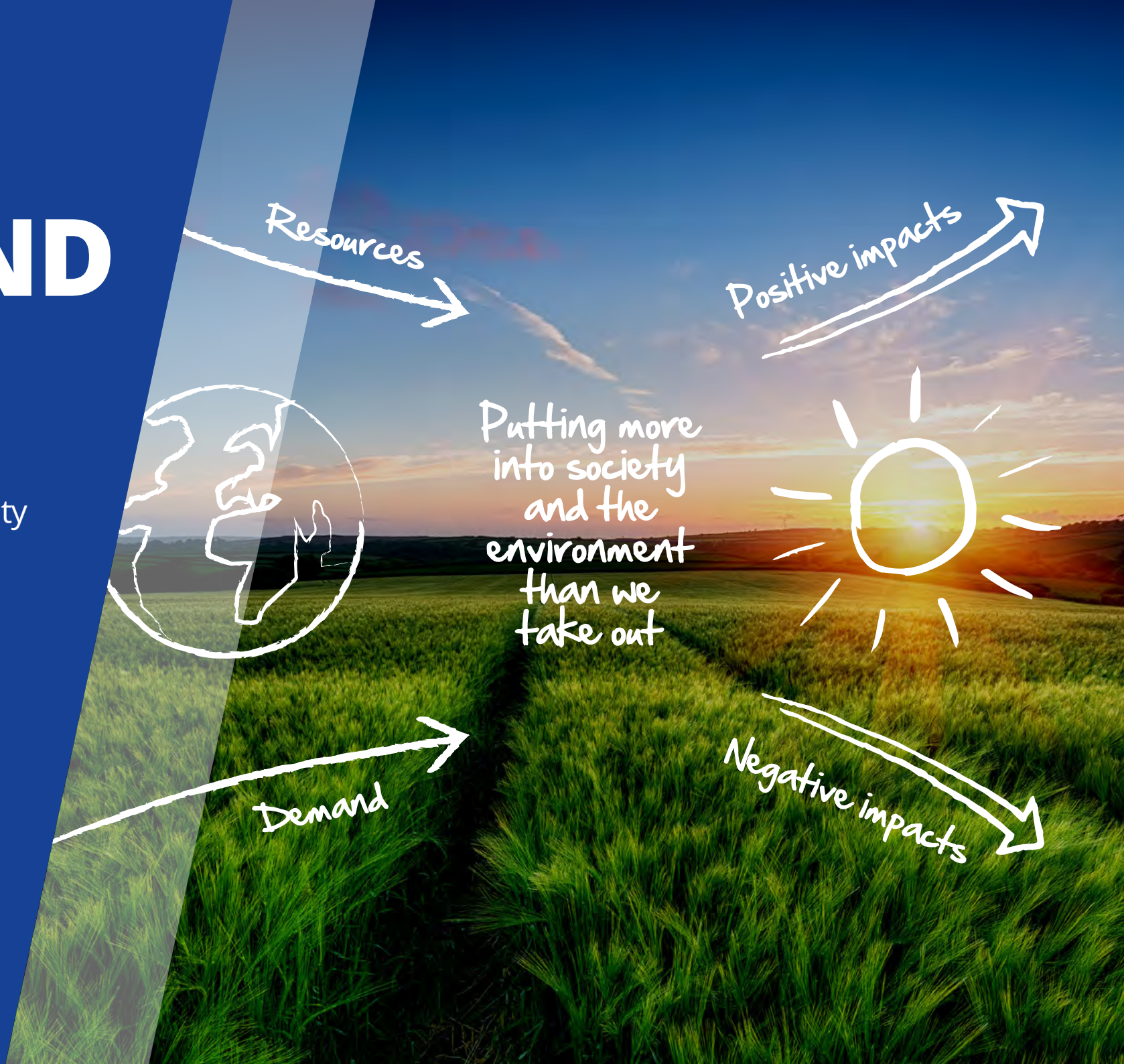
WAY BEYOND GOOD

Corporate Responsibility Report 2018



WELCOME TO OUR CORPORATE RESPONSIBILITY REPORT FOR 2018

We are making great progress on our journey to go *Way Beyond Good* – to put more into society and the environment than we take out.

Here we report on what we have achieved in 2018 and explain some of the challenges we must work through to reach our ambitious goals for 2020 and beyond.

This is SIG's second full Corporate Responsibility (CR) Report. It has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option, describing our management approach and performance on our most material environmental and social issues.

We publish a full GRI report every two years. Our first full report was for 2016 and we published an interim performance update in 2017.

This document acts as our Communication on Progress in relation to the 10 principles of the United Nations Global Compact (see page 70) and shows how we are contributing to the United Nations Sustainable Development Goals (SDGs) (see page 14).

Structure of the report

The report is structured around the focus areas of the responsibility roadmap we are using to drive progress towards our commitment to go *Way Beyond Good*.

Relevant material issues, GRI indicators and SDGs are shown at the start of the section on each focus area. Details on reporting boundaries, together with an index of conformance with the GRI Standards, can be found in About our reporting (see page 67).

Key for icons

DATA ASSURED

Selected data points indicated by this icon have been externally assured with limited assurance by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (see page 86). Their assurance statement can be found on page 84.

INDUSTRY LEADER

Specific achievements where SIG is leading the industry are highlighted with this icon.

KEY CHALLENGE

Key challenges are signposted with this icon.

Scope of report

Unless otherwise stated, data covers the 2018 calendar year and all our global operations except our joint ventures in the Middle East and Japan. Our Whakatane paper mill in New Zealand is excluded from our reporting on responsible sourcing.

We want to hear from you

We welcome stakeholder feedback on our CR approach, performance and reporting.

Please contact Ingo Büttgen, Head of Corporate Communication, at waybeyondgood@sig.biz.

GRI INDICATORS

General Disclosures GRI 102-50
General Disclosures GRI 102-51
General Disclosures GRI 102-52
General Disclosures GRI 102-53
General Disclosures GRI 102-54
General Disclosures GRI 102-56

UN GLOBAL COMPACT
WE SUPPORT

SUSTAINABLE DEVELOPMENT GOALS
SIG supports the SDGs

CONTENTS

WAY BEYOND GOOD

RESPONSIBLE COMPANY

RESPONSIBLE SOURCING

RESPONSIBLE PRODUCTS

ABOUT OUR REPORTING

How to navigate the report

Use the tabs at the bottom of each page to move between the main sections of the report. The navigation buttons enable you to:

- Return to the start of the report
- Return to last page viewed
- Go back one page
- Move forward one page

WAY BEYOND GOOD

IN THIS SECTION

*"We are leading the industry by pioneering sustainable innovations to deliver scalable, systemic net positive impacts – for society, the environment and our business. There is an incredible level of commitment throughout the organisation as we drive progress towards our ambitious goals to go **Way Beyond Good**."*

Rolf Stangl
Chief Executive Officer

Rolf holds a combifit pack specially printed to present our Corporate Compass, which includes bold commitments on responsible company, sourcing and products.

MESSAGE FROM OUR CEO

I am incredibly proud of the progress we have made since we embarked on our responsibility roadmap in 2016. Our pioneering innovations are showcasing the role of SIG solutions in delivering food in a safe, sustainable and affordable way.

Over the last three years, we have achieved a host of industry firsts. First to enable customers to include the FSC™ label on any of our packs. First to offer an aseptic carton linked to 100% renewable plant-based materials.[1] First to source all the energy that we use to make our packs from renewable sources. First to achieve certification to the new ASI standard for responsible aluminium sourcing. And, most recently, first to offer a market ready alternative to plastic straws for use with aseptic carton packs.

Sustainability is ingrained in SIG's strategy and this has strengthened the way we source, produce and sell. The environmental credentials of our carton packs are inherently strong and we have led the industry with even more sustainable innovations, such as our **SIG**NATURE PACK which hit the supermarket shelves in 2018. More and more customers are asking for and taking up these solutions as they seek to enhance their own environmental credentials with consumers and regulators.

Our *Way Beyond Good* ambitions and activities are increasingly central to our business. The level of investor interest in this during our Initial Public Offering shows just how important it is to SIG's success now and in the future. And it is really encouraging to have gained such strong buy in from stakeholders both within and outside the business.

There is an incredible level of commitment throughout the organisation. The Board is driving our *Way Beyond Good* agenda and the first meetings with our external Responsibility Advisory Group have given us further impetus and motivation by challenging us to think big. We have also created a team of experts from across the business to help us deliver transformative change and reinforce the connection between *Way Beyond Good* and SIG's core business.

But this is not just a top down initiative. SIG people are getting involved all over the world with projects like the eco-canteen for a local school in Thailand and a reward scheme for recycling in Brazil. I'm delighted that our refreshed engagement programme will give them – and us – more opportunities to have a positive impact in their communities. We will amplify our impact through our newly formed *Way Beyond Good* Foundation, which will initially focus on our flagship Cartons for Good project.

We built our innovative mobile Cartons for Good filling machine this year and delivered it to Bangladesh, where it has already begun helping farmers preserve surplus food and providing children with school meals. I'm extremely proud of this project and everyone involved in taking an idea we had and turning this vision into something that is creating real benefits for communities within a very short space of time.

I'm equally proud of the programmes that have been triggered by employees taking the initiative. Our people – their expertise and enthusiasm – are essential to achieve our ambitions and I am pleased that engagement levels have significantly improved this year. Over 77% of employees took the time to respond to our latest survey and we are using their feedback to help us improve.

Way Beyond Good is founded on our strong commitment to corporate responsibility. SIG supports the United Nations Sustainable Development Goals and remains dedicated to upholding the principles of the United Nations Global Compact.

We have made excellent progress on our journey to go *Way Beyond Good*. But we want to do even more to support the transition to a net positive food supply system. I look forward to reporting on our progress next year.

Rolf Stangl
Chief Executive Officer

GRI INDICATOR

General Disclosures
GRI 102-14

[1] Via a mass balance system

*What it means to go **Way Beyond Good***

We are going *Way Beyond Good* by partnering to create a net positive food supply system that will nourish a growing global population while putting more into society and the environment than it takes out.

Our ambition is to become net positive in the long run. In simple terms, this means we are working to reduce any negative impacts and increase the positive impacts we have on the environment and society. Ultimately, we want to create a net positive impact overall across our value chain. In doing so, we are not only benefiting people and the planet, we are also investing in the success of our business now and in the future.

We align our efforts with the principles of the Net Positive Project by focusing on our material impacts, targeting systemic change and regenerative outcomes, and being transparent about our progress and the challenges we face along the way.

The graphic on the following page illustrates what *Way Beyond Good* means to the environment, society and SIG. Features later in this report explore what this means in practice.

We also invited our NGO partners to discuss what it means to be net positive in a series of interviews posted on our SIGnals blog.

OUR JOURNEY *WAY BEYOND GOOD*

Our business

ecoVadis **Gold** shows SIG is a responsible partner

More customers for **EcoPlus** and **SIG**NATURE PACK

Green product portfolio offers extra sustainability credentials

Our dream

Every consumer in the world with an SIG pack in their hand and a smile on their face, every single day

DECLINING RESOURCES AND ECO-SYSTEMS SERVICES

Positive impacts

1.7 Earths used every year

×5 more climate-related disasters since 1970

1/3 food wasted

1 billion more people by 2030

Natural resources

Climate change

Communities

2016 | 2017 | 2018 | 2020 | 2030

FSC™ label possible on any SIG pack

82% plant-based **EcoPlus**

-28% life-cycle CO_2

ISCC PLUS certification

100% plant-based* **SIG**NATURE PACK 100

-58% life-cycle CO_2

asi certification

100% renewable energy for production

-45% operational CO_2 since 2016

Joined UN Global Compact

Way Beyond Good **Foundation** established

Cartons for Good prevents food loss and feeds schoolchildren

NEXT STEPS ON ROADMAP TO BE DEVELOPED

100% FSC™ labelled packs

100% renewable pack

Partner to increase carton collection and recycling

-50% operational CO_2

×2 impact of community programmes

100% **certified materials to help forests and ecosystems thrive**

50% **sourcing spend with suppliers that share our net positive approach**

-50% **value chain environmental impacts**

-25% **CO_2 /litre of food packed to cut climate impacts across our value chain**

×2 **societal benefits to help communities thrive**

Our net positive ambition

Partner to create a net positive food supply system that will nourish a growing global population while putting more into society and the environment than it takes out

INCREASING DEMAND FOR RESOURCES

Negative impacts

* Via a mass balance system

OUR BUSINESS

We partner with our customers to bring food products to consumers around the world in a safe, sustainable and affordable way. That's our purpose and it underpins our net positive ambition.

OUR SOLUTIONS AND MARKETS

SIG Combibloc ('SIG') is a leading systems and solutions provider for aseptic packaging. We deliver innovative packaging solutions that enable businesses to satisfy growing demand around the world for high-quality, sustainable and convenient food and beverage products.

We serve major food and beverage brands and contract packers in the Americas, Asia-Pacific, Europe, and the Middle East and Africa. Our packaging is primarily used for long-life milk and dairy products, as well as non-carbonated soft drinks such as fruit juices, and liquid and particulate foods such as soups and sauces.

Our products and services include sleeves, spouts and caps for our packs, filling machines and technical service (see page 8). In addition, our paper mill in New Zealand produces liquid packaging board used in our sleeves.

PROMOTING SUSTAINABLE SOLUTIONS

Our unique technology and outstanding innovation capacity enable us to provide a complete range of packs, flexible filling machines and solutions for operating smarter factories (see more on our website).

We sell solutions. This means analysing customers' needs and looking for opportunities to support them. Many of our customers are targeting improvements in the sustainability of their products and operations, and we receive regular requests about the sustainability claims they can make by choosing our packs. This makes the strong environmental credentials of our solutions an increasingly important selling point.

All our aseptic carton packaging solutions have a significantly lower environmental footprint than other comparable alternatives, such as plastic bottles or cans. And we are leading our industry with a range of innovations that enable customers to make even stronger sustainability claims about their choice of packaging.

For every product in our portfolio, we offer customers a menu of features to choose from that can enhance the credentials of their packaging in the eyes of consumers – from FSC™ labelling (see page 43) to polymers linked to 100% forest-based materials (see page 55).

This is not just marketing speak. We have a long history of engineering precision at SIG and we apply this rigour to sustainability too. The environmental credentials of our solutions are backed up by independent life-cycle assessments and recognised external standards (see page 56).

OUR ORGANISATION

We have over 5,000 employees and operate in more than 60 countries. Previously entirely privately owned, SIG's parent company, SIG Combibloc Group AG, is now listed on the SIX Swiss Stock Exchange following an Initial Public Offering in September 2018. Questions from potential investors on environmental, social and governance topics underlined how important SIG's responsibility commitment is to the success of the business.

GRI INDICATORS

General Disclosures GRI 102-1 | General Disclosures GRI 102-5 | General Disclosures GRI 102-6 | General Disclosures GRI 102-7

OUR BUSINESS

SIG is a leading systems and solutions provider for aseptic packaging.

OUR PRODUCTS AND SERVICES		SUSTAINABLE INNOVATION
PACKS We produce aseptic carton packs, made primarily from renewable forest-based liquid packaging board, with thin polymer and aluminium barrier layers to help protect the food inside. Carton sleeves are delivered in flat-packed format for efficient transport and formed into carton packs using our filling machines at customers' factories, where our caps and closures can also be added.	 **>35bn** packs produced in 2018	**Find out how we're strengthening the environmental credentials of our packs. See page 58**
FILLING MACHINES Customers use our aseptic filling machines to form, sterilise and fill our cartons with food products, and seal the filled cartons ready for distribution and storage. Our highly efficient machines offer the flexibility to fill packs in a range of different formats and volumes using a variety of opening solutions, with a very low waste rate.	 **1,180** SIG filling machines in use worldwide	**Find out how we're making our filling machines more eco-efficient. See page 64**
TECHNICAL SERVICE We provide service and maintenance support for customers throughout the life of our filling machines. Our technical service engineers offer advice, training and support to optimise the efficiency and reduce the environmental impacts of our customers' filling lines and factories.	 **550** service engineers	**Find out how our technical service solutions are helping customers operate more sustainably. See page 64**

OUR REVENUE

2016	2017	2018
€1,723.8 m	€1,664.1 m	€1,676.1 m

OUR MAIN SITES

GRI INDICATORS

GRI 102-2 · GRI 102-3 · GRI 102-4 · GRI 102-7

RESPONSIBILITY BUILT IN

Our net positive commitment is reinforced by SIG's purpose, built into our strategy and managed through our core business functions.

STRATEGY

Our Corporate Compass is the strategy that guides our business decisions at every level, with SIG's purpose and values at its core. The Compass includes bold commitments on being a responsible company, sourcing responsibly and creating responsible products (see graphic).

These long-term commitments support our goals around business growth, people and customer.
They are accompanied by a roadmap of targets that drive progress on our journey to go *Way Beyond Good* (see page 19).

EMBEDDING CR INTO CORE BUSINESS PROCESSES

Management of corporate responsibility (CR) topics is embedded within relevant functions and processes to make sure CR is a core part of our decision-making in every aspect of the business. For example:

GRI INDICATORS

General Disclosures GRI 102-15

General Disclosures GRI 102-16

- **Solutions selling** – The environmental credentials of our solutions add value to customers and consumers, and are becoming increasingly central to our selling. We are training our sales teams to explain how our solutions can help customers meet their sustainability needs, starting with our European sales, service and marketing teams.
- **Product innovation** – Environmental performance is one of the core value drivers for our product innovation, alongside product safety and commercial considerations (see page 58).
- **Manufacturing** – The safety of our people (see page 35) and our products (see page 66) is critical to our manufacturing operations, as well as managing environmental impacts from production (see page 27).
- **Procurement** – Working with responsible suppliers and sourcing raw materials sustainably is central to procurement at SIG and forms part of our training for everyone involved in this function (see page 41).
- **Human resources** – One of our three strategic corporate goals is to foster a winning team. Engaging and supporting our employees is essential to do this and our new Human Resources strategy is closely aligned with the Employees focus area of our responsibility roadmap (see page 31).
- **Risk management** – We have implemented a risk management process led by the Group General Counsel and approved by the Board of Directors, which sets out a structured process to systematically manage risks (see Annual Report). We are working to ensure that our most material CR risks are fully integrated into corporate risk management processes. CR topics are integral to five of the 11 key risks we have identified for the business (see box). Our approach to managing these risks is outlined in the relevant sections of this report. Responsibility for each key risk is allocated to individuals, who report back to our Group Risk Manager.

