first matched talented people with a mentor from a different country or continent. In addition to monthly virtual meetings, the mentees also spent a few weeks at their mentor’s workplace to shadow them in their work, expand their networks and experience a different location. The second focused on parents and caregivers during the ‘rush hour of life’: when career development and parenthood or care responsibility may coincide. Mentees were matched with a senior mentor to build support and continue their professional development support during this phase.

Mithu, a director in the research marketing team with two young children, was paired with Gabrielle, Group Company Secretary, who has oversight of the Group’s 200+ subsidiary companies and has two sons.

“The engagement with other colleagues has surfaced shared issues and challenges. During every meeting with Gabrielle, I’ve found useful advice that I can implement day to day. It has given me the structure and support to think about my professional development.”

Mithu

“Spending time with Mithu has helped me see how important it is for everyone to have the space to fulfil their own potential, personally and professionally. I have been inspired by Mithu’s focused approach to work, while balancing her role as a working mum. Discussing her challenges and achievements broadened my understanding of the business.”

Gabrielle

OUR SUPPORT FOR COMMUNITIES

In 2019, we gave around €857,000 in donations and sponsorship to charities and organisations that align with our aims. In addition, we donated resources such as books, educational materials and equipment as well as the residual value of some of our obsolete stock, which is then recycled into new paper.

These activities are guided by a framework that shows us how we can support people and communities to discover, learn and achieve. Our employees volunteer their time, and we offer both financial support and gifts-in-kind to support projects that align with our mission.

The Julius Springer Fund made commitments of €104,108 to support people in need in Germany and New Zealand (a figure that is incorporated into the amount above).



SUPPORTING GIRLS’ EDUCATION AND EQUALITY IN INDIA

We believe that investing in girls’ education, empowerment and economic self-sufficiency supports their independence and helps to address gender inequalities. By supporting projects that inspire young women for a lifetime of learning, we can help give them the skills they need to become future leaders. Learn more about how we are supporting female empowerment in India [online](#).

KEY DATA

		2018	2019
Economic	Revenue (€ billion)	1.66	1.72
Our research content	Proportion of journal content published immediate (gold) open access ¹	29%	30%
	Number of fully open access journals ²	604	592
	Number of fully open access books	651	923
People	Number of full-time employees (headcount) ³	12,927	9,753
	Number of full-time employees (FTE) ³	12,596	9,365
	Number of employees by continent (headcount) ³		
	Europe	5,509	5,098
	North America	1,097	1,071
	Latin America	860	808
	Asia	5,564	2,474
	Africa	232	225
	Oceania	115	77
	Gender split – management board (% men/women) ⁴	83/17	80/20
	Gender split – tiers one to three (% men/women) ⁴	61/39	59/41
Environment	Total energy (MWh) ⁵	32,967	31,267
	Renewable energy (MWh) ⁶	15,150	14,804
	Greenhouse gas emissions, gross (tonnes CO ₂ e) ⁷	42,506	38,871

- 1 Includes research journal and review article content only, published in fully open access journals or within hybrid journals. Excludes editorials and opinion pieces.
- 2 During the course of 2019, 23 new OA journals were launched, while others were closed, sold to other publishers or merged.
- 3 Figures as at the end of 31 December 2019. Excludes around 3,400 colleagues from Scientific Publishing Services (SPS), a division that was sold to SPI Global in a transaction which closed on 31 December. Calculations of carbon intensity use the headcount/FTE figure including SPS, since these colleagues were part of Springer Nature until 31 December.
- 4 As at 31 December 2019.
- 5 This figure includes energy used by sites where we have operational control, our serviced sites and outsourced data centres, and excludes properties leased by Springer Nature to third parties.
- 6 In addition, our largest outsourced datacentre uses 100% renewable electricity.
- 7 Additionally, the 'outside of scopes' ('biogenic' part of biofuels) emissions are estimated at 78 tonnes.
- 8 Flights data has been restated for 2017 and 2018 to reflect more accurate data from travel providers and improved estimation.
- 9 Includes renewable electricity used at our largest outsourced datacentres and sites covered under our purchases of energy attribute certificates in Germany and India.