Key business risks related to CR topics

Supply – risks to our ability to supply our customers, including as a result of employee action or interruptions in the supply chain

Compliance – risks of non-compliance, including in relation to ethical, environmental and health and safety laws

Environment – risks related specifically to environmental compliance, including meeting new regulations on packaging products or recycling of beverage cartons, and climate-related risks

Image – risks to our reputation, including as a result of unethical behaviour or defects in product quality and safety

Human resources – risks to our ability to attract and retain new talent, including loss of key personnel

GOVERNANCE

Our CEO and Group Executive Board (GEB) are ultimately accountable for our CR performance and delivering on our *Way Beyond Good* commitments. GEB meetings include standing items on responsibility topics and there is a dedicated GEB member sponsor for each of the priority roadmap workstreams. The GEB is advised by our external Responsibility Advisory Group (see page 11) and GEB members sit on our Responsibility Steering Group (RSG).

Responsibility for implementing each individual focus area of the roadmap lies with the relevant functions of the business. Progress is reviewed by our RSG – made up of the GEB and other senior representatives from key functions and regions. The RSG convened three times in 2018 and will continue to meet twice a year to ensure alignment and collaboration across the business as we implement our roadmap.

In 2018, we restructured the RSG to make sure it continues to represent our evolving business. Our joint venture in the Middle East and Africa is now included alongside our other regions. We have also added members from our new Investor Relations team and from the *Way Beyond Good* Foundation we have established to channel our community investment (see page 39).

The RSG is supported by Team Beyond, a newly formed group of experts from various functions. Team Beyond has been tasked with identifying ways to reinforce the connection between *Way Beyond Good* and SIG's core business, and to embed a more transformational approach across the company to help us achieve our net positive ambitions. Responsibility leaders from each function and region also support implementation of our responsibility roadmap.

GRI INDICATOR

General Disclosures GRI 102-18

RESPONSIBILITY GOVERNANCE STRUCTURE

INTEGRATING EXTERNAL INSIGHT

Our independent Responsibility Advisory Group (RAG) has an integral role in defining SIG's CR approach, providing valuable external perspectives and challenging us to continually improve.

Comprised of external CR experts, the RAG provides strategic input to our Group Executive Board and Responsibility Steering Group through direct interaction with our C-suite.

In March 2018, the RAG met in person for the first time to provide feedback on our approach and performance directly to our Chief Executive Officer, our Chief Finance Officer and our Chief Market Officer (see photo). The meeting was facilitated by the Group CR team. The table summarises the key points we captured from their feedback together with our responses.

The RAG met again in December to hear how we are responding to their feedback and share their views on our progress (see page 12).

RESPONDING TO RAG FEEDBACK

RAG FEEDBACK		OUR RESPONSE
IMPACT	**Identify where SIG can have the biggest impact and how SIG's solutions fit in the context of global challenges. Seek and create broader ripple effects beyond SIG's own business, even if they start small.**	We have identified our most significant impacts through a materiality assessment, and we ran a workshop to examine which of our roadmap focus areas have the most potential to drive progress towards our net positive commitments and create ripple effects. Features throughout this report explain how each focus area contributes to going ***Way Beyond Good*** and what this means for SIG, the environment and society. We also include context on global challenges by highlighting how we are contributing to the United Nations Sustainable Development Goals (see page 14).
TRANSFORMATIONAL ATTITUDE	**Address the language gap between SIG's bold net positive ambitions and some of the more reactive terminology that implies the focus is on managing negative impacts.**	We have created Team Beyond to promote a more transformational attitude across the business (see page 10). We have also redefined our material issues and accompanying management approaches to help us increase our focus on opportunities to create positive impacts on society and the environment (see page 17).
BUSINESS LINKS AND DISRUPTIVE CHANGE	**Connect *Way Beyond Good* more closely to the business and purpose, and use this to consider ways to change or improve SIG's business. Explore opportunities to create disruptive and systemic change, for example through a focus on solutions that are scalable and stand on their own, as a means to effect change.**	We have further embedded management of CR topics into our core business (see page 9). Part of Team Beyond's remit is to identify ways to reinforce the connection between ***Way Beyond Good*** and SIG's core business. We are engaging with partners and peers to seek opportunities for systemic change by driving the net positive agenda beyond our own business (see page 13).

EXTERNAL PERSPECTIVES FROM OUR RESPONSIBILITY ADVISORY GROUP

We asked each member of our Responsibility Advisory Group to share their views on our approach to going *Way Beyond Good.*

Greg Norris *Chair*
Co-Director of Sustainability and Health Initiative for NetPositive Enterprise (SHINE)

"Becoming net positive is the highest ambition a company can set and SIG's comprehensive approach in pursuit of this goal is trailblazing. The company has come a long way in the past year with a broad portfolio of initiatives across a range of impacts.

SIG is targeting deep systemic change to achieve long-term net positive impacts across the value chain and it is determined to do this in a rigorous and credible way. The stakeholder meeting the company held on biodiversity in Gimo, Sweden, is a great example of how SIG is taking a leadership role in the debate about what net positive means in practice.

For a company of its size, SIG is pursing major impact. I'm hopeful that this will come to fruition and inspiring widespread employee participation will give the company a huge boost towards its *Way Beyond Good* ambitions.

The Responsibility Advisory Group is providing an opportunity for deep engagement with the company and it's really unusual to see the CEO so engaged. He and other SIG representatives at the meetings listen carefully to what we have to say and it's great to see some of our ideas already being implemented."

Gail Klintworth
Partner of the think tank, SYSTEMIQ

"SIG's 2030 goals are very ambitious and the company is uniquely positioned within the industry because it is small enough to disrupt the market yet big enough to have a real impact.

The company has made great progress in reducing its own footprint and delivered some pioneering sustainable product innovations. The next challenge is to lead the industry in making these sustainable innovations the default option for customers.

Like others, SIG is still working to understand what net positive means and I would like to see a stronger focus on the potential positive social impacts that its packaging solutions can play in delivering nutrition and tackling food waste. SIG is on a journey and I am delighted to be on this journey with them because they are really committed.

Way Beyond Good is not a public relations exercise. SIG's leaders want to fundamentally change the way the business works because they really believe it must put more into the environment and society than it takes out. This level of commitment from the top is extremely powerful and the company can also build momentum from the bottom up by making *Way Beyond Good* a reason for its employees to come to work every day."

Erin Meezan
Vice President and Chief Sustainability Officer at Interface, Inc

"SIG's ambitious *Way Beyond Good* commitment sets the company apart from many others that still just focus on reducing negative impacts. We need more companies to embrace this net positive approach if we are going to address global challenges like sustainable development and climate change.

There are still only a small number of companies worldwide that have set science-based targets on greenhouse gas emissions and SIG is one of them. As a pioneer, SIG has an opportunity to create a much bigger ripple effect by engaging others in its sector and beyond and showing them what is possible.

I'm impressed by how quickly SIG has moved on sourcing more sustainable materials and its 2030 goal to source all materials from certified sources is commendable. As a company that makes things, this is SIG's biggest impact and it's exciting to see it tackling the big, hard stuff head on.

The participation of the executive management team in the Responsibility Advisory Group is indicative of SIG's level of commitment and we are not just there to validate their approach, they have been very open to constructive criticism. One challenge is to develop metrics that will enable the company to inspire others by demonstrating measurable progress towards its net positive ambition."

DRIVING THE NET POSITIVE AGENDA

SIG is one of a leading group of companies that have made the bold commitment to become net positive. We aim to inspire others to join the movement to catalyse efforts to tackle global challenges, and create more benefits for people and the planet.

COLLABORATING WITH PARTNERS AND PEERS

As a member of the Net Positive Project, we are part of a dedicated group of pioneering companies and non-governmental organisations working together to drive the net positive agenda.

In 2018, the group established guidance on implementing the net positive principles, looking specifically at issues such as carbon, water and social impacts. It also consulted other stakeholders on what net positive means for them to understand opportunities to broaden the net positive movement.

We held a workshop with one of the project's NGO founders, Forum for the Future, to examine what it means for SIG to go net positive, and identify which of our roadmap focus areas have the most potential to drive progress towards our *Way Beyond Good* commitments and create wider ripple effects.

To extend impacts through our value chain, we are encouraging our suppliers to commit to becoming net positive (see page 44) and working with industry peers and other partners to foster recycling and the environmental benefits it can bring (see page 58).

"The Net Positive Project is a global collaboration of NGOs and corporates working to define the net positive concept and develop resources to enable more organisations to take up this approach. SIG is playing a pivotal role in shaping the direction of the group, engaging with other members to make sure we are working on the things that will have the biggest impact.

SIG has made a significant contribution to the development of resources, such as principles to define a net positive approach and a maturity model to enable organisations to gauge progress on their journey towards becoming net positive. Insights from the company are helping to make sure these tools are robust and will work in practice."

Zoe Le Grand
Forum for the Future

We are also part of the Science Based Targets Initiative (SBTI), which aims to cut greenhouse gas emissions enough to prevent the worst effects of climate change. Our emissions reduction targets were approved by the SBTI in 2018 (see page 27).

MEASURING NET POSITIVE IMPACTS

Quantifying overall net positive impacts is challenging because there are no established methodologies to do so. We are working with partners to explore ways to measure these impacts.

We have contributed to the Net Positive Project's work to develop a methodology for consistently measuring both positive and negative impacts on society and the environment. We are also supporting the Forest Stewardship Council's Bonn Initiative to quantify the positive contribution that FSC™ certified forests can make to mitigating climate change.

In 2018, we published the first ISO-conformant life-cycle assessment (LCA) for a mass balance product (our **SIG**NATURE PACK), which enables environmental impacts to be counted from mass balance materials rather than just the physical contents of a product (see page 57). We are also applying an LCA approach to measure the value chain impacts of our business (see page 26).

PROMOTING POSITIVE BIODIVERSITY DECISIONS THROUGH LCA

We also partnered with peers through the Alliance for Beverage Cartons and the Environment (ACE) to develop recommendations on how LCA can be improved to better address the United Nations Sustainable Development Goal 15 to protect life on land.

ACE teamed up with the United Nations Environment Programme (UNEP) Life Cycle Initiative and World Wildlife Fund (WWF) to gather a multi-disciplinary group of international experts in forestry, ecosystem science and LCA in Gimo, Sweden. The three-day workshop, held in October 2018, included a forest visit to study responsible forest management.

The resulting Gimo Recommendations are designed to empower decision makers across the value chain to protect and restore life on land by providing clear guidance for enhancing LCA impact modelling to better address impacts on biodiversity.

The recommendations build on existing guidance from UNEP and the Society of Environmental Toxicology and Chemistry (SETAC), as well as the ISO 14040 standard on LCA. They make clear that life-cycle information addressing biodiversity should drive decisions across the value chain that restore and protect biodiversity-related outcomes.

"It was great to see companies in the paper, packaging and consumer goods industries talking with ecologists and NGOs about how to measure and address impacts on forest ecosystems. We left the meeting with better tools for informed and effective decision making, as well as clear recommendations about improving the relevance of life-cycle assessments by better integrating biodiversity impacts. This work has the potential to inspire other sectors to play a role in conserving the world's forests."

Martha Stevenson
WWF

CONTRIBUTING TO THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

We are determined to play our part in supporting the United Nations Sustainable Development Goals (SDGs). Capturing the opportunities we have to support these global goals – and manage related risks – can have a positive impact not just on people and the environment, but also on our long-term business success.

We are focusing on four of the 17 SDGs where we can make the biggest contribution to tackling global challenges by supporting systemic change at scale. These are:

SDG12 to ensure sustainable consumption and production patterns

SDG13 to take urgent action to combat climate change and its impacts

SDG15 to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

SDG17 to strengthen the means of implementation and revitalise the global partnership for sustainable development

These are closely aligned with the significant impacts we identified through our materiality assessment (see page 17). This targeted approach – focusing on the biggest risks to people or the environment and the greatest benefits our products and partnerships can have – is in line with the new guidelines for business reporting on the SDGs from the Global Reporting Initiative and the United Nations Global Compact.

Our activities in several areas are also relevant to some of the other SDGs. For example, our commitment to employee health and safety and fair labour practices for people in our supply chain is informed by SDG 8 on decent work for all.

Based on an analysis by the Forest Stewardship Council™ (FSC™), we are supporting progress towards 11 of the SDGs (and 35 of the accompanying targets) by promoting the use of FSC™ certification. By the end of 2018, 70 companies had joined the FSC's Vancouver Declaration that we launched with other leading businesses in 2017 to pledge support for the SDGs via FSC™ certification.

Our new methodology for measuring the impact of our local community engagement includes criteria related to alignment with the SDGs. Through our Cartons for Good project, we are also exploring the potential to support other global sustainable development goals, such as SDG 1 on poverty and SDG 2 to reduce hunger, by creating a new model that applies our technology and expertise to enable communities to reduce food loss by preserving surplus harvests locally, and providing school meals to encourage children to stay in school (see page 25).

GETTING OUR PEOPLE INVOLVED

Our people have a central role to play in helping us drive progress towards our net positive commitments. We asked them how we are doing on corporate responsibility as part of our 2018 employee engagement survey.

Employees agree that SIG is exceptionally committed to sustainable products and environmentally friendly production. They would like to see us further enhance our contribution to communities and society, and we are increasing our focus on this through our *Way Beyond Good* engagement programme.

A network of *Way Beyond Good* champions at every major location across the business is helping us raise awareness of responsibility topics and get employees and local communities involved. In 2018, the champions ran a number of activities to spread the word about our Cartons for Good flagship project and we extended their remit to work with other employee volunteers as part of local action groups to increase the impact of our *Way Beyond Good* engagement programme (see page 39).

LISTENING AND RESPONDING TO STAKEHOLDERS

We engage in dialogue with stakeholders to understand what matters most to them and we respond to their feedback.

GRI INDICATORS

General Disclosures GRI 102-40 | General Disclosures GRI 102-42 | General Disclosures GRI 102-43 | General Disclosures GRI 102-44

HOW WE ENGAGE WITH STAKEHOLDERS

STAKEHOLDER	HOW WE ENGAGE	KEY TOPICS AND CONCERNS	OUR RESPONSE
CUSTOMERS	■ Customer questionnaires ■ Regular interactions with customers through sales and service	**Customers want us to meet their requirements on a broad range of responsibility issues and help them achieve their social and environmental goals. Recyclability of products, recycling infrastructure and plant-based polymers were high on our customers' agenda in 2018.**	We use established industry platforms, such as SEDEX and EcoVadis, to demonstrate compliance with customer requirements (see page 24) and support their goals through product innovation (see page 53). In 2018, we engaged closely with customers to understand their needs and also partnered with several customers on recycling initiatives (see page 62).
EMPLOYEES	■ Biennial global employee survey ■ Regular day-to-day dialogue ■ Formal appraisals ■ Consultation with employee representatives	**Feedback from our second global survey showed improved employee engagement and highlighted several areas where we are working to improve.**	We are using employee feedback to make SIG a better place to work (see page 31).
INVESTORS	■ Quarterly reporting and investor calls	**Investors seek sustainable, long-term returns and we received many questions related to environmental, social and governance topics from potential investors during the Initial Public Offering process in 2018.**	We have integrated responsibility into our corporate strategy to grow our business sustainably, and address the issues raised by investors through our responsibility roadmap.

STAKEHOLDER	HOW WE ENGAGE	KEY TOPICS AND CONCERNS	OUR RESPONSE
SUPPLIERS	■ Regular engagement ■ Compliance assessments and audits	**Suppliers want to know what our requirements are on responsibility so they can understand how to meet them.**	We communicate our ethical supplier standards and work with suppliers to source raw materials from responsible sources (see page 41).
SUSTAINABILITY EXPERTS	■ Responsibility Advisory Group (RAG) ■ Regular conversations with experts from academia, institutes, government and non-governmental organisations ■ Participation in multi-stakeholder initiatives, including the Net Positive Project and Science Based Targets Initiative ■ Engagement with the Institute for Energy and Environmental Research (IFEU)	**Experts want us to show we are managing our most material issues, setting ambitious targets and reporting transparently on our performance, following recognised international standards.** **Independent experts on our Responsibility Advisory Group met twice in 2018 to provide feedback on our approach (see page 11).**	We revised our materiality assessment in 2018 and we have set ambitious targets through our responsibility roadmap. We have established a clear governance structure for responsibility as a whole. We use international protocols and standards in the management of specific focus areas. We engage IFEU to conduct third-party life-cycle assessments (LCAs) of our products (see page 56) and we are drawing on our expertise in LCAs in our engagement with others to drive the net positive agenda (see page 13). We also report in accordance with the Global Reporting Initiative Standards and we get key data assured externally to enhance transparency. See page 11 for our response to the RAG's feedback.
POLICYMAKERS AND REGULATORS	■ Engagement through trade associations	**The range of topics covered by regulators is broad. Hot topics include responsible production, sustainable consumption, waste and recycling, and contributions to broader global goals, such as the United Nations Sustainable Development Goals.**	Existing and emerging regulations feed into our identification of material issues and we address topics relevant to public policy through our roadmap. Our response to specific regulatory priorities is detailed in the relevant sections of this report.
LOCAL COMMUNITIES AROUND SIG PRODUCTION SITES	■ *Way Beyond Good* engagement programme ■ Family days and open days at our sites ■ Recycling initiatives	**Issues raised by communities are generally locally specific.**	We have strengthened our focus on community engagement this year, with a new target to increase the positive impact we have on communities (see page 39). We are also enhancing our social impact in communities through our flagship project, Cartons for Good (see page 25).

OUR PRIORITIES

Insights from stakeholders and our business help us identify the issues that are most important – or material – to SIG and where we have the most significant impacts.

In early 2018, we refreshed our materiality assessment to review our CR priorities, based on research into external perspectives representing a range of stakeholder groups and insights from within the business.

Based on this assessment, we have refined the list of our most material issues – those that are most important to stakeholders and have most influence on business success – as well as identifying which of these represent our most significant environmental, societal and economic impacts.

The matrix (right) shows the results, which were validated internally by our Responsibility Steering Group and our Group Executive Board, and externally by our NGO partners. See page 68 for more on our materiality process and definitions of each material issue.

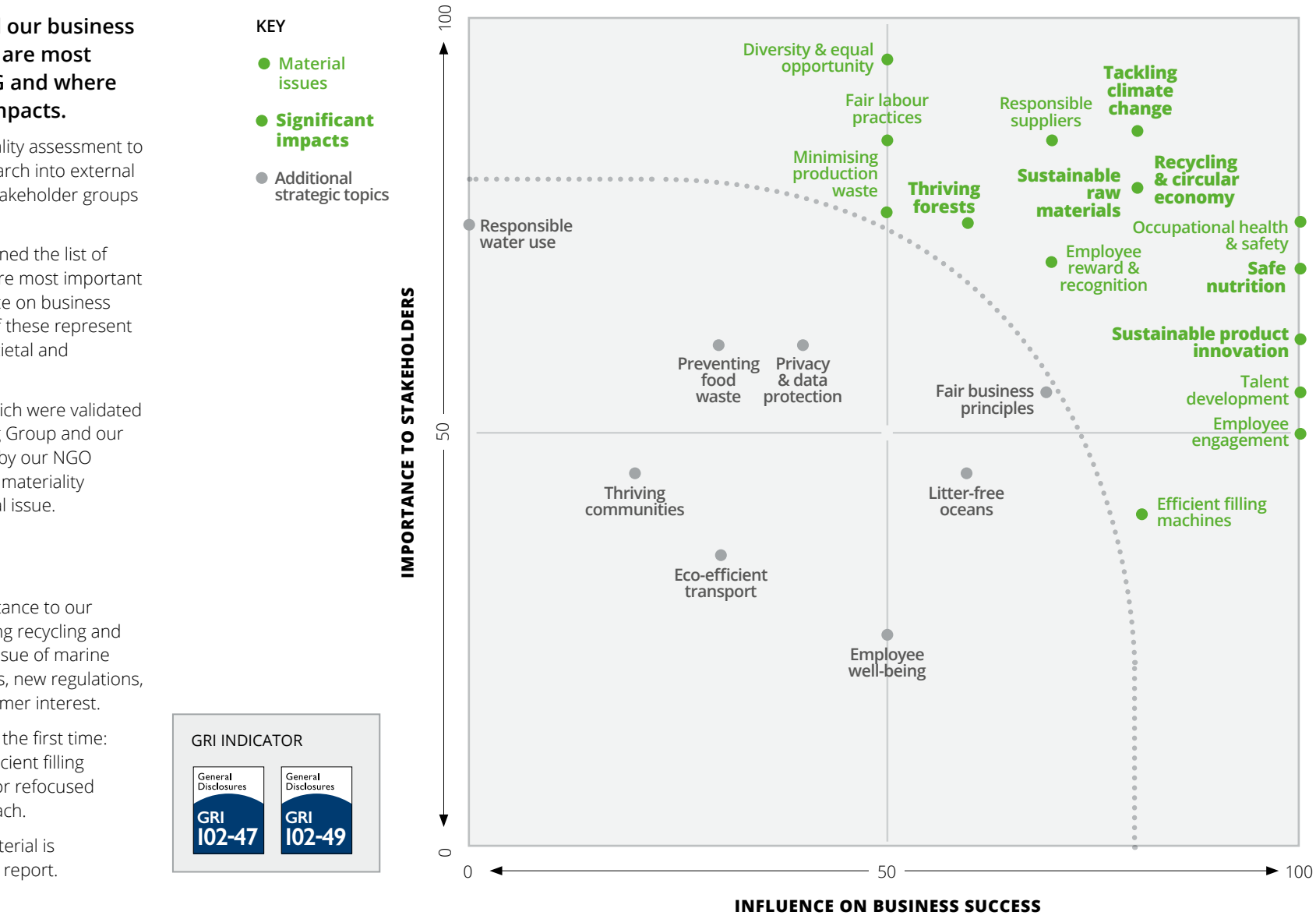
KEY TRENDS

Several issues have increased in significance to our business and our stakeholders, including recycling and circular economy – and the emerging issue of marine litter – with high-profile NGO campaigns, new regulations, customer demands and growing consumer interest.

Two issues were ranked as material for the first time: diversity and equal opportunity and efficient filling machines. Others have been grouped or refocused to better reflect our net positive approach.

An explanation of why each issue is material is included in the relevant sections of this report.

OUR MATERIAL ISSUES AND SIGNIFICANT IMPACTS



GRI INDICATOR

General Disclosures GRI 102-47

General Disclosures GRI 102-49

DEFINING FOCUS AREAS FOR OUR ROADMAP

Our responsibility roadmap was built around the most material issues identified in our previous assessment, together with some additional topics we consider strategic to the business.

We have used the latest findings to bolster our efforts and, in some cases, refine our roadmap targets to reflect emerging issues and areas that have risen in importance to stakeholders. The table shows a simplified mapping between our material issues, additional strategic topics and roadmap focus areas.

STAKEHOLDER	MATERIAL ISSUES	ADDITIONAL STRATEGIC TOPICS	ROADMAP FOCUS AREA	FIND OUT MORE
RESPONSIBLE COMPANY	■ Talent development ■ Employee engagement ■ Employee reward & recognition ■ Diversity and equal opportunity	Employee wellbeing	**Employees**	Page 31
	■ Occupational health and safety		**Health and safety**	Page 35
	■ Tackling climate change ■ Minimising production waste		**Environmental footprint**	Page 27
	■ Fair labour practices	Fair business practices	**Governance and ethics**	Page 38
		Thriving communities	**Communities**	Page 39
RESPONSIBLE SOURCING	■ Responsible suppliers		**Responsible suppliers***	Page 45
	■ Sustainable raw materials ■ Thriving forests		**Sustainable raw materials**	Page 47
	■ Tackling climate change		**Energy sourcing**	Page 49
		Eco-efficient transport	**Sustainable logistics**	Page 51
RESPONSIBLE PRODUCTS	■ Sustainable product innovation ■ Recycling and circular economy		**Packs****	Page 58
	■ Efficient filling machines ■ Sustainable product innovation	Preventing food waste	**Filling machines & technical service**	Page 64
	■ Safe nutrition		**Product safety**	Page 66

*Roadmap focus area formerly titled Ethical supplier standards ** The focus area on Packs now includes the previously separate focus area on Recycling

RESPONSIBLE COMPANY ROADMAP PROGRESS IN 2018

FOCUS AREA	2020 GOAL	PERFORMANCE RATING	2018 PROGRESS
ENVIRONMENTAL FOOTPRINT	**Put a science-based CO_2 reduction target in place covering our entire value chain (by 2018)**		We have established CO_2 reduction targets, approved by the Science Based Targets Initiative, covering our entire value chain. These are the targets shown below to reduce Scope 1 and 2 greenhouse gas emissions and to reduce Scope 1, 2 and 3 greenhouse gas emissions per litre of food packed.
	Reduce Scope 1, 2 and 3* greenhouse gas emissions by 25% per litre of food packed by 2030		We have reduced our Scope 1, 2 and 3* emissions by 10% per litre of food packed from the 2016 baseline.
	Reduce Scope 1 and 2 greenhouse gas emissions by 50% by 2030 – and by 60% by 2040		We have reduced our Scope 1 and 2 emissions by 45% from the 2016 baseline.
	Cut operational greenhouse gas emissions rate (Scope 1 and 2) by more than 50% (from 2014)**		We have reduced our operational greenhouse gas emissions rate by 73% since 2014, largely as a result of the transition to 100% renewable energy.
	Reduce energy rate by more than 35% (from 2014)**		Our energy rate remained fairly static in 2018 and has increased by 11.1% overall from 2014. We aim to increase our focus on energy efficiency in 2019, having prioritised emissions reductions through the transition to renewable energy over the last two years.
	Reduce waste rate by more than 45% (from 2014)**		Despite efficiencies through our waste reduction programmes, our waste rate has decreased by just 1.6% since 2014 due to more frequent changes to production lines to meet customer demand.
	Achieve compliance with ISO 50001 at our European production plants* and revised ISO 14001 standard at all production plants**		We have achieved certification to the revised ISO 50001 standard at our three European sleeve production plants and to the revised ISO 14001 standard globally, with audits at our Linnich site and the Suzhou assembly plant in 2018.
EMPLOYEES	**Increase employee net promoter score year by year**		Our net promoter score has significantly improved from –16 in 2016 to –1 in 2018, with 33% of survey participants this year saying that they would strongly recommend SIG to friends and family as a good place to work and 34% that they would not.
	Achieve a sustainable engagement score above industry benchmark		We increased our sustainable engagement score to 78% (up from 74% in 2016). This is just one point below the benchmark of 79% for global manufacturing companies.
	Achieve cultural entropy level below 10%	TARGET DISCONTINUED	We no longer separately track cultural entropy (a measure of how well our people share SIG's cultural values) among our leaders because we believe sustainable engagement and net promoter scores provide a better indication of overall engagement levels among all our employees.

* Target covers the three most material Scope 3 categories: from goods and services, use of our products (filling machines) and end of life treatment (cartons). ** Energy, emissions and waste rates are per million square metres of sleeves produced and exclude energy use at our closure production plant in Switzerland and our paper mill in New Zealand. *** This target has been revised to correct an error in the previously published wording as the ISO 50001 target only applies to European production plants.

KEY: MORE WORK TO DO ON TRACK COMPLETED

FOCUS AREA	2020 GOAL	PERFORMANCE RATING	2018 PROGRESS
EMPLOYEES	**Maintain voluntary turnover below 5%**		The voluntary turnover rate was 4% in 2018.
	Make our training and development investment above industry benchmark		We provided an average of 30.4 hours of training per employee in 2018, exceeding the industry benchmark of 24.0 hours.
	Establish a diversity and inclusion strategy and steering group		Diversity and equal opportunity was identified as a material issue for the first time in 2018 and we have set a new target to strengthen our focus in this area.
HEALTH & SAFETY	**Zero lost-time case rate**		Our lost-time case rate increased by 29% to 0.49 during 2018. We are targeting improvements by continuing to embed and extend our behaviour-based safety programme and life-saving rules across our sites.
	Achieve a life-critical safety elements score of 100% at all production sites		All our production sites maintained a minimum score of 96% in our annual assessment of the way they manage life-critical safety elements.
	Maintain a health rate of more than 97%		We are increasing our focus on improving employee health and wellbeing by addressing the root causes for occupational illness and this will inform the development of a leading indicator to monitor the health rate of our employees. In 2018, we began to integrate ergonomics into our behaviour-based safety system at one of our biggest production sites in Linnich, Germany.
GOVERNANCE & ETHICS	**Mandatory annual Code of Conduct training for all employees**		We are continuing to develop e-training on the SIG Code of Conduct and exploring options to reach people without computer access at work.
	In-depth training on specific areas of compliance for high-risk roles every two years		During 2017 and 2018, we trained over 230 employees in high-risk roles on various topics, including our new Gifts Policy.
	SEDEX Members Ethical Trade Audit (SMETA) at all large sites with more than 40 employees		Nine of our 17 sites with over 40 employees have successfully completed SMETA audits, including our New Zealand paper mill which completed a SMETA audit for the first time in 2018.
COMMUNITIES	**Double the impact of community engagement programmes***		We have refined our target to focus on our impact rather than the number of programmes. Our methodology shows we have more than doubled the societal impact from our community programmes around the world since the 2016 baseline.
	Launch a global flagship project using our expertise to support communities		Our flagship project Cartons for Good began in Bangladesh in late 2018 and the first packs of food were distributed to schools in early 2019.

* Wording changed to make target more meaningful.

KEY: MORE WORK TO DO ON TRACK COMPLETED

RESPONSIBLE SOURCING ROADMAP PROGRESS IN 2018

FOCUS AREA	2020 GOAL	PERFORMANCE RATING	2018 PROGRESS
RESPONSIBLE SUPPLIERS	**Include new social responsibility requirements in 100% of contracts with suppliers of our key raw materials**		Social responsibility requirements were included in 100% of our contracts with suppliers of key raw materials in 2018, either through the SIG Business Ethics Code for Suppliers or an equivalent code.
	Audit 10% of high-risk suppliers each year		We audited 14% of high-risk significant suppliers (one of seven) in 2018.
	Provide regular training (at least every two years) on ethical supplier standards and sustainable sourcing to all employees who interact frequently with suppliers		Everyone in our global, regional and local procurement teams (for both direct and indirect suppliers) was trained on their role in implementing our new Responsible Sourcing Directive in 2017. Further training is planned for 2019.
SUSTAINABLE RAW MATERIALS	**100% FSC™ labelled packs (work with customers to include the FSC™ logo on 100% of the packs we sell)**		By the end of 2018, we had increased the share of packs sold with the FSC™ logo on them to 96%.
	100% A-materials from certified sources		In 2018, 45% (by spend) of the liquid packaging board, aluminium and polymers we purchased in 2018 were linked to certified sources. The minimum supply of liquid packaging board made with wood from FSC™ certified forests and other controlled sources was 86% (down from 89% in 2017). We used certified plant-based polymers for our **SIG**NATURE PACK (via a mass balance system) and we became the first in our industry to begin implementing the new ASI Performance Standard and Chain of Custody certification for responsible aluminium sourcing.
ENERGY SOURCING	**100% renewable energy and Gold Standard CO_2 offset for all non-renewable energy (at production plants)**		We have completed the switch to 100% renewable energy – electricity and gas – at our production plants worldwide, investing in renewable energy projects certified to the GoldPower® standard to offset CO_2 where it is not feasible to source renewable energy directly.
SUSTAINABLE LOGISTICS	**Increase the rate of full truck loads delivered to customers**		The rate of full truck loads delivered declined slightly to 91% due to increased demand from customers for smaller loads and shorter delivery times.
	Ensure logistic partners use trucks that meet Euro 6 emissions standards for 100% of outbound road transport from our production plants in Europe		We engaged with our logistics partners to emphasise our expectations on environmental performance and they used Euro 6 trucks for 75% of outbound road transport from our European production plants, up from 60% in 2017.

KEY: MORE WORK TO DO ON TRACK COMPLETED

RESPONSIBLE PRODUCTS ROADMAP PROGRESS IN 2018

FOCUS AREA	2020 GOAL	PERFORMANCE RATING	2018 PROGRESS
OUR PACKS	**Create a 100% renewable aseptic pack**		**SIG**NATURE PACK 100 is the first aseptic pack that is 100% linked to renewable forest-based material (using a mass balanced approach). This represents an important step towards our target to create an aseptic carton pack that contains 100% renewable materials.
	Offer a carton made of 50% recycled content		We are working with suppliers to identify how much content in our packs can be defined as recycled and to explore how we can integrate more recycled materials into our packs in future.
	Ensure environmental performance is one of the core value drivers of our product innovations		We have developed a system to track how many of our innovation projects include environmental performance as a core value driver.
	Partner with stakeholders to support collection and recycling of beverage cartons		We have refined our approach to drive local programmes where we can have the biggest impact and we have worked with partners to launch major new initiatives in Europe and Brazil.
FILLING MACHINES & TECHNICAL SERVICE	**Reduce energy use by 20% per hour of runtime in our next generation filling machine**		We have re-opened the concept phase for our next generation filling machine to realign the project focus according to actual market demands. This will help us achieve our targets to reduce energy, hydrogen peroxide and water use.
	Reduce hydrogen peroxide use by 35% per hour of runtime in our next generation filling machine		
	Reduce water use by 25% per hour of runtime in our next generation filling machine		
	Support sustainability improvements for at least 50% of our customers through technical service		We have continued to expand our range of technical service solutions to support sustainability improvements for our customers and we are introducing new criteria to help us measure progress towards this goal. Our initial analysis shows that 20% of our customers have been reached since 2016.
PRODUCT SAFETY	**All production plants certified based on ISO 9001:2015 and all sleeves and spout production plants certified based on BRC Packaging Issue 5 with AA Grade**		We achieved group-wide certification to the revised ISO 9001:2015 standard. All our sleeves and spout production plants maintained their BRC packaging certification at A or AA Grade.

KEY: MORE WORK TO DO ON TRACK COMPLETED

RESPONSIBLE **COMPANY**

2030 goal
Halve environmental impacts and double societal benefits

IN THIS SECTION

"Being a responsible company is part of everything we do: it's in our DNA. Integrating responsibility into our strategy gives us a competitive edge, and delivers value for our customers and investors. This is fundamental to achieve our growth targets and sustain our business in the long term."

Samuel Sigrist
Chief Financial Officer

Samuel holds a Cartons for Good pack designed by children of our employees to tell the story of our flagship project that is helping communities turn food loss into nutritious school meals.

RESPONSIBLE **COMPANY** *OVERVIEW*

Being a responsible company is essential to earn the trust of our customers and other stakeholders – and underpins our efforts to go *Way Beyond Good*.

Minimising environmental impacts, keeping our employees safe at work, respecting and supporting our people and communities, and behaving ethically in everything we do. These are all fundamental corporate responsibilities that we take very seriously and our commitment to CR is recognised by external benchmarks such as EcoVadis.

We are building on these strong foundations to create systemic and regenerative net positive impacts for climate change, natural resources, people and communities. Our goal is to halve our environmental footprint and double societal benefits across our value chain by 2030, while meeting business growth and earnings targets.

We are developing methodologies to help us understand and measure the positive and negative impacts we have at each stage of the value chain – on the forests and communities that provide our main raw materials, on our employees and people who work in our supply chain, on customers who use our solutions to deliver food, and on consumers who use our products and dispose of them in recycling bins.

This will help us target our efforts to support transformative change to create a global food delivery system that is fit for the future, and not only protects but regenerates valuable natural resources for generations to come.

SIG ranked in the top 1% of around 30,000 participating companies in the latest assessment of our environment, social, ethical and supply chain policies and performance by EcoVadis in 2017

-45%

We have cut our Scope 1 and Scope 2 greenhouse gas emissions by 45% since 2016

Our CO_2 reduction targets have been approved by the Science Based Targets Initiative

5

of our plants achieved a zero lost time case rate in 2018 and we continued to roll out our behaviour-based safety programme globally

We launched our Cartons for Good project in Bangladesh to help communities preserve surplus food to provide school meals for children

78%

We increased our sustainable engagement score to 78% in our 2018 employee survey (up from 74% in 2016)

SIG EMPLOYEE SURVEY

Going ***Way Beyond Good*** *with*

CARTONS FOR GOOD

Cartons for Good, launched in 2018, is an ambitious initiative to apply our technology and expertise to help communities reduce food loss, support farmers' livelihoods, and promote children's nutrition and education.

Through this flagship project, we are exploring new models with the potential to support global sustainable development goals through our packaging solutions, expertise and partnerships.

The idea was born out of our Global Leadership Meeting in 2016, when we were looking at ways to make a positive impact on society and the environment. We wanted to use our expertise to help communities preserve surplus food locally.

We partnered with Forum for the Future and BRAC, an international development organisation, to help us realise this ambition in a region where we could make a big difference. We are piloting the project in Bangladesh, where nearly 20% of the population is undernourished and almost half of the children are underweight but food is still needlessly wasted.

Every harvest produces more food than farmers or communities can eat immediately, but they have no way to preserve surplus crops for future use so some of this food goes to waste. At the same time, many children drop out of school because they need to work to feed themselves and their families, stifling their potential.

We created a unique mobile filling solution to take to remote rural locations so excess crops can be turned into meals and preserved in SIG's long-life carton packs. Farmers are paid for their produce, providing them with much-needed income, and the packs of food are used by local schools to provide a healthy, hot meal for children every day.

The mobile filling unit arrived in Bangladesh at the end of 2018. Surplus vegetables have already been cooked and preserved in SIG packs, and the first meals were distributed to BRAC schools in early 2019. After use, the packs are sent for recycling locally.

Find out more about our Cartons for Good journey and watch accompanying videos on our website.

"There used to be wastage of surplus crops from our farming land, but this will now be put to use with Cartons for Good. We can use the extra money from selling the surplus for next year's farming and SIG is taking care of children by giving them school meals."