		2018	2019
Environment	Greenhouse gas emissions, net (tonnes CO ₂ e)	33,012	29,692
	Scope 1	5,645	4,847
	Scope 2		
	Location-based emissions	11,578	10,894
	Market-based emissions	3,093	2,691
	Scope 3		
	Flights ⁸	21,550	19,473
	Leased building services (location-based emissions)	1,671	1,693
	Leased building services (market-based emissions) ⁹	663	717
	Transmission and distribution of energy	2,060	1,965
	Emissions intensity (net emissions in tonnes per billion Euro)	19,887	17,263
	Total water usage (cubic metres)	117,852	121,790
	Total site waste production (t) ¹⁰	1,054	1,070
	% office waste separated from general waste streams ¹¹	39	52
	Office paper (t)	106	87
	Production paper (t)	32,178	31,553
	Production waste (t) ¹²	1,276	1,762
Social impact	Cash donations and sponsorship (€ thousands) ¹³	875	857
Compliance	% of staff undertaken Code of Conduct training ¹⁴	97	99

- 10 Figure relates to typical office and warehouse waste streams and excludes recycling of unsold product and damaged production paper and recycling of construction wastes. Figures for 2017 and 2018 have been restated to reflect more accurate data collection by our third-party waste contractors.
- 11 This indicator is being reported for the first time; figures for 2017 and 2018 are based on data records and extrapolation. The indicator replaces the previous '% recycling of office waste' indicator, to reflect more accurate data gathering by our waste contractors. 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 (21 offices in 2019; 18 offices in previous years). Data for our largest warehouses shows these mainly have paper and packaging waste, which is sent for reuse and recycling.
- 12 Unsold product and unusable production paper is recycled.
- 13 This estimated figure comes from group-wide research and information taken from financial systems, and includes funds given in donations and sponsorships to charities and non-profit organisations to support projects and programmes that align with our aims.
- 14 Percentage of those staff registered for eLearning.

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 organization	Springer Nature Group
102-2	Activities, brands, products, and services	Springer Nature is a leading publishers 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. Page 1 of this report and https://group.springernature.com/gp/group/our-business provides a 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	In 2019, our largest markets by number of employees are India, Germany and the UK. Please see https://group.springernature.com/gp/group/locations .
102-5	Ownership and legal form	Please see https://group.springernature.com/gp/group/aboutus/our-history .
102-6	Markets served	Springer Nature has offices in more than 50 countries and our content is available in more than 180 countries. For further information on the sectors we serve, please see https://group.springernature.com/gp/group/research https://group.springernature.com/gp/group/education https://group.springernature.com/gp/group/professional .
102-7	Scale of the organization	As at 31 December 2019: Springer Nature employed over 9,750 (headcount) people and 9,365 (FTE) people. These numbers exclude the staff from SPS, a business that was sold to SPI Global in 2019. Each year we handle more than 1 million article submissions and publish around 340,000 articles across almost 3,000 journals and 13,000 books. We have published more open access research than any other publisher and our content platforms receive almost 2 million visits 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 includes seasonal warehouse workers, to assist with peak seasons.
102-9	Supply Chain	As a global business, Springer Nature has an international supply chain. Direct goods and services include: Global Production (Pre-press, Print, Paper), Global Distribution (Transport and shipping, Postage, Warehousing & Logistics). Indirect goods and services include: IT (Hardware, Software, Services, Fixed/Mobile Telecoms), Marketing, Travel and Events, External agencies and Communications, Auditing, Consulting/Outsourcing/Offshoring.

GRI indicator	Description	Detail
102-10	Significant changes to the organization and its supply chain	During 2019, we announced the sale of the SPS business to SPi Global .
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 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), 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.
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, CrossRef, De Media federatie, National Information Standards Organization (NISO), Open Access Scholarly Publishers Association (OASPA), ORCID, The Publishers' Association, Society for Scholarly Publishing (SSP), STM.</p> <p>Education Division: Association of Publishers – India, Australian Publishers Association, Camara Argentina del Libro, Cámara Nacional de la Industria Editorial, Confederation of Indian Industry, PASA, Polish Chamber of Books, Egyptian Publishers Association, Publishers Association of New Zealand.</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	Please see page 2 of this report.
102-16	Values, principles, standards, and norms of behaviour	Please see pages 11-12 of this report and Springer Nature's Code of Conduct: https://group.springernature.com/gp/group/responsible-business/policies-reports
102-18	Governance structure	https://group.springernature.com/gp/group/aboutus/corporate-governance Please see page 3 of this report.
102-40	List of stakeholder groups	<p>Please see page 3 of this report.</p> <p>Our materiality matrix captures issues raised by stakeholder groups including the research community, authors, editors, librarians, research funders, employees and investors.</p>
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.

GRI indicator	Description	Detail
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	<p>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:</p> <ul style="list-style-type: none"> • We engage with our global workforce through our annual Pulse survey (see page 19). 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.
102-44	Key topics and concerns raised	<p>Examples of topics raised by key stakeholders:</p> <p>Institutions, researchers and educators:</p> <ul style="list-style-type: none"> • Our vision: an open future. • The highest standards of research. • Springer Nature and the Sustainable Development Goals. • Copyright and protecting intellectual property. • Opening up research and research integrity. • Connecting researchers across continents. <p>Employees:</p> <p>Employee engagement.</p> <p>Shareholders:</p> <p>Shareholders require us to report ESG data annually.</p> <p>See page 2 of this report for our full list of material issues.</p>
102-45	Entities included in the consolidated financial statements	Reporting covers entities that are part of Springer Nature Group. Please see https://group.springernature.com/gp/group/our-business for more information.