Samsul Alam
Farmers' Community Representative

UNDERSTANDING OUR VALUE CHAIN IMPACTS

We look at our impacts – good and bad – across the value chain to drive progress towards our goal to halve our environmental footprint and double societal benefits by 2030.

OUR ENVIRONMENTAL IMPACTS

SIG's biggest environmental impacts occur outside our factory gates and we have made good progress in understanding our value chain environmental impacts.

An estimated 59% of our value chain greenhouse gas emissions lie in the supply chain, from the extraction and processing of raw materials. A further 32% come from the transport of materials to SIG, distribution of products to customers, use of filling machines in our customers' factories, and recycling or disposal of packs after use. Our own operations account for 8% of our value chain emissions. See a full breakdown on page 28.

Our focus is on creating a positive environmental impact (handprint) as well as reducing our negative impact (footprint). We need to understand and measure both to get a full picture of our progress in becoming net positive. We are building on our extensive experience with life-cycle assessments (LCAs) and other relevant expertise to develop new methodologies to measure environmental impacts (see box).

OUR SOCIETAL IMPACTS

Quantifying societal impacts is more challenging because metrics are less well defined than for environmental impacts and can be difficult to measure. We have made progress this year by developing a methodology to measure the impact of our community engagement programmes (see page 39). We are continuing to explore how to measure wider societal impacts and establish a baseline for our 2030 goal to double societal benefits.

Support for local communities is just one of the ways we have a positive impact on people's lives. Delivering societal benefits is inherent in SIG's purpose to partner with our customers to bring food products to consumers around the world in a safe, sustainable and affordable way. We are also exploring new models for our technology to reduce hunger, and improve nutrition and education for children through our flagship Cartons for Good project.

We strive to have a positive impact on our own employees by supporting their development, rewarding them fairly and keeping them safe and healthy at work. This has ripple effects in our communities, for example by promoting safe attitudes and better health at home. Our commitment to fair labour practices and sourcing materials from certified responsible sources helps to ensure the rights of workers, communities and indigenous people are respected.

Managing value chain environmental impacts can also bring societal benefits by helping to improve air and water quality, tackle climate change and preserve valuable ecosystems.

Measuring environmental impacts

Measuring the environmental impacts of our operations is relatively straightforward but this becomes much more complex when looking across the whole value chain.

In line with established practices, we measure our value chain greenhouse gas emissions following the Greenhouse Gas Protocol and use this to set corporate reduction targets. However, this system is not well suited for taking into account positive impacts at different stages of the product life-cycle and the narrow focus on climate impacts makes it difficult to identify and measure other impacts and any potential trade-offs that may occur. For example, by switching from fossil-based feedstocks to renewable feedstocks, there may be implications for land use.

To address these issues, we are applying the life-cycle assessment (LCA) approach that we use to measure the impacts of our products – across a range of different impact areas – to the value chain impacts of our business. LCA following ISO standards is an accepted method to measure and improve on environmental footprints of products, but scaling this approach to cover the environmental footprint of a whole business is challenging.

Over the last two years, we have been developing and testing our method for corporate footprinting – including adapting our greenhouse gas emissions inventory for this purpose. This work will help us measure our environmental footprint across the value chain so we can focus on our most material impacts, while monitoring any potential trade-offs in other areas.

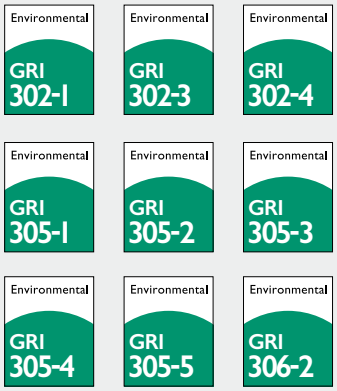
We are also working with the Net Positive Project and others to develop methodologies to measure both positive and negative environmental impacts (see page 13).

ENVIRONMENTAL FOOTPRINT

MATERIAL ISSUES
- **TACKLING CLIMATE CHANGE**
- **MINIMISING PRODUCTION WASTE**

SIGNIFICANT IMPACT
- **ENVIRONMENTAL**
  (TACKLING CLIMATE CHANGE)

GRI INDICATORS



KEY POLICIES
- **SIG GLOBAL ENVIRONMENT, HEALTH AND SAFETY POLICY**

RELEVANT SDGs

OUR APPROACH

Why is this material for SIG?

Climate change and depleting natural resources are among the biggest global challenges the world faces. Stakeholders expect businesses to support global efforts to tackle climate change and do their bit to conserve natural resources. We are well placed to contribute, not only by reducing our own value chain footprint, but by supporting thriving forests and helping customers deliver food in a sustainable way.

Our efforts to promote responsible forestry are particularly important to mitigate climate risks in our supply chain and offer a significant opportunity for us to have a positive impact on climate change by helping to create resilient ecosystems and maintain relevant carbon stocks.

Minimising our environmental impacts is also important to meet customer requirements and ensure compliance with relevant regulations. We aim to lead by example on this and use what we learn from our own experience to share best practices with suppliers and customers. Using resources efficiently also makes good business sense. Put simply, waste costs money – whether it's a waste of energy, materials or any other resource.

Management overview

We are committed to reducing the environmental impacts of our company, our sourcing and our products to tackle climate change and conserve natural resources.

See page 56 for more on how we reduce impacts across the product life-cycle.

In 2018, the Science Based Targets Initiative approved the targets we have set to cut our Scope 1 and 2 operational greenhouse gas emissions, and to decouple value chain emissions from growth by reducing our Scope 1, 2 and 3 emissions per litre of food packed.* We chose 'per litre of food packed' as our comparator for this intensity target, rather than revenue or number of packs produced, to better reflect our corporate purpose to get food products to consumers around the world in a safe, sustainable and affordable way – regardless of the size of the pack or our company turnover.

To meet this value chain target we are focusing on resource efficiency in our products (see page 58), making our filling machines more efficient (see page 64) and supporting programmes to increase collection and recycling of used beverage cartons (see page 58). The main contribution to meeting this target will come from our suppliers and we are engaging with our larger suppliers on their climate strategies and encouraging them to cut their emissions. We aim to demonstrate leadership in this area by spending 50% of our sourcing expenditure with net positive suppliers by 2030. See page 41 for more on responsible sourcing.

Our own operations make up a relatively small proportion of our value chain environmental footprint. But we believe it is important to lead by example and minimise the impacts that we have most direct control over.

OUR GOALS

TARGET	
Put a science-based CO_2 reduction target in place covering our entire value chain (by 2018)	COMPLETED
Reduce Scope 1, 2 & 3* greenhouse gas emissions by 25% per litre of food packed by 2030	ON TRACK
Reduce Scope 1 and 2 greenhouse gas emissions by 50% by 2030 – and by 60% by 2040	ON TRACK
Cut operational greenhouse gas emissions rate (Scope 1 and 2) by more than 50% by 2020 (from 2014)**	COMPLETED
Reduce energy rate by more than 35% by 2020 (from 2014)**	MORE WORK TO DO
Reduce waste rate by more than 45% by 2020 (from 2014)**	MORE WORK TO DO
Achieve compliance with ISO 50001 at our European production plants* and revised ISO 14001 standard at all production plants by 2020**	COMPLETED

* Target covers the three most material Scope 3 categories: from goods and services, use of our products (filling machines) and end of life treatment (cartons).

** Energy, emissions and waste rates are per million square metres of sleeves produced and exclude energy use at our closure production plant in Switzerland and our paper mill in New Zealand.

*** This target has been revised to correct an error in the previously published wording because the target on ISO 50001 compliance only applies to European production plants.

All our production, assembly and research and development sites, and our paper mill in New Zealand, have environmental management systems certified to the international ISO 14001 standard. In addition, our sites in Linnich, Wittenberg and Saalfelden have implemented an energy management system in accordance with ISO 50001. These systems promote continuous improvement in the management of environmental impacts.

We also aim to conserve natural resources by minimising production waste and contributing to the circular economy (see page 59). We consider waste an unnecessary cost to our business and the environment, and we aim to make our manufacturing processes lean and efficient.

We have a range of initiatives to reduce waste at our production plants by using more efficient processes and increasing opportunities to reuse and recycle materials. Where it is not feasible to reuse or recycle waste, we work with our waste management service providers to choose the next best option, such as energy recovery.

PERFORMANCE IN 2018

Cutting climate impacts across the value chain

We are making strong progress towards our greenhouse gas emissions reduction targets with a 45% reduction in our total Scope 1 and 2 emissions since 2016. We have also cut our Scope 1, 2 and 3 emissions per litre of food packed by 10% since 2016 and we are working towards a 25% reduction by 2030.

In 2018, our operational (Scope 1 and 2) greenhouse gas emissions from production plants totalled 30,973 tonnes of CO_2 equivalent. Scope 1 emissions from the use of natural gas and liquefied petrol gas in our production of sleeves and closures are compensated through Gold Standard certificates (see page 49). The total compensated in 2018

OUR VALUE CHAIN CARBON FOOTPRINT (THOUSAND TONNES OF CO_2 EQUIVALENT)

	2016	2017	2018
Scope 1	99.5	103.6	92.5
Scope 2 (market based)	98.3	19.9	16.7
For production (excluding paper mill)	78.4	0.0	0.0
Scope 3	1,381.4	1,324.9	1,381.9
Total	**1,579.1**	**1,448.4**	**1,491.1**

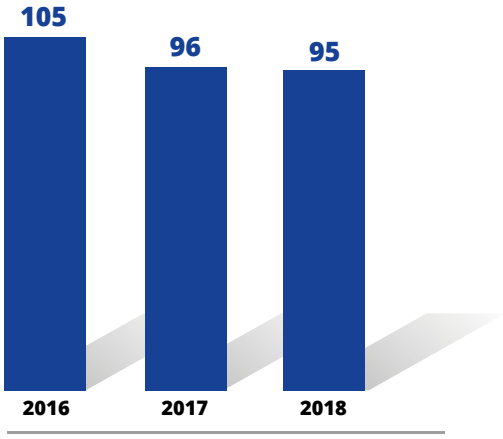
Data from previous years has been restated according to our recalculation policy and to include Scope 1 and 2 emissions from our paper mill in New Zealand which were previously reported separately.

Location-based emissions based on the electricity grid average amount were 93.9 thousand tonnes of CO_2 equivalent in 2018.

Scope 3 categories include goods and services, energy production, transportation, travel, use of our products (filling machines) and end of life treatment (cartons).

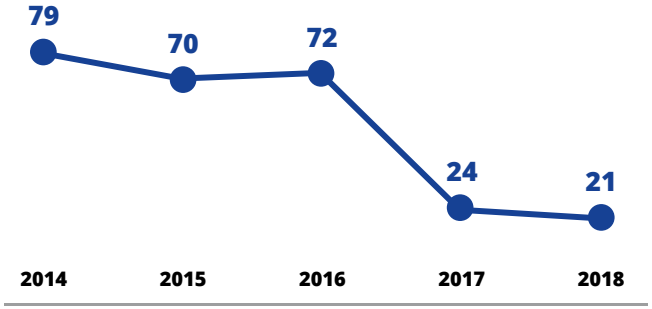
For more on the basis of reporting for greenhouse gas emissions and a detailed list of what is included in each Scope 3 category, see page 82.

VALUE CHAIN EMISSIONS RATE (SCOPE 1, 2 AND 3* GRAMS CO_2 EQUIVALENT/LITRE OF FOOD PACKED)



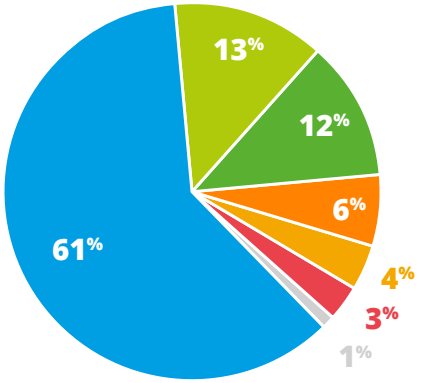
* The value chain emissions rate and associated target cover our most significant Scope 3 emissions – from our supply chain, use of our filling machines and recycling or disposal of packs.

GREENHOUSE GAS EMISSIONS RATE FROM PRODUCTION** (CO_2 EQUIVALENT/MILLION M^2 OF SLEEVES PRODUCED)



** Emissions rate from production is per million square metres of sleeves produced and excludes energy use at our closure production plant in Switzerland and our paper mill in New Zealand. 2017 data has been restated due to a previous reporting error.

SCOPE 3 EMISSIONS BY CATEGORY IN 2018



was 25,469 tonnes of CO_2 equivalent. We have cut our operational greenhouse gas emissions rate from production by 73% from the 2014 baseline as a result of our investment in renewable energy and efficiency measures. This means we have exceeded our 2020 target to halve this rate two years early.

This rate for production excludes Scope 1 and 2 emissions from our closure production and our paper mill in New Zealand, which supplies some of the liquid packaging board to our production plants, because the mill is treated as an internal supplier rather than part of our production facilities. In 2018, Scope 1 and 2 emissions from the mill totalled 78,210 tonnes of CO_2 equivalent, a 12% decrease from the previous year.

Following our initial reported estimates in 2016, our Scope 3 greenhouse gas emissions data has now been independently assured for the first time in 2018. Our total Scope 3 emissions have remained almost flat since 2016, despite increased output as a result of business growth.

We are targeting Scope 3 reductions through our continued focus on sourcing sustainable raw materials (see page 47), developing and selling more sustainable products (see page 53), and partnering to increase recycling of used beverage cartons (see page 58).

Reducing emissions from production

We have achieved significant reductions in our operational emissions from production by completing our transition to 100% renewable energy for production in 2018 – an industry first (see page 49).

Rooftop solar panels in Suzhou (see page 30) and Rayong (see page 50) have increased our on-site capacity to generate renewable energy. We buy GoldPower® standard certificates to compensate for any remaining non-renewable energy required for production (see page 50).

The transition to renewable energy has been our main focus over the past two years in our efforts to reduce operational greenhouse gas emissions, but we remain committed to reducing energy use too.

Reusing heat from production processes at Saalfelden, Austria

Our production plant at Saalfelden, Austria, has a well-established system to reuse the heat generated in the coating process by redirecting it into the site's central heating system. But it was going to waste in the warm summer months when the heating was off.

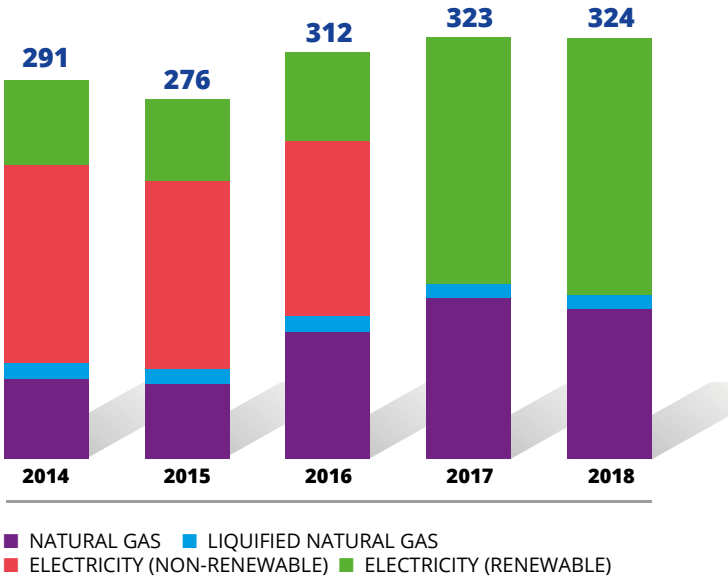
We have installed a new system to divert the waste heat to generate hot water for the printing presses used in another part of the production process. This will save around 450,000 KWh of natural gas per year.

In 2018, we continued to implement a range of initiatives to reduce energy use across our sites, including a heat recovery system at Saalfelden (see case study). The 2MW combined heat and power (CHP) plant at Linnich produced more than 19,000 MWh of energy for our production in 2018, improving efficiency by over 22% compared with separate generation of heat and electricity.

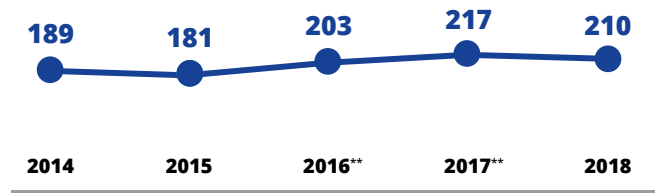
However, our energy rate in production remained fairly static in 2018 and has increased by 11.1% overall from 2014. One of the main reasons was a delay in optimising the operation of the CHP plant in Linnich. We ran a series of energy workshops at our European sites in 2018 and we will enhance our focus on energy reduction next year to drive progress towards our 2020 target to reduce our energy rate by more than 35% (from 2014).

A new system introduced to improve the efficiency of the gas boiler at our New Zealand paper mill will reduce energy use by an estimated 33,000 GJ and save over €130,000 in energy costs per year.

OPERATIONAL ENERGY USE FROM PRODUCTION (GWH, BY TYPE)



ENERGY RATE FROM PRODUCTION* (TONNES CO_2 EQUIVALENT/MILLION M^2 OF SLEEVES PRODUCED)



* Energy rate is per million square metres of sleeves produced and excludes energy use at our closure production plant in Switzerland and our paper mill in New Zealand.

** Energy rates for 2016 and 2017 have been recalculated due to a reporting error.

Minimising production waste

The amount of waste generated from our production plants has remained fairly flat over the past few years, with a total of 51,045 tonnes of waste produced in 2018. Most of this waste is made up of offcuts of the raw materials we use to manufacture our packs.

Waste reduction initiatives include a recycling system at our production plant in Suzhou, China, that enables us to reuse the pre-melted polyethylene that was previously wasted every time we stopped the production line.

Despite efficiencies, our waste rate has decreased by just 1.6% since 2014. One of the main reasons is that we have needed to make more frequent changes to our production lines to meet customer demand for different formats and smaller batches.

Less than 1% of our global waste went to landfill in 2018. A small proportion of the waste we generate (2,806 tonnes in 2018) is made up of hazardous waste, such as inks, oil and contaminated cans, which we dispose of responsibly.

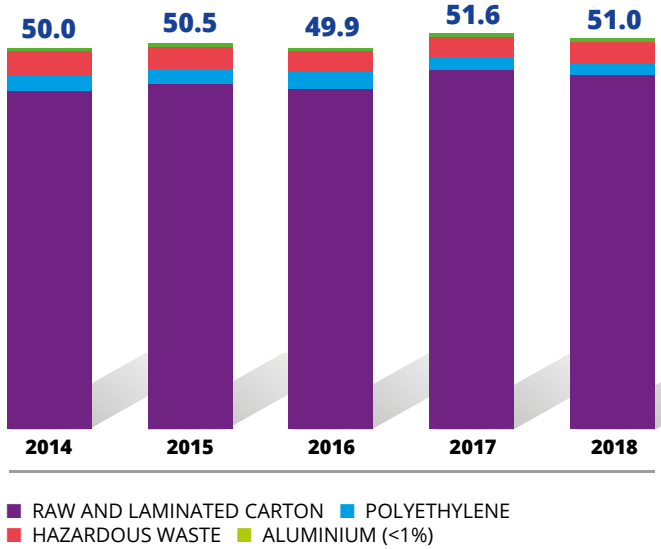
Managing operational environmental impacts

In 2018, we achieved certification to the latest version of the ISO 50001 energy management standard at all three of our European production plants in line with our 2020 target.

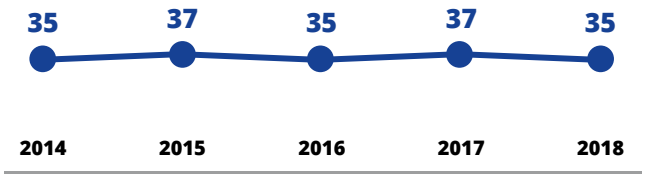
We also obtained global certification to the ISO 14001 environmental management standard. For this, different sites are selected for audit each year. Both sites selected in 2018, Linnich and the Suzhou assembly plant, achieved certification to the latest version of ISO 14001. Our other sites will be certified to the new version by 2020. Meeting the requirements of the revised standards will support our efforts to improve our energy and waste rates.

We also integrate environmental considerations into the design and development of new facilities, such as our new technology centre in China which has been certified to the highest standard for green buildings (see case study).

PRODUCTION WASTE BY TYPE* (THOUSAND TONNES, BY TYPE)

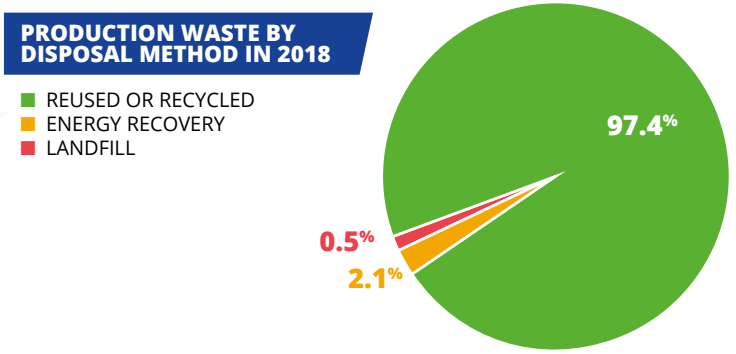


WASTE RATE FROM PRODUCTION* (TONNES OF NON-PRODUCT OUTPUT/MILLION M² OF SLEEVES PRODUCED)



* Production waste and waste rate excludes our production plant in Switzerland and our paper mill in New Zealand. Waste rate from production is per million square metres of sleeves produced.

PRODUCTION WASTE BY DISPOSAL METHOD IN 2018



New technology centre in China achieves highest green building standard

Our new technology centre in Suzhou, China, has achieved the Platinum Standard – the highest level – of the internationally recognised LEED (Leadership in Energy and Environmental Design) certification for green buildings.

The 17,500m² building includes rooftop solar panels and energy-saving features, such as LED lighting and sensors to make sure lights and air conditioning are only on in rooms that are being used. It optimises use of natural light and minimises water use through reuse systems and rainwater harvesting. The site also has facilities such as cycle racks and public transport links to promote more sustainable commuting.

SIG is the ninth industrial company in China to earn the LEED Platinum Standard and the technology centre achieved the second highest score of any building in the country.

EMPLOYEES

MATERIAL ISSUES
- **TALENT DEVELOPMENT**
- **EMPLOYEE ENGAGEMENT**
- **EMPLOYEE REWARD AND RECOGNITION**
- **DIVERSITY AND EQUAL OPPORTUNITY**

ADDITIONAL STRATEGIC TOPIC
EMPLOYEE WELLBEING

SIGNIFICANT IMPACTS
N/A

GRI INDICATORS

KEY POLICIES
- **SIG CODE OF CONDUCT**
- **HUMAN RESOURCES FRAMEWORK**

RELEVANT SDG

OUR APPROACH

Why is this material for SIG?

We are creating positive impacts for our people and communities by providing jobs, investing in training and development, and fostering a more inclusive culture. Fostering a winning team, one of the three main business goals in our Corporate Compass, is essential to the success of our business. To do this, we need to engage, reward and develop talented employees with diverse perspectives to help us support customers across different markets.

Management overview

We want to be the best employer in the industry and beyond. We aim to create an environment where all of our more than 5,000 employees worldwide are engaged in the business, fairly rewarded and recognised for the work that they do, given equal opportunities regardless of their background and able to develop their full potential at SIG.

Our Learning Centre provides a wide range of training modules from basic know-how to expert skills and leadership development. Employees identify training and development opportunities through regular discussions with their manager and as part of the annual appraisal process for all managers and office workers, as well as some production staff (where agreed with workers' councils). We encourage managers to seek 360° feedback from others to support their personal development and we have a talent and succession management programme to create a pipeline of people with career potential.

OUR GOALS

2020 TARGET

Increase employee net promoter score year by year
ON TRACK

Achieve a sustainable engagement score above industry benchmark
ON TRACK

Achieve cultural entropy level below 10%
TARGET DISCONTINUED[1]

Maintain voluntary turnover below 5%
ON TRACK

Make our training and development investment above industry benchmark
ON TRACK

Establish a diversity and inclusion strategy and steering group
MORE WORK TO DO

[1] We no longer separately track cultural entropy among our leaders because we believe sustainable engagement and net promoter scores provide a better indication of overall engagement levels among all our employees.

[2] The sustainable engagement score is based on responses to a series of questions designed to measure motivation to work hard, an environment that supports productivity and support for personal wellbeing.

We aim to reward everyone at SIG fairly based on what they do and how they do it. We benchmark salaries with other companies to check we offer competitive reward packages in each of our markets. Terms and conditions of employment, including pay, are negotiated through collective bargaining with recognised trade unions for a significant portion of our employees (see page 38). Employee benefits vary by region and include retirement benefits, health and life insurance, and parental benefits and leave.

The SIG Code of Conduct includes a strict policy against discrimination on any grounds and we aim to create an inclusive workplace where a range of nationalities and cultures are represented, and where everyone is treated with respect and has equal opportunities regardless of their age, gender, ability and cultural background.

PERFORMANCE IN 2018

Engaging employees

In 2018, over 77% of our employees – almost 3,900 people – responded to our second biennial employee survey. We held discussions with our people beforehand to help us refine the survey questions and we have extended the topics covered.

Overall, we increased our sustainable engagement score[2] to 78% (up from 74% in 2016). This is just one point below the benchmark of 79% for global manufacturing companies and we are making good progress towards our target to exceed the industry benchmark in our next survey in 2020.

Our net promoter score has significantly improved from -16 in our last survey in 2016 to -1 in 2018. The 2018 score is based on 33% of survey participants saying that they would strongly recommend SIG to friends and family as a good place to work and 34% that they would not.[3]

The results of the survey were reviewed in depth by the Group Executive Board to understand people's views and consider measures to achieve tangible improvements for employees across the business. Local results were shared with managers to help them explore the feedback in their teams, develop tangible actions and deliver solutions together. We have developed a new toolbox to support our analysis and communication of the results, enabling us to give managers more detailed – but still entirely confidential – feedback to help them make meaningful improvements for their teams.

At a global level, the 2018 survey showed significant improvements in overall engagement levels, but also highlighted several areas where we can improve, for example by: better explaining our long-term strategic goals and how individuals can contribute to achieving them; providing more support for career development and recognising individual contributions to the company's success; and increasing engagement to create a diverse and fair work environment. We are already implementing initiatives to support improvements across all these areas, as detailed in the relevant sections of this report.

[3] "On a scale from 0 (not at all likely) to 10 (extremely likely), how likely is it that you would recommend SIG to your friends and family as a good place to work?" was rated with a 9 or 10 by 33% of the respondents ("promoters") and 34% gave a score between 0 and 6 ("detractors"). The employee net promoter score is calculated by subtracting the total detractors from the total promoters.

OUR WORKFORCE

	ASIA PACIFIC	AMERICAS	EUROPE	TOTAL
Total number of employees:	1,796	616	2,808	5,220
male	1,452	461	2,359	4,272
female	344	155	449	948
Employees with a permanent contract:	1,457	589	2,606	4,652
male	1,193	446	2,186	3,825
female	264	143	420	827
aged up to 30	183	211	288	682
aged 31 to 50	1,117	345	1,363	2,825
aged 50 +	157	33	955	1,145
Full-time employees:	1,449	589	2,472	4,510
male	1,193	446	2,137	3,776
female	256	143	335	734
Part-time employees:	8	0	134	142
male	0	0	49	49
female	8	0	85	93
Employees with a fixed-term contract:	339	27	202	568
male	259	15	173	447
female	80	12	29	121
thereof Apprentices	0	16	129	145

NEW HIRES

	ASIA PACIFIC	AMERICAS	EUROPE	TOTAL
Total number of new hires:	120	143	179	442
male	91	108	111	310
female	29	35	68	132
aged up to 30	60	63	72	195
aged 31 to 50	57	77	95	229
aged 50 +	3	3	12	18
Rate of new hires:	8%	24%	7%	10%
male	8%	24%	5%	8%
female	11%	24%	16%	16%
aged up to 30	33%	30%	25%	29%
aged 31 to 50	5%	22%	7%	8%
aged 50 +	2%	9%	1%	2%

EMPLOYEE TURNOVER

	ASIA PACIFIC	AMERICAS	EUROPE	TOTAL
Total employee turnover	8%	20%	8%	10%
Voluntary employee turnover rate	5%	7%	3%	4%
Total employee turnover:	120	115	212	447
aged up to 30	13	40	38	91
aged 31 to 50	88	68	114	270
aged 50 +	19	7	60	86
male	92	74	149	315
female	28	41	63	132

Over the past two years, we have responded to employee feedback from the previous survey in 2016 by focusing on the way we lead, innovate and manage change.

Our new 'C Time' and 'T with the C' meetings give employees an opportunity to hear from our CEO and other C-suite executives directly, and ask about the issues that matter most to them. Quarterly team meetings, with video messages from the CEO, are designed to improve engagement and understanding of the company strategy. Employees can also suggest questions for the CEO via our intranet and the most popular ones are answered each month.

We are getting our people more involved in innovation across the business. Teams can pitch ideas to our Innovation Board, which awards funding to take the winning ones forward. At our production plant in Neuhausen, Switzerland, employees can submit their suggestions for improving our processes through a new feedback mechanism. In Saalfelden, Austria, executives consulted with employees at all levels to identify new ways for SIG to be an 'organisation of the future'.

We also improved the way we manage change (see our 2017 CR Performance Update for more on this).

Training and development

We provided more than 158,400 hours of training in 2018. This is an average of 30.4 hours per employee, exceeding the industry benchmark of 24 hours per person. We offer over 100 eLearning training modules on the SIG Learning Centre, including on-demand videos teaching technical skills.

In 2018, 2,879 (55%) of our employees had annual appraisal interviews and we introduced a mid-year review to give employees and managers an opportunity to capture feedback and identify development opportunities more frequently. We also encourage managers to obtain 360° feedback from superiors, peers, employees and others (such as customers) to gain a broader perspective on their performance and identify more effective development plans.

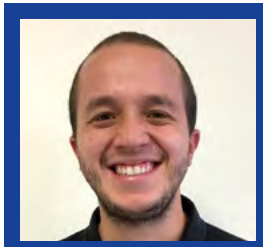
AVERAGE HOURS OF TRAINING*

	2015	2016	2017	2018
Management	39.3	41.0	36.0	34.0
Non-management	37.2	33.9	31.7	29.9
Total	37.5	34.6	32.1	30.4

* Average hours of training for previous years have been restated due to improvements in our reporting on this topic.

We are strengthening our talent and succession management programme with a new career framework to help people achieve their potential and develop their careers at SIG. We also aim to fill positions internally and support employees in exploring new opportunities within the business. For example, we organised an exchange programme between Mexico and Brazil for people in our finance teams to develop their skills by working abroad.

In 2018, 158 managers completed face-to-face and online training to develop their leadership skills through the SIG Leadership Campus. The focus is on transformational leadership and ensuring that leaders promote emotional engagement, high performance standards and a positive working culture.

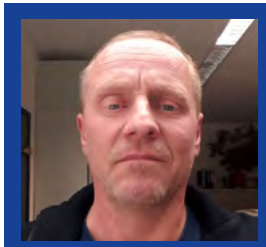


"We use team meetings to present our own ideas. In addition, the meetings provide employees with answers to their questions, which is also very important. I already feel closer to the company and I know better now where the journey is heading in the coming years."

Vinícius Vale
Junior Internal Communication Analyst, Curitiba (Brazil)

"I went to 'C-Time' and 'Tea with the C' with questions about our staff development programme. We got much valuable information and also gained new insights. The events showed me how we can learn from the experiences of other sites."

Anuluk Janyao
EHS Supervisor, Rayong (Thailand)



"The quarterly team meetings provided detailed information about SIG's future plans and deeper insights into the company. This kind of communication helps us to move forward. The event shows that the common efforts of all employees help to achieve SIG's goals."

Christian Kranepuhl
Production Preparation Ink Store, Wittenberg (Germany)

"I joined SIG straight from school as an apprentice in mechanical maintenance at the Saalfelden production plant in Austria. That was nearly 15 years ago.

The apprenticeship gave me great hands-on experience in each area of production. Since then, I have worked my way up through roles in quality assurance and hygiene management. I'm now Head of Quality Management for the whole plant.

SIG has helped me develop every step of the way. As an apprentice, I was welcomed with open arms and I learned a lot. My managers have been very supportive in helping me advance my career and I received extensive internal and external training whenever I took on a new role.

I now manage my own team and I make it a priority to help them develop. We speak regularly about what they need and how I can help. My door is always open.

SIG has a lot to offer and I am constantly developing myself further. Of course it is challenging, but I feel very happy in my current role and I am excited to see where the future will lead me."

Michael Herzog
Head of Quality Management, Saalfelden (Austria)

We also offer apprenticeships to help young people develop skills. In 2018, we had 145 apprentices across four countries.

Reward and recognition

In 2018, we took steps to make our reward system more transparent and consistent across the organisation by grading different roles and we will roll out standardised pay bands based on these grades in 2019.

We have also increased our focus on recognising employees for their efforts in response to employee feedback from our previous survey. For example, a new programme at our site in Cluj, Romania, recognises a 'Team of the month' by asking them to present their successes to colleagues and we have introduced a new recognition and reward programme in Brazil (see case study).

Diversity and inclusion

Diversity and inclusion has increased in importance for our business and our stakeholders. In 2018, we set a new 2020 roadmap target to develop a strategy and created a new position in our Human Resources team to drive progress in this area.

We have started to review how well our existing HR and recruitment processes and tools promote diversity and inclusion at every level of the business. This input will inform the development of our diversity and inclusion strategy, which will be overseen by a dedicated steering group to be appointed by 2020.

We also included diversity questions in our employee survey to understand how we are doing from our employees' perspective. Of those surveyed, 82% agreed that people are treated fairly at SIG regardless of their gender and 86% agreed that people are treated fairly at SIG regardless of their nationality or ethnic background.

Engineering and manufacturing industries are traditionally male dominated and our workforce reflects this context, with women representing only 18% of our employees and 17% of managers. We aim to encourage more women to join our business and support their career progression into management to develop a more diverse pipeline for our senior leadership roles. Currently, our Group Executive Board is all male.

Diversity in nationalities is also important to support our global business. In 2018, we brought together people from SIG locations around the world and new recruits with international backgrounds to form a new global marketing team to serve our diverse customers.

WOMEN IN MANAGEMENT

DATA ASSURED

	2018
Senior management	17%
Management	17%
All employees	18%

Wellbeing

Together with our wider commitment to corporate responsibility, employee wellbeing has been identified as a key driver to improve engagement levels.

We are increasing our focus on this issue by defining what wellbeing means for our employees. This is part of our broader focus on health and wellbeing (see page 35). In our latest employee survey, 74% of responses on work-life balance were positive and 83% on health and safety were positive.

Recognising and rewarding performance in Brazil

Through the SIG+ Recognition and Reward Programme in Brazil, employees can nominate colleagues who have gone above and beyond for recognition that translates into points and prizes.

Points are awarded for demonstrating SIG's values or leadership principles, or for projects that have made a real difference to our business. The points can be exchanged for products on the SIG website and dinner out to say thank you for putting in the extra effort.

Standout individuals and teams are recognised at an annual awards celebration. We said a SIG+ thank you to more than 680 people in Brazil in 2017 and 2018 and we are extending the programme to North America in 2019.

HEALTH & SAFETY

MATERIAL ISSUE
- **OCCUPATIONAL HEALTH AND SAFETY**

SIGNIFICANT IMPACTS
N/A

GRI INDICATORS

KEY POLICIES
- **SIG GLOBAL ENVIRONMENT, HEALTH AND SAFETY POLICY**

RELEVANT SDG

OUR APPROACH

Why is this material for SIG?

Health and safety is vital to our employees and a prerequisite for any responsible company. By preventing injuries and promoting health and wellbeing, we can also support the success of our business by reducing lost time, enhancing productivity and improving employee engagement.

By focusing on safe behaviour at work, we are not just fulfilling a fundamental responsibility as a good employer, we are also empowering employees to adopt safer behaviour at home and instil safer attitudes among their families and communities.

Our increasing focus on health will enable our people to lead fuller, more productive lives both at work and at home. We are also using our expertise and experience to join forces with our customers to enhance health and safety in our own operations and theirs.

Management overview

Nobody comes to work to get hurt. That's the basic principle that underpins our approach to occupational health and safety. We expect everyone at SIG to take care of their own safety and the safety of those around them, and we provide regular safety training to help them do this.

Our programmes to embed a Take Care culture centre around our life-saving rules – for everyone working with us or visiting our sites – and behaviour-based safety for employees. These focus on tackling unsafe behaviours that we have identified as the root cause of almost all incidents at SIG.

Health and safety management systems at all our sites align with the internationally recognised OHSAS 18001 and ISO 45001 standards. These help us identify and manage risks, and promote continuous improvement. All incidents must be reported following our standard operating procedure and we issue an alert across the business in cases where an incident could recur.

OUR GOALS

2020 TARGET

Zero lost-time case rate
MORE WORK TO DO

Achieve a life-critical safety elements score of 100% at all production sites
ON TRACK

Maintain a health rate of more than 97%
MORE WORK TO DO

PERFORMANCE IN 2018

Focusing on lost time cases

Several of our sites finished the year with zero lost time cases – our production plants in Neuhausen (Switzerland) and Suzhou (China), our assembly plants in Suzhou and in Linnich (Germany), and our paper mill in Whakatane (New Zealand).