GRI indicator	Description	Detail
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.</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. In 2019, we revised the labels of our material issues to clarify the issue boundaries. For example, climate change issues are now incorporated within both 'climate change impact of our operations' and in 'accelerating research solutions to the SDGs' (in relation to SDG13).</p> <p>Please see page 3 of this report.</p>
102-47	List of material topics	Please see page 3 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. In 2019, we changed the methodology used to calculate waste collection data at some of our largest sites, and have restated figures for 'total site waste production' accordingly for 2017 and 2018. Work with our main travel agency to provide more granular data on our business flights has enabled us to improve our extrapolation approach, and we have restated flights emissions data for 2017 and 2018.
102-49	Changes in reporting	During 2019, we announced the sale of Scientific Publishing Services (SPS) to SPi Global, a transaction which closed on 31 December. Data throughout the report includes SPS, except 2019 headcount figures taken on 31 December, which exclude around 3,400 staff who are no longer part of Springer Nature.
102-50	Reporting period	Calendar year 2019
102-51	Date of most recent report	Springer Nature's report covering calendar year 2019 was published in March 2020. Our previous report was published in March 2018, covering calendar year 2017.
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	This report has not been externally assured.

MATERIAL TOPICS

Material topic	GRI indicator	Description	Detail
All	103-1	Explanation of the material topic and its Boundary	See page 3 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 3 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 13-21 of the ESG Report. Details of responsibilities, resources and grievance mechanisms, where this differs from the overall approach outlined on page 4-5, is given per material issue in this Content Index.
All	103-3	Evaluation of the management approach	See pages 4-5 of our ESG 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 6-19 of the ESG Report.
Diversity in the research community and accelerating solutions to the 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. Please see page 10 for more information.</p> <p>We also have a specific focus on research for the SDGs, supporting sustainable development. Please see pages 6-7 of this report.</p>
Anti-corruption	205-1	Operations assessed for risks related to corruption	<p>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 corruption as a topic in our all-staff training.</p> <p>Please see pages 11-12 of this report for information about the Code of Conduct and training.</p>
Anti-competitive behaviour	206-1	Anti-competitive behaviour	The Spanish Competition Authority (Comisión Nacional de los Mercados y la Competencia, CNMC) has issued a decision that finds against Anele, the Spanish industry association, and its members including Macmillan Iberia (who were a member until 2018). While the fine received by Macmillan Iberia is significantly below the fines received by many of our major competitors, we are appealing this decision. As a company, we have reiterated the importance of our Code of Conduct training.
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 17, 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.</p> <p>We do not have centralised data on the use of packaging materials for all of our products. See page 18 for our work on reducing the impact of product packaging. 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 17).</p>

Material topic	GRI indicator	Description	Detail
Climate impacts	305-1	Direct (Scope 1) GHG emissions	Please see pages 13-16 of this report.
	305-2	Energy indirect (Scope 2) GHG emissions	Please see pages 12-15 of this report.
	305-3	Other indirect (Scope 3) GHG emissions	Please see pages 13-16 of this report.
	305-5	Reduction of GHG emissions	Please see pages 13-16 of this report.
Occupational health and safety	403-6	Promotion of worker health	Please see pages 17-19 of this report.
Workforce diversity and inclusion	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 page 20 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 2019 on this page: https://group.springernature.com/gp/group/responsible-business/policies-reports .
Data privacy and security	418	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	N/A	N/A	Springer Nature has published more open access research than any other publisher – more than 800,000 articles in total, to-date. Our approach is outlined on pages 7-8 of this document and the metrics in the data table on page 22.
Diversity in the research community	N/A	N/A	Please see page 17-19 of this report.
Safeguarding research integrity	N/A	N/A	Please see pages 9-10 of this report.
Tax	N/A	N/A	Please see our tax strategy disclosure at https://group.springernature.com/gp/group/responsible-business/policies-reports .
Author rights	N/A	N/A	Please see pages 9-10 of this report.
Content piracy/IP	N/A	N/A	Please see pages 9-10 of this report.



You can read an online version of this report, download a PDF and discover more about responsible business at Springer Nature at www.springernature.com/responsiblebusiness

Enquiries can be sent to the responsible business team at communications@springernature.com or to Group Communications, Springer Nature, The Campus, 4 Crinan Street, London WC1X 8HL