However, our overall lost-time case rate increased by 29% to 0.49 during 2018, with a total of 20 lost time cases worldwide. Corrective action plans have been put in place at sites that need to improve engagement on health and safety.

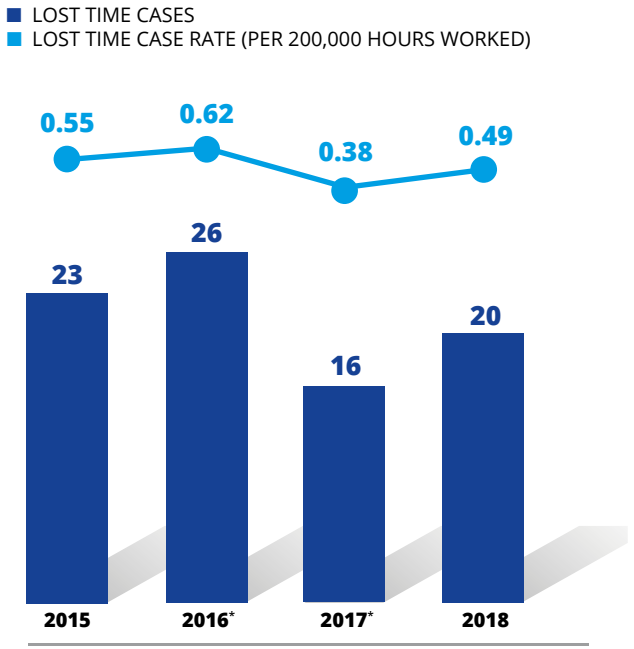
We are targeting improvements across all sites by continuing to embed and extend our behaviour-based safety programme and life-saving rules across our sites.

Embedding behaviour-based safety

By the end of 2018, we had established behaviour-based safety programmes at all our production sites, except Wittenberg which will follow in 2019. These programmes are run by steering committees that include both management and employees. The process begins with an in-depth analysis of previous safety incidents to support continuous improvement in the adoption of safe behaviour to avoid future incidents.

We encourage colleagues to learn from each other by recognising and reporting at-risk behaviours so we can raise awareness and remove potential barriers to people working safely. Our paper mill at Whakatane introduced

TOTAL LOST-TIME CASES AND LOST-TIME CASE RATE



* Data on lost time cases and lost time case rate have been restated for 2016 and 2017 due to inconsistent reporting at one site, which has now been rectified.

TOTAL LOST-TIME CASES BY REGION AND GENDER IN 2018

	LOST-TIME CASES	LOST-TIME CASES (PER 200,000 HOURS WORKED)
Americas	1 male	0.30 male
	0 female	0 female
Asia Pacific	1 male	0.07 male
	0 female	0 female
Europe	18 male	0.80 male
	0 female	0 female

Our life-saving rules

Rule 1: **Work with a valid work permit when required**

Rule 2: **Check equipment is isolated before work begins**

Rule 3: **Obtain a permit for entry into a confined space**

Rule 4: **Use fall protection when working at height**

Rule 5: **Wear a seatbelt in motor vehicles when provided**

The Golden Rule: Intervene to stop work if conditions or behaviour are unsafe

a new CARE initiative this year to Collect, Analyse and Reduce Exposure to safety risks. It encourages open and honest conversations about safety, within a no name and no blame culture.

Our site in in Curitiba, Brazil, launched its behaviour-based safety programme in 2018 by asking employees to vote on its name. Over 60% of them voted and the winning name was SIGA-ME – a combination of SIG + AME (love) – o show that we want people to love working at SIG and care about safety.

In 2019, we will also extend our focus on behaviour-based safety to our technical service engineers who provide support at customers' sites worldwide.

Changing attitudes takes time, but we are already starting to see results at the sites where the behaviour-based safety programme was first introduced. In August 2018, Saalfelden celebrated one year without lost-time cases by rewarding employees with fluorescent helmet and backpack covers to help them stay safe when cycling.

We are also developing an initiative to encourage leaders and employees to make a personal commitment to care about their safety and the safety of those around them. It will be piloted in Whakatane in 2019 through workshops using mindfulness techniques to build awareness about how safe behaviour fits with participants' personal values.

Identifying and managing key risks

Our life-saving rules continue to play a critical role in addressing the biggest risks to our people. We have continued to keep these at top of mind for employees through a range of communications, including workshops, toolbox talks, signs – and a video for staff at Whakatane.

In 2018, we set up subject matter expert groups to identify and manage other key safety risks, such as working at height, ensuring safety devices are regularly tested and maintained, and isolation of dangerous energy sources using lock out, tag out, try out procedures. Each group is led by a different site and shares best practices with colleagues around the world to educate people about key risks and how to manage them.

This builds on our previous initiatives to tackle specific risks, such as injury to hands and fingers. Three years ago, 48% of injuries were to hands or fingers. In 2018, it was just 25%, following a €2 million investment in safety mechanisms, regular audits and training to make sure they are being used appropriately, and a sustained communications campaign.

Our production sites, where the majority of employees work and most incidents occur, maintained a minimum score of 96% in our annual assessment of the way they manage life-critical safety elements.

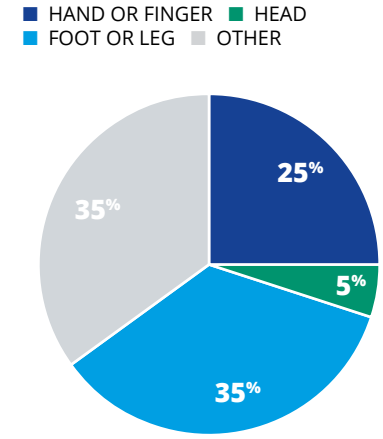
Promoting good health

As part of our net positive approach, we focus on improving employee health and wellbeing by addressing the root causes for occupational illness with greater emphasis on work-life balance, a healthy work environment, mindfulness, happiness and smart time management to combat stress. This holistic approach will inform the development of a leading indicator to monitor the health rate of our employees.

Our focus is on musculoskeletal health issues, such as back problems, as these can be an indicator of wider health and wellbeing with root causes ranging from poor ergonomics to workload and stress. We are applying the behaviour-based model we use for safety to this health issue, with an initial focus on ergonomics. In 2018, we began piloting this approach as part of a broader employee health programme at Linnich (see case study).

Other sites also continued to encourage employees to stay fit and healthy through a range of local initiatives. For example, energy drinks with high sugar content are no longer offered in the canteen at Neuhausen to promote healthier diets. Colleagues in Mexico ran in an annual corporate 5km race (see photo), and 150 employees in Europe took part in an 80,000km challenge to walk, run and cycle far enough to do a virtual tour of SIG sites around the world.

INJURIES BY TYPE IN 2018 (%)



Understanding and enhancing employee health in Linnich

Health is a very personal thing. That's why, when we set out to support health improvements for our people, the first thing we did was ask them how we could help.

In March 2018, we surveyed employees in Linnich, Germany, to get a better understanding of their health needs. Based on more than 350 responses, 34% suggested doing sport, 31% pointed to better posture at work and 30% recommended a healthy food when asked what they would advise a colleague to do to improve their health.

Two-thirds said that opportunities to do sports would be the best way to promote health during work time and 21% suggested inspiring and entertaining training activities. We are using this input to design and test a tailored health programme at Linnich before we expand this approach to further sites around the world.

An important aspect of this is integrating ergonomics into the site's behaviour-based safety programme, with observers trained to spot poor ergonomics, such as bad posture when working or lifting. We are also developing advanced training on ergonomics to help people improve their posture.

New programmes to support more sport and activity at work include encouraging people to hold meetings on the move, while going for a walk. More than 160 employees have also taken up our offer to lease an electric bike through the company to get more exercise by cycling to work and we train them to do so safely (see photo).

GOVERNANCE & ETHICS

MATERIAL ISSUE
- **FAIR LABOUR PRACTICES**

ADDITIONAL STRATEGIC TOPIC
- **FAIR BUSINESS PRACTICES**

SIGNIFICANT IMPACTS
N/A

GRI INDICATORS

General Disclosures GRI 102-16
General Disclosures GRI 102-17
General Disclosures GRI 102-41
Economic GRI 205-2
Social GRI 412-1
Social GRI 412-2

KEY POLICIES
- **SIG CODE OF CONDUCT**
- **GIFTS POLICY**

RELEVANT SDG

8 DECENT WORK AND ECONOMIC GROWTH

OUR APPROACH

Why is this material for SIG?

Strong governance and ethics is fundamental to protect our reputation as a responsible company and provides a robust platform on which to build our net positive impacts. Upholding labour rights is an important aspect of respecting human rights, a topic of significant stakeholder concern. Implementing fair labour and business practices is essential to comply with regulations and maintain stakeholder trust.

Management overview

We expect everyone at SIG to be guided by our values and comply with the SIG Code of Conduct in everything they do.

The SIG Code of Conduct covers topics such as discrimination and harassment, and emphasises our zero tolerance policy on bribery and corruption in any form. It is part of our induction for all new employees and is communicated to everyone on our website in 14 languages.

We offer in-depth training for people working in high-risk roles (such as sales, purchasing and finance) to help them understand how to apply the SIG Code of Conduct to real-life dilemmas they may face. Further guidance is provided in our accompanying Gifts Policy and we require people working in management and high-risk roles to record any potential conflicts of interest.

We encourage people to speak up if they have any concerns about unethical behaviour and we make it clear that we will not retaliate against anyone reporting a concern. Employees can seek advice or raise concerns through their line managers or the Global Legal and Compliance team. Alternatively, they can contact our 24-hour external ethics and compliance hotline to voice concerns confidentially and – where permitted by local legislation – anonymously, by email or phone in their local language.

For SIG, fair labour practices include zero tolerance of forced, compulsory or child labour, and respecting the right to freedom of association and collective bargaining. We consult with employees and their representatives on issues such as pay, health and safety, and working conditions. Globally, around 60% of our employees are covered by collective bargaining agreements.

We also extend our requirements on fair labour practices to suppliers through the SIG Code of Business Ethics (see page 45).

OUR GOALS

2020 TARGET

Mandatory annual Code of Conduct training for all employees
MORE WORK TO DO

In-depth training on specific areas of compliance for high-risk roles every two years
ON TRACK

SEDEX Members Ethical Trade Audit (SMETA) at all large sites with more than 40 employees
ON TRACK

PERFORMANCE IN 2018

Raising awareness

During 2017 and 2018, we provided in-depth compliance training for around 230 employees in high-risk roles across Asia, Europe and the Americas on various topics, including data protection, fraud, insider trading and our new Gifts Policy. We are continuing to develop e-training on the SIG Code of Conduct and exploring options to reach people without computer access at work.

Reporting concerns

The number of concerns reported remains very low and in 2018 new posters were issued across our sites to update contact details for reporting concerns and raise awareness of our hotline. The few concerns reported in 2018 related to HR issues, non-compliance with internal processes and conflict of interest. Each concern was assigned to an investigation officer who examined the case and proposed an appropriate response. This included disciplinary action in one case where concerns were substantiated in 2017, but no cases resulted in disciplinary action in 2018.

Upholding labour rights

Nine of our 17 sites with over 40 employees have now completed SMETA audits. Our New Zealand paper mill completed its first SMETA audit in 2018. All our production sites were audited in 2016 and the next audits of these sites are due in 2019. Compliance on fair labour practices was also part of our assessments and audits of suppliers in 2018 (see page 45).

COMMUNITIES

MATERIAL ISSUES
N/A

ADDITIONAL STRATEGIC TOPIC
■ **THRIVING COMMUNITIES**

SIGNIFICANT IMPACTS
N/A

GRI INDICATORS
N/A

RELEVANT SDG

OUR APPROACH

Why is this strategic for SIG?

We are enhancing our positive social and environmental impacts in communities through our engagement programme and, with Cartons for Good, we are leading the industry with an innovative model that has the potential to deliver disruptive change and strengthen our contribution to the SDGs. Supporting thriving communities helps us strengthen our business by being a good neighbour and an employer of choice, enhancing our corporate image and exploring new models and markets.

Management overview

Our support for local communities is channelled through our *Way Beyond Good* engagement programme. This is run by local action groups of employee volunteers led by our network of *Way Beyond Good* champions. We focus on projects that meet the needs of local stakeholders, harness the skills of our people and have a positive impact in communities.

We have developed a methodology for measuring the impact of our community programmes, based on an assessment by the employees and communities involved. It takes into account contributions to the SDGs, who benefits from the project and the type of impact it has, such as improving education or supporting recycling.

Each local team has an allocated budget each year to run community projects. In future, additional investment in community projects, including Cartons for Good, will be funded through our new *Way Beyond Good* Foundation. Members of our GEB sit on the Foundation's Board of Trustees and projects will be nominated by an advisory council of employee representatives from different regions.

OUR GOALS

2020 TARGET

Double the impact of community engagement programmes*
COMPLETED

Launch a global flagship project using our expertise to support communities
COMPLETED

* Wording changed to make target more meaningful.

PERFORMANCE IN 2018

Launching Cartons for Good

In 2018, we launched our Cartons for Good flagship project (see page 25).

Our engineers developed a downsized, mobile filling machine designed to be easy to operate and maintain locally to support the Cartons for Good project. It was shipped from our production site in Linnich to Bangladesh in late 2018 where farmers were immediately able to supply surplus from their harvests of crops such as cauliflower, cabbages and tomatoes.

Championing Cartons for Good

Our *Way Beyond Good* champions ran a series of local campaigns to promote our flagship Cartons for Good project in 2018. Imaginative events included a 'Who wants to be a cardboard millionaire?' quiz game in Whakatane, New Zealand, and a partnership with a school near our Saalfelden site in Austria.

They also ran a drawing competition for the children of our employees. The children were read a story – about a farmer called Rakib, who brings his leftover pumpkins to SIG so that they can be used to feed local schoolchildren – and asked to draw pictures based on what they heard.

We used their drawings to create a unique design for the Cartons for Good packs that will be distributed to schools in Bangladesh and publish an illustrated children's storybook. The storybook is available on our website.

IMPACT OF OUR COMMUNITY PROJECTS

	2016	2017	2018
Number of projects	13	19	32
Total impact score*	9,879	14,596	23,833

*Based on the methodology developed by SIG.

The filling machine is being used locally to cook and preserve food in SIG combisafe packs, specially branded for Cartons for Good through a children's drawing competition run by our *Way Beyond Good* champions (see case study).

In early 2019, we celebrated the official inauguration of the project together with our project partner, BRAC, and the first packs of food were distributed to schools.

Enhancing the impact of our community programmes

In 2018, we changed our target from doubling the number of community programmes to doubling their impact by 2020 to help us create a more meaningful difference in local communities.

We have established a baseline for this target, with the total impact score across all projects in 2016 adding up to 9,879. In 2018, the score increased to 23,833, with projects such as our 'eco-canteen' in Thailand scoring very highly (see case study). This means we have achieved our target to double the impact of our community programmes by 2020.

Way Beyond Good local action groups will help us drive progress and run a global engagement day each year to encourage people to volunteer their time to projects that share a common theme across the company. In 2019, the first engagement day will support community meals around the world.

We also aim to increase the impact of our community engagement programmes through our *Way Beyond Good* Foundation, founded in October 2018 with an initial grant of €330,000 from SIG.

> *"We believe that good nutrition and clean water should be available to everyone and that natural habitats need to be preserved for future generations. Together with partners, our purpose is to identify, drive and promote activities and projects that strengthen civil society and create positive impacts for the environment."*
>
> ***Way Beyond Good* Foundation mission statement**

> *"The eco-canteen is a great way to bring recycling to life by showing children – and their parents – what happens to the cartons after they drink their milk. Helping children understand how recycling can help the environment is really important because they are the consumers of tomorrow."*
>
> **Chatramon Intason**
> *School Director at Nikomsangtoneang Rayong 10 School*

School 'eco-canteen' gives used cartons a new lease of life in Thailand

In 2018, we showcased how companies and communities can come together to turn waste into value through an innovative 'eco-canteen' made almost entirely from used beverage cartons at a school in Thailand.

We teamed up with Kasetsart University, the food manufacturer Ampol Foods and the Fiber Pattana recycling plant to design and rebuild the canteen at the Nikom Sang Ton Eang primary school near our production site in Rayong, Thailand.

More than 1.4 million recycled cartons went into the canteen, used to make the roof tiles, wall panels, tables and chairs. The 170 children at the school can now drink their milk from cartons in a canteen made of cartons, taking a clear message on recycling home to their families.

RESPONSIBLE SOURCING

2030 goal

All raw materials from certified sources and 50% of total sourcing spend on net positive suppliers

IN THIS SECTION

"We want to partner with suppliers that share and contribute to our net positive ambition. Sourcing raw materials from certified responsible sources enables us to deliver significant environmental and societal benefits, while securing a reliable supply for our business and our customers."

Ian Wood
Chief Supply Chain Officer

Ian holds a combidome pack specially printed to show our commitment to source FSC™ certified liquid packaging board.

RESPONSIBLE **SOURCING** *OVERVIEW*

By sourcing renewable, recyclable raw materials from certified responsible sources, we are cutting the environmental footprint of our packs, promoting thriving forests and supporting the transition to a circular economy.

SIG has pioneered the use of third-party verified certifications within our industry to demonstrate that key materials used to make our cartons are sourced responsibly.

In 2009, we were the first to achieve 100% global coverage of Forest Stewardship Council (FSC™) Chain of Custody certification for liquid packaging board. Last year, our European sleeve and spout production plants achieved ISCC PLUS certification for the plant-based polymers used in **SIG**NATURE PACK 100 that are linked to 100% forest-based material.[1] And we are now one of the first companies in the world to achieve certification to the new Aluminium Stewardship Initiative (ASI) standard for responsible aluminium sourcing.

This year, we became the first beverage carton manufacturer to switch all the energy used to produce our packs – both electricity and gas – to renewable sources, either sourced directly or indirectly through GoldPower® certified renewable energy projects. Our additional focus on sustainable logistics also supports our commitment to reduce greenhouse gas emissions across the value chain.

Strict social, environmental and ethical standards apply to every supplier we work with and we have strengthened our procedures to check compliance among our significant suppliers. Ultimately, our aim is to partner with suppliers that support our net positive ambition.

FSC FORESTS FOR ALL FOREVER™
Forest Stewardship Council®

96%
We have now sold 101bn packs with the FSC™ label and the share of SIG packs sold with the label reached 96% by the end of 2018

1st
SIG is the first in the industry to achieve certification to the new ASI Performance Standard for responsible aluminium sourcing

asi Aluminium Stewardship Initiative

100%
Our social responsibility requirements are now included in 100% of our contracts with suppliers of key raw materials

100%
All of the energy we use in production now comes from renewable sources, either directly or indirectly through GoldPower® certified renewable energy projects

Trademark licence code: FSC™ CO20428 [1] Via a mass balance system.

*Going **Way Beyond Good** with*
FSC™

Over 96% of SIG packs carried the FSC™ label by the end of 2018. With this little label, we are helping forests and communities thrive, and tackling some of the biggest global challenges we face.[2]

The NGO-backed FSC certification helps forests remain thriving environments for generations to come by setting strict standards for responsible forest management that support biodiversity and ecosystem functions, prevent deforestation and degradation, and respect the rights of local communities and indigenous peoples. Forest managers must meet and maintain these standards to retain their certification.

Forest-based liquid packaging board makes up around 70-80% of each SIG pack on average. Sourcing this from suppliers certified to the FSC Chain of Custody standard helps us produce our packs sustainably and promotes more sustainable production among our suppliers.

Responsibly managed forests also help to store carbon, regulate the climate and provide a renewable alternative to fossil-based feedstocks.

When consumers scan the shelves of their local store, the FSC label tells them that the paper used in the packaging of the product they are buying comes from responsibly-managed forests and other controlled sources.

We encourage customers to put the FSC label on their packs to raise awareness of sustainability. As people get used to seeing the label on more of their favourite food and drinks, they start looking for it on other products too. Retailers, in turn, are stocking a wider range of FSC certified products – from printer paper to garden furniture.

Partnering with both suppliers and customers is essential to fulfil our FSC commitments. We also work closely with the FSC to develop the certification scheme and, through its Vancouver Declaration, we joined other leading companies committing to contribute to global sustainable development goals through our use of forest materials.

By supporting FSC certification and calling on others to do so, we aim to work together to drive progress towards sustainable production and consumption through market transformation.

[2] In December 2018.

OUR SUPPLY CHAIN

We spend over €1 billion a year with approximately 6,000 suppliers around the world on the goods and services we need to make our products and run our business.

GRI INDICATORS

General Disclosures GRI 102-9

Direct suppliers provide the raw materials we use in our carton packs. Indirect suppliers provide the secondary packaging used to transport and display our packs (such as corrugated cardboard and wooden pallets) and a range of other products and services, including energy, logistics, IT, catering and cleaning. Global Assembly suppliers provide the metals and components used to assemble and maintain our filling machines.

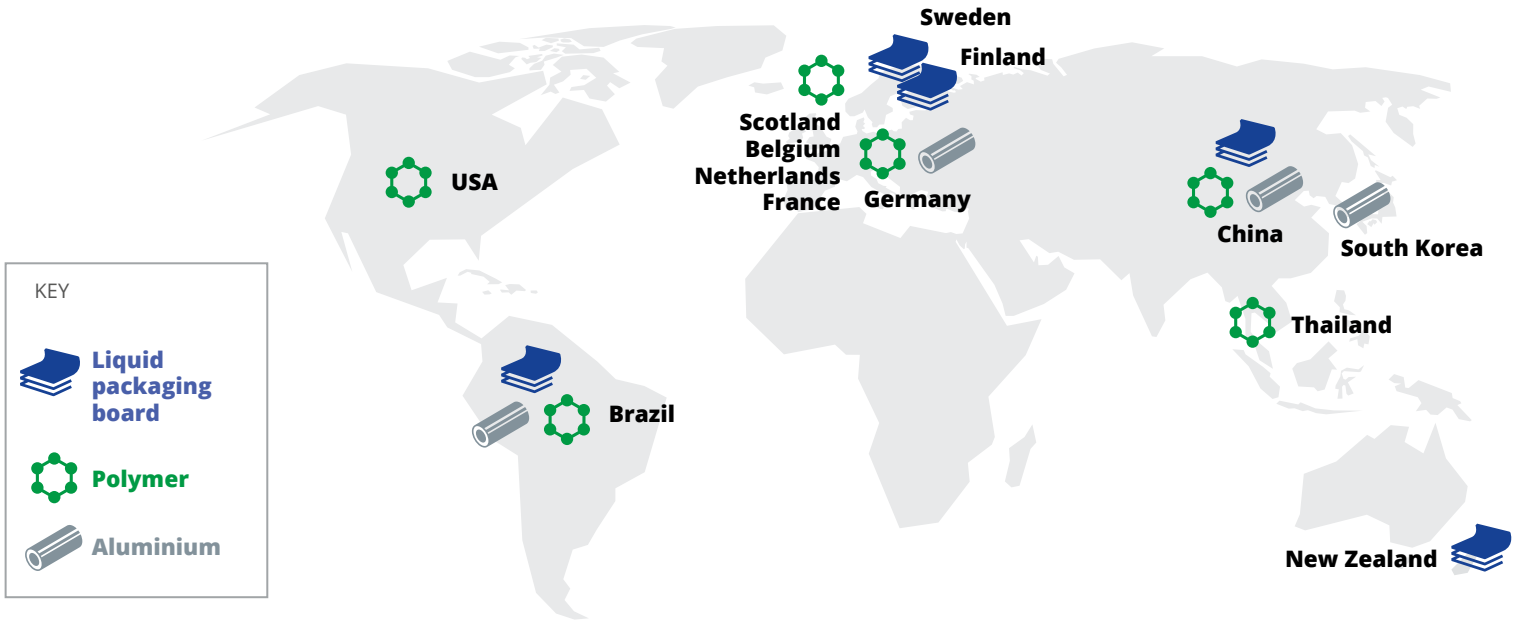
Around 54% of our procurement spend goes on the raw materials for our packs: liquid packaging board (a stiff paper board made from wood), polymers, aluminium, ink and solvents. We source these 'A-materials' from around 40 suppliers, ranging from local paper mills that source wood from their own forests to major multinational mining and chemical companies. Our own paper mill in New Zealand also supplies some of our liquid packaging board.

We work particularly closely with a group of just over 200 suppliers (both direct and indirect) that are considered most significant to our business – based on their potential to affect our ability to meet customer needs, the high volumes we purchase from them, or sustainability risks identified in the supply chain. These significant suppliers account for around 60% of our total procurement spend.

In our Global Assembly business, which makes our filling machines, key suppliers are identified based on criteria such as level of turnover or single source category.

Where feasible, we also aim to source locally within each region to support local economies and communities, and reduce environmental impacts from transporting goods over long distances.

WHERE OUR RAW MATERIALS COME FROM



Encouraging our suppliers to go net positive

We want to go net positive across our value chain and that means working with suppliers that can help us achieve this ambition. Our goal is to channel 50% of our procurement spend with net positive suppliers by 2030.

We are exploring how to define net positive suppliers in parallel with our work to understand how to measure overall net positive impacts (see page 26). We are already working closely with one of our biggest suppliers of liquid packaging board, Stora Enso Consumer Board Division, as a fellow member of the Net Positive Project.

RESPONSIBLE SUPPLIERS

MATERIAL ISSUES
- **RESPONSIBLE SUPPLIERS**
- **FAIR LABOUR PRACTICES**

SIGNIFICANT IMPACTS
N/A

GRI INDICATORS

Environmental GRI 308-1

Social GRI 414-1

KEY POLICIES
- **SIG BUSINESS ETHICS CODE FOR SUPPLIERS**
- **RESPONSIBLE SOURCING DIRECTIVE**
- **SUPPLIER QUALIFICATION (EQUIPMENT) PROCESS**

RELEVANT SDGs

8 DECENT WORK AND ECONOMIC GROWTH

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

OUR APPROACH

Why is this material for SIG?

Managing supply chain risks by ensuring we work with responsible suppliers is an important foundation for our ambition to have a net positive impact on society and the environment across our value chain.

Stakeholders increasingly hold companies accountable not just for their direct impacts on society and the environment, but for indirect impacts in their supply chain too. The ethical requirements demanded by our customers often include criteria that extend beyond our own operations to our supply chain.

Demonstrating that we work with responsible suppliers enables us to meet these requirements and avoid ethical breaches in our supply chain that could affect our reputation or cause disruptions to supply.

OUR GOALS

2020 TARGET

Include new social responsibility requirements in 100% of contracts with suppliers of our key raw materials

ON TRACK

Audit 10% of high-risk suppliers each year

ON TRACK

Provide regular training (at least every two years) on ethical supplier standards and sustainable sourcing to all employees who interact frequently with suppliers

ON TRACK

Management overview

We expect all our suppliers to comply with the SIG Business Ethics Code for Suppliers, which is based on the Ethical Trading Initiative Code and sets out our requirements on business integrity, labour, safety and environmental issues. Our buyers are responsible for ensuring suppliers sign up to the SIG Business Ethic Code, or demonstrate an equivalent code is in place, as part of all new or renewed contracts with SIG.

All suppliers are screened on social and environmental criteria as part of our onboarding process. We conduct more in-depth evaluations of our significant suppliers' transparency and performance through a combination of self-assessments, external certifications and common industry tools such as SEDEX or EcoVadis. We also conduct our own on-site audits of some high-risk suppliers.

We accept significant suppliers that comply with our standards for up to two years before they are reassessed. We work with others to help them improve through corrective action plans. If suppliers fail to respond to our requests or show no willingness to improve, we may terminate our business relationship with them.

Our Responsible Sourcing Directive describes how we assess our suppliers' performance on responsibility criteria. We train everyone in our global, regional and local procurement teams – dealing with both direct and indirect suppliers – on responsible sourcing. Some are trained to conduct high-level responsibility checks during their regular visits to suppliers' sites and we also have a team of experts to conduct in-depth audits. By 2020, we aim for all significant direct suppliers to be audited by SIG or a third party.

In our Global Assembly business, the Supplier Qualification (Equipment) process sets out how we screen all new suppliers through self-assessments and how the Supplier Management (Equipment) team follows up to requalify key suppliers based on responsibility criteria.

PERFORMANCE IN 2018

Integrating responsibility in our supplier management

All of our contracts with suppliers of key raw materials explicitly included either the SIG Business Ethics Code for Suppliers or an equivalent code in 2018.

We have begun monitoring suppliers' acceptance of the SIG Business Ethics Code through our new procurement software, which is used to request information and self-assessments from suppliers and record their compliance. We are now also assessing indirect suppliers' compliance alongside direct suppliers.

We have also begun to roll out our responsibility requirements among our Global Assembly suppliers. All 78 of the key suppliers in this part of the business have signed up to the SIG Business Ethics Code or equivalent, or have achieved certification to recognised external standards.

Monitoring and improving supplier performance

Over the past two years, we have screened all new and existing direct significant suppliers for environmental and social risks and 72% have responded to our requests for information.

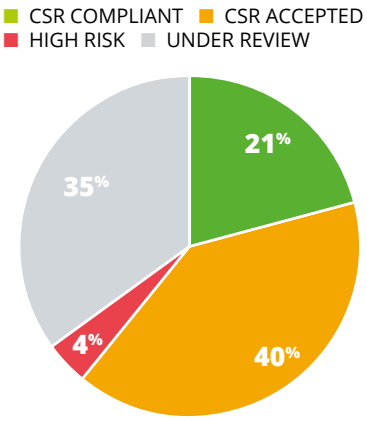
Based on our assessments, 21% of our direct significant suppliers and 3% of our indirect significant suppliers are rated as CSR compliant (see charts). This means they have demonstrated compliance with our responsibility requirements through recognised external standards such as the Supplier Ethical Data Exchange (SEDEX) Members Ethical Trade Audit (SMETA) within the last two years.

Those rated as 'CSR accepted' – 40% of direct significant suppliers and 75% of indirect significant suppliers – are expected to submit plans outlining their steps to achieve certification to recognised standards or third-party assessments. Any business with suppliers failing to respond or provide appropriate information is put on hold while we investigate. In 2018, we terminated our relationship with one of our significant suppliers that refused to sign up to the SIG Business Ethics Code and we put our business with another on hold until the supplier agreed to comply with our code.

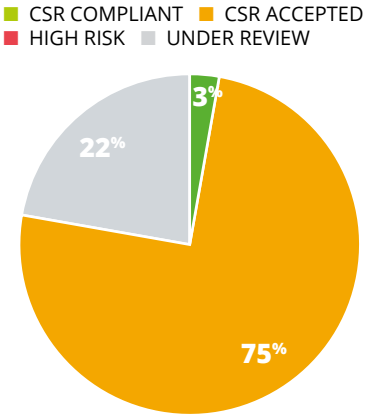
At the start of 2018, 16 significant suppliers had been identified as high-risk. Since then, two of them have provided evidence of third-party assessments (SMETA or EcoVadis), three have signed up to the SIG Business Ethics Code and four have been delisted. Of those removed from our approved supplier list, three were delisted for commercial reasons and one because it did not sign up to the SIG Business Ethics Code.

In line with our target to audit 10% of high-risk suppliers each year, we audited one of the remaining seven high-risk suppliers. The audit identified several opportunities for minor improvements, but none of the findings were considered critical.

RATING DIRECT SIGNIFICANT SUPPLIERS ON ETHICAL STANDARDS (%)



RATING INDIRECT SIGNIFICANT SUPPLIERS ON ETHICAL STANDARDS (%)



SUSTAINABLE RAW MATERIALS

MATERIAL ISSUES
- **SUSTAINABLE RAW MATERIALS**
- **THRIVING FORESTS**

SIGNIFICANT IMPACTS
- **ENVIRONMENTAL, SOCIETAL AND ECONOMIC**
  (SUSTAINABLE RAW MATERIALS, THRIVING FORESTS)

GRI INDICATORS

Environmental GRI 301-1

KEY POLICIES
- **LIQUID PACKAGING BOARD, POLYMER AND ALUMINIUM PURCHASING POLICIES**

RELEVANT SDGs

12 RESPONSIBLE CONSUMPTION AND PRODUCTION
15 LIFE ON LAND
17 PARTNERSHIPS FOR THE GOALS

OUR APPROACH

Why is this material for SIG?

Sourcing more renewable, forest-based materials that are certified as responsibly managed contributes to our efforts to mitigate and adapt to climate change, and support thriving forests.

Through FSC™ certification, we are helping forests – and the communities that depend on them – thrive. By sourcing more sustainability certified raw materials, we are enhancing the environmental credentials of our packs and creating broader net positive effects by increasing demand for these feedstocks. This in turn can lead to suppliers making them more widely available for our industry and beyond.

A sustainable supply of our key raw materials is also critical for us to continue meeting customer needs now and in the future. Our business is modelled on a long-term return on investment, with many customers using a SIG filling machine – and the packs that go with it – for decades. This makes it all the more important to secure a reliable supply of materials that is sustainable in the long term.

Management overview

Environmental and social requirements for our main raw materials are defined in our purchasing policies for liquid packaging board, aluminium and polymers. We use certifications to trace our raw materials back to responsible sources and independent auditors check compliance. SIG is supporting the development of such certifications and driving wider use of certifications in our industry and beyond.

Since 2009, we have maintained FSC Chain of Custody certification at our production sites and sales offices. All our liquid packaging board comes from paper mills certified to the FSC Chain of Custody standard.

We are implementing the new Aluminium Stewardship Initiative standard for responsible aluminium sourcing through a similar Chain of Custody certification and a Group-wide Performance Standard. SIG is the first in the industry to do so.

We are also using certified renewable polymers for our **SIG**NATURE PACK (see page 55) as we explore ways to use more responsibly-sourced renewable materials in our packs. These polymers are certified to the ISCC PLUS and TÜV SÜD CMS71 standards.

OUR GOALS

2020 TARGET

100% FSC™ labelled packs (work with customers to include the FSC logo on 100% of the packs we sell)

ON TRACK

100% A-materials from certified sources

MORE WORK TO DO

PERFORMANCE IN 2018

Liquid packaging board

We have now sold over 101 billion FSC labelled packs. During 2018, 92.5% of the packs we sold worldwide carried the FSC label and the share reached 96% in December.

INDUSTRY LEADER

Since 2016, customers have been able to put the FSC label on any of our packs – we were the first carton provider to make that possible – and we are encouraging more of them to do so. In August 2018, for the first time, all the packs sold in China carried the FSC logo.

In 2018, the minimum supply made with wood from FSC certified forests and other controlled sources remained high, but decreased slightly from 89% to 86%. To help us reach our 100% target, we are encouraging our liquid packaging board suppliers to increase the supply of FSC material and to engage with their own suppliers – mostly privately-owned operations in Scandinavia – to explain the benefits of certification.

Polymers

INDUSTRY LEADER

Our **SIG**NATURE PACK is the first aseptic carton that is 100% linked to plant-based materials. The polymers are linked to plant-based materials via a mass balance system and certified to the ISCC (International Sustainability & Carbon Certification) PLUS standard or the alternative TÜV SÜD CMS71 scheme. In 2018, several customers launched products with **SIG**NATURE PACK (see page 60).

"Aluminium is a critical material for the packaging sector and ASI's Certification programme provides a platform to recognise and collaboratively foster global supply chain efforts towards enhanced sustainability. SIG's ongoing actions to responsibly source raw materials are now being extended to aluminium, one of the world's most widely used metals. With the first ASI Certifications already announced, we look forward to an acceleration of efforts in the packaging sector in the coming months and years, with the support of SIG and other ASI members."

Dr Fiona Solomon
CEO, Aluminium Stewardship Initiative

SOURCING OUR A MATERIALS

	2016	2017	2018
Raw materials purchased (tonnes of liquid packaging board, aluminium and polymers)	550,000	533,000	550,000
% from renewable sources (by volume)	70%	71%	72%
% from certified sources (by spend)	39%	47%	45%

KEY CHALLENGE

However, rolling out this plant-based solution across our product range is challenging due to the associated price premium. This must be balanced with our purpose to help customers deliver food in an affordable as well as a sustainable way.

As a result, we anticipate there will be a continued need for fossil-based polymers for several years to come and we want to ensure they are produced responsibly. With no suitable recognised certification for fossil-based polymers, this represents a significant challenge to our 2020 goal to source 100% of our A-materials from certified sources.

Aluminium

INDUSTRY LEADER

In 2018, we became the first in the industry – and one of the first companies in the world – to achieve certification to the new standard from the Aluminium Stewardship Initiative (ASI) to enhance traceability and responsibility in the aluminium supply chain.

Sourcing certified aluminium has not previously been possible as there was no appropriate certification available. The ASI certification now offers a way to audit the aluminium supply chain against strict standards on a broad range of ethical, environmental and social topics.

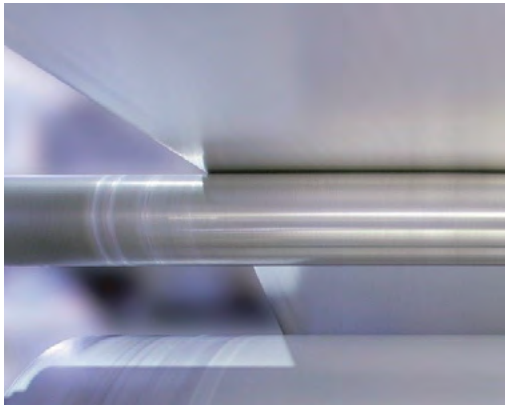
We led the industry in achieving global certification to the ASI Performance Standard at company level, together with ASI Chain of Custody certification at our production site in Saalfelden, Austria. More of our production sites are aiming to achieve this certification soon.

The certification will enable customers to trace the aluminium foil in SIG packs through the value chain – from responsible sourcing and processing of the raw material to responsible production of the finished packs – once ASI Chain of Custody certification is achieved at every stage of our supply chain.

We are encouraging suppliers to work towards ASI certification to help create the necessary supply of aluminium foil from certified sources. Prior to the launch of the ASI standard, we partnered with one of our suppliers, Amcor, to understand whether the supply chain was ready to meet the requirements through third-party assessments. The Amcor site we source from has now achieved the ASI Chain of Custody certification.

Secondary packaging

We are also working with suppliers to use more certified materials in our secondary packaging –



the corrugated cardboard and pallets used to transport our products. In 2018, around 95% of the corrugated cardboard boxes we used in Europe were from FSC certified sources (up from 81% in 2016). We have also switched to FSC certified suppliers for the cardboard boxes we use in Brazil from 2019.

All the pallets we use to export products from our European factories are made from FSC certified wood. But sourcing certified options in other regions is more challenging, particularly in Asia where pallets are often made of plastic or rubber rather than wood.

Ink

There is currently no external certification for the inks we use to print customers' designs on our packs so we are planning to develop our own responsibility requirements for the suppliers of these ingredients. As a first step, we conducted an assessment of potential environmental and social risks in the ink supply chain in 2018. We are also continuing to engage with suppliers about the potential to introduce more plant-based solvents and other components in the printing process to support our move away from fossil-based materials.

ENERGY SOURCING

MATERIAL ISSUE
- **TACKLING CLIMATE CHANGE**

SIGNIFICANT IMPACT
- **ENVIRONMENTAL**
  (TACKLING CLIMATE CHANGE)

GRI INDICATORS
N/A

KEY POLICIES
- **RESPONSIBLE SOURCING DIRECTIVE**

RELEVANT SDGs

OUR APPROACH

Why is this material for SIG?

We are leading the industry in sourcing all our energy for production from renewables. The most significant environmental impact of our operations used to be the greenhouse gas emissions from the energy we use in production. Switching to renewable energy has significantly cut the carbon footprint of our operations. This effectively eliminates greenhouse gas emissions from manufacturing our packs, supporting our efforts to tackle climate change and setting a strong example for others to target 100% renewable energy. Our support for renewable energy projects that are certified to the recognised GoldPower® standard also delivers wider positive social impacts as well as environmental savings.

Management overview

We purchase renewable electricity from the grid in Europe and Brazil, using guarantees of origin (or equivalent) to verify the energy is generated from renewable sources. In markets where this is not a viable option – and for the natural gas we use worldwide – we source renewable energy indirectly by investing in local renewable energy projects.

These projects are certified to the GoldPower® standard which verifies that they will not only deliver measurable greenhouse gas emissions reductions, but also create benefits for local communities, such as air or water quality improvements, or job opportunities. We are also pursuing options to generate renewable energy on our own sites by, for example, investing in rooftop solar installations.

OUR GOALS

2020 TARGET

100% renewable energy and Gold Standard CO_2 offset for all non-renewable energy (at production plants)

COMPLETED

PERFORMANCE IN 2018

Going 100% renewable

In 2018, we became the first in the industry to produce all our packs using 100% renewable energy – electricity and gas – at production sites worldwide.

We made the switch to 100% renewable electricity in 2017 and we are now sourcing renewable alternatives for the remaining energy used in production that comes from natural gas. This means we have met our 2020 goal two years early.

All other remaining greenhouse gas emissions from production, such as small amounts released in the printing process, are also being offset.

Sourcing renewable alternatives for gas

Finding renewable alternatives for gas was challenging because the market for renewable biogas is not yet well established.

With no viable option to source renewable biogas directly, we are instead sourcing it indirectly by supporting GoldPower® certified projects to construct and operate waste-to-energy systems in China, Thailand and Turkey that capture gas generated at landfill sites and use it to produce renewable energy.

Landfill gas from decomposing waste includes large amounts of methane, a potent greenhouse gas. Preventing this gas from escaping into the atmosphere helps to avoid harmful climate impacts. The switch to renewable gas will save an estimated 28,600 tonnes of CO_2 equivalent emissions per year.

Investing in on-site renewable electricity

We initially followed a similar model to offset the CO_2 emissions from electricity used at our production sites in China and Thailand, investing in GoldPower® certified renewable energy projects because purchasing green electricity from the grid is not a viable option in these countries (as it is in Europe and Brazil).

Now, we are looking for opportunities to source more renewable electricity directly by investing in on-site installations. In 2018, we completed a 3.3 MWp rooftop solar installation at our production plant in Thailand (see case study). Our new technology centre in China is also enabling on-site solar power generation by a 1MWp installation (see page 30). These projects provide a valuable blueprint for developing on-site renewable energy capacity at our other production plants.

GoldPower®
GLOBAL RENEWABLE ENERGY

Harnessing solar power on site in Thailand

Our production plant in Rayong, Thailand, is harnessing the power of the sun with a massive new rooftop solar installation covering an area of more than 17,660m².

With 9,048 individual photovoltaic panels, the 3.3 MWp system is one of the largest in the country and is capable of producing up to 4,431 MWh of power per year. It will contribute around 10% of the site's total energy use, saving on energy costs and avoiding around 2,240 tonnes of CO_2 equivalent emissions per year.

Not only is this supporting SIG's efforts to go ***Way Beyond Good***, it's also contributing to Thailand's target to meet 40% of the country's electricity requirements from renewable energy sources by 2036.

To further enhance our positive impact for communities, the supplier of our solar panels has also installed 7kWp of solar panels on the roof of a local school free of charge as part of our agreement. That's enough to power the school.

SUSTAINABLE LOGISTICS

MATERIAL ISSUES
N/A

ADDITIONAL STRATEGIC TOPIC
- **ECO-EFFICIENT TRANSPORT**

SIGNIFICANT IMPACTS
N/A

GRI INDICATORS
N/A

KEY POLICIES
- **RESPONSIBLE SOURCING DIRECTIVE**

RELEVANT SDGs

OUR APPROACH

Why is this strategic for SIG?

A focus on sustainable logistics is part of our holistic approach to reduce our environmental footprint and support our net positive ambition throughout the value chain.

We deliver billions of carton sleeves to our customers every year. Although environmental impacts from transport are not material compared with other stages of the life-cycle (see page 56), eco-efficient transport is still of strategic importance for SIG because it helps us minimise the cost of our logistics and reduce our total value chain greenhouse gas emissions.

By encouraging our logistics partners to use more fuel-efficient trucks to deliver our products, we are also supporting wider greenhouse gas emissions reductions as they will use the same trucks to deliver other products too.

Management overview

The delivery of goods and materials from our suppliers to our plants is managed by our procurement teams as part of SIG's contracts with relevant suppliers. We also reduce impacts from inbound logistics by sourcing locally where possible.

Our Supply Chain Management team manages our outbound logistics, working with logistics providers to balance costs and environmental considerations with the need to deliver our products to customers when they need them – whether it is by truck, by sea or, for very urgent orders, by air. As part of our tender process, we ask our logistics providers to demonstrate how they will help us achieve our goals for eco-efficient transport. We also check for intermodal transport (using multiple modes of transportation) options where feasible to improve efficiency.

Sending our sleeves in flat-pack format significantly reduces the amount of space required to transport our products to customers relative to comparable plastic, metal or glass packaging. This reduces the number of journeys required.

We aim to further reduce environmental impacts from transport by packing our products in a space-saving way and filling each truck as fully as possible to reduce the number of journeys required, as well as encouraging suppliers to use more fuel-efficient vehicles.

OUR GOALS

2020 TARGET

Increase the rate of full truck loads delivered to customers

MORE WORK TO DO

Ensure logistic partners use trucks that meet Euro 6 emissions standards for 100% of outbound road transport from our production plants in Europe

MORE WORK TO DO

PERFORMANCE IN 2018

Improving eco-efficiency

In 2018, emissions for our outbound logistics totalled 43,860 tonnes of CO_2 equivalent emissions. This is a 3% reduction compared with 2016.

Filling trucks fuller

Trucks delivering our products make outbound journeys of around 8 million kilometres a month from our factories. We aim to fill them as fully as possible to make the most of each journey.

In 2018, we began rolling out a new stacking process that enables even more products to be delivered in each truck load, starting with deliveries from our plant in Wittenberg, Germany. By fitting over 10% more sleeves per pallet, this is expected to save 7.8kg of CO_2 equivalent emissions per 100 kilometres travelled.

We increased the rate of full truck loads delivered to customers every year from 2012 to 2017. However, in 2018, this trend levelled off, with an average truck utilisation rate of 91% for delivery trucks dispatched from our production plants worldwide, largely as a result of customer demand for express deliveries and orders in smaller quantities.

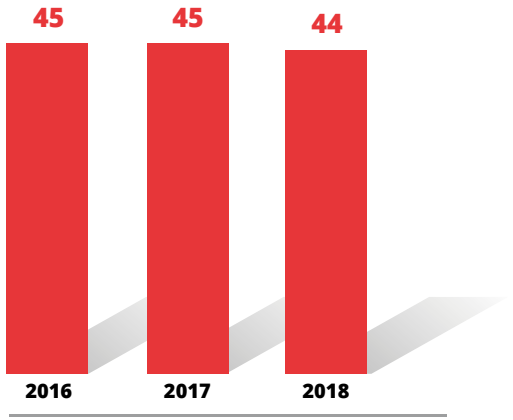
Using more efficient vehicles

We encourage logistics providers to use more efficient vehicles to reduce fuel costs and transport emissions. The Euro 6 emissions standard is a useful benchmark to gauge fuel efficiency.

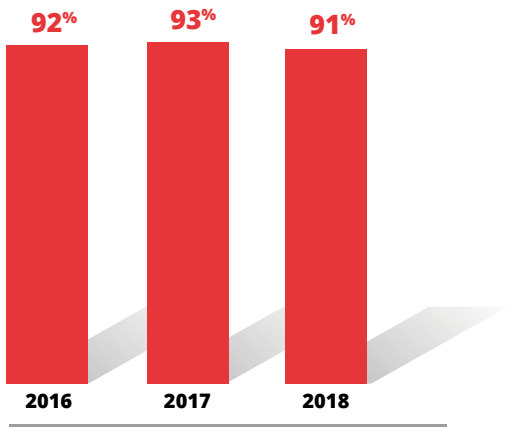
A full truck that meets the requirements of the latest Euro 6 standard uses nearly two litres less diesel – and saves around 3.2kg of CO_2 equivalent emissions – per 100km journey compared with a truck complying with the previous Euro 5 standard. In 2018, around 75% of our deliveries in Europe were made using Euro 6 trucks, up from 60% in 2017.

We made environmental criteria a priority in our latest tender for new contracts with sea freight logistics providers, requiring them to provide information on their greenhouse gas emissions performance to inform our decision making.

EMISSIONS FROM OUTBOUND LOGISTICS
THOUSAND TONNES OF CO_2 EQUIVALENT



TRUCK UTILISATION RATE RATE OF FULL TRUCK LOADS DELIVERED TO CUSTOMERS (%)



RESPONSIBLE **PRODUCTS**

2030 goal

Offer customers the most sustainable food packaging solutions – compared to carton or other materials

IN THIS SECTION

"We are constantly innovating to offer customers the most sustainable solutions on the market. Designing, producing and marketing responsible products is critical to meet customer and consumer needs – and to fulfil our purpose."

Markus Boehm
Chief Market Officer

Markus holds our **SIG**NATURE PACK 100, the world's first aseptic carton pack linked to 100% plant-based materials (via a mass balanced system).

RESPONSIBLE **PRODUCTS** *OVERVIEW*

SIG products have an important role to play in helping customers deliver nutrition to people around the world in a safe, sustainable and affordable way.

Our aseptic carton packs enable food and beverages to retain their nutritional value over long periods of time without the need for refrigeration. All our production plants are certified to strict product safety and quality standards to make sure the food inside our packs stays safe.

Our standard carton packs have significantly lower environmental impacts than alternative packaging solutions and our **SIG**NATURE PACK 100 has raised the bar in the industry as the first aseptic carton pack that is linked to 100% plant-based material,[1] reducing climate impacts and supporting a transition to a circular economy. Customers in several markets are already using this latest innovation to enhance the sustainability credentials of their own products.

We take a holistic view across the entire life-cycle to help us develop the most sustainable food packaging solutions on the market. We are driving progress towards this ambition through product innovation in our packs, filling machines and technical service, together with our efforts to source responsibly (see page 41), reduce our own environmental impacts (see page 27) and support recycling after use.

With all our product innovations, we must balance sustainability with cost so we can continue supporting our customers by helping them deliver nutrition in an affordable way.

[1] Via a mass balance system.
[2] Based on Europewide LCA – available at www.sig.biz.

>35bn

packs produced in 2018, helping customers deliver nutrition to consumers around the world in a safe, sustainable and affordable way

-58%

The carbon footprint of our SIGNATURE PACK 100 is 58% lower than our standard packs in the world's first ISO-conformant life-cycle assessment of a mass balance product[2]

4,850

Our innovative RS structure has saved more than 4,850 tonnes of polymer since its introduction in 2016

-80%

The new eco-mode for our filling machines cuts energy use during production breaks by 80%

Together with industry partners, we launched a new platform called EXTR:ACT to coordinate and drive solutions to enhance collection and recycling of beverage cartons in Europe.

EXTR:ACT
DRIVING VALUE FROM MULTIMATERIAL RECYCLING

*Going **Way Beyond Good** with*

SIGNATURE PACK

The world urgently needs to sever ties with fossil-based materials to preserve finite natural resources and tackle climate change. We believe plant-based alternatives hold the answer.

When managed responsibly, plant-based resources can be continually renewed and plants help to prevent a build-up of greenhouse gases in the atmosphere by absorbing CO_2 as they grow.

Our **SIG**NATURE PACK 100 is the world's first aseptic carton pack linked to 100% plant-based renewable materials, with a life-cycle carbon footprint 58%[3] lower than one of our standard cartons.

It's made possible through an innovative mass balance approach for the polymers used in the pack. Plant-based raw materials are mixed in with conventional fossil-based raw materials to produce polymers to the grade we need. External certifications ensure that enough renewable material is fed into the mix to make the amount of polymers we use in our **SIG**NATURE PACK 100 and **SIG**NATURE PACK Full Barrier cartons.

We opted for a mass balance approach because it supports a broader transition from fossil to plant-based raw materials within the conventional and highly efficient polymer industry.

By supporting a transition from fossil to plant-based raw materials, mass balancing can be a key driver in creating more sustainable production – and, over time, could see fossil resources replaced entirely with renewable alternatives.

The plant-based feedstock comes from tall oil, a residue extracted from wood in the paper manufacturing process. We chose it because it's a by-product from another industry rather than an agricultural crop requiring land and resources that could be used to produce food. This use of industrial residues supports **SIG**NATURE PACK's contribution to a circular economy. And like all SIG cartons, **SIG**NATURE PACK is fully recyclable.

Residues (wood chips) from the sawn log industry make up around 30% of the liquid packaging board used in the pack. All the liquid packaging board comes from sources that meet strict criteria for responsible forest management, adding to **SIG**NATURE PACK's contribution to thriving forests (see page 47).

[3] Based on Europewide LCA – available at www.sig.biz.

OUR LIFE-CYCLE APPROACH

We consider the environmental impacts of our packaging solutions at every stage of their life-cycle (see graphic) to drive progress towards our net positive ambition.

We are continually working to improve the environmental credentials of our products through innovation in our packs, our filling machines and our technical service solutions.

Independent life-cycle assessments (LCAs) show that our products' biggest environmental impacts come from the extraction and processing of fossil-based polymers and aluminium in our supply chain. That's why our efforts to source more sustainable raw materials are so important.

Reducing the environmental footprint of our own operations and logistics, as well as supporting efforts to improve recycling rates, also contribute to cutting the overall life-cycle impacts of our products.

OUR PRODUCT LIFE-CYCLE: MINIMISING ENVIRONMENTAL IMPACTS AT EVERY STAGE

CLIMATE IMPACT AT EACH STAGE OF THE LIFE-CYCLE*

Design	Sourcing	Manufacturing	Transport	Filling	Recycling
60%	8%	16%	6%		10%
Minimising the life-cycle impacts of our products starts with design. Environmental factors are core value drivers in our product development and our standard procedures mandate that new packaging designs must demonstrate optimised resource use compared with previous models (see page 58).	We use mainly renewable materials in our packs, we purchase all our liquid packaging board from suppliers that require their wood supplies to meet strict criteria for responsible forest management, and we use recognised external certifications to trace raw materials back to responsible sources (see page 47).	We make our sleeves, spouts and caps using 100% renewable energy and have a range of programmes to minimise waste and energy use at our ISO 14001 certified plants around the world (see page 27).	We reduce transport emissions by delivering our carton sleeves in flat-packed form and filling trucks fuller for fewer journeys and less fuel use (see page 51). Our lightweight packs also help customers cut emissions from distributing their products and avoid the need for refrigeration.	We improve the efficiency of our filling machines with every new generation, and our technical service teams help customers minimise use of energy and other resources needed to use our existing machines (see page 64).	We make sure all our packs are designed to be fully recyclable, and we partner with stakeholders to raise consumer awareness and support efforts to improve local collection and recycling (see page 58).

* Indicative figures referring to the climate impact of an average SIG pack for 1L in EU28 based on our LCA tool.

How our cartons compare

Cartons offer significant reductions in life-cycle environmental impacts compared with other types of packaging – such as glass, HDPE or PET bottles, pouches and cans – for a range of products, including long-life food, UHT milk and non-carbonated soft drinks.

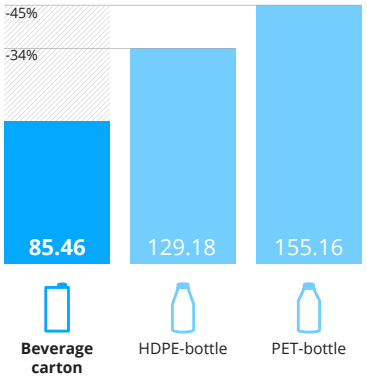
LCAs show that climate change and fossil resource use are the biggest impacts from packaging. The life-cycle carbon footprint of a carton is 28% to 70% lower than the alternatives and cartons use between 41% and 68% fewer fossil fuel resources. Our latest product innovations offer significant further improvements (see charts).

In 2018, the environmental benefits of **SIG**NATURE PACK were confirmed by the world's first critically reviewed ISO-conformant life-cycle assessment (LCA) to take into account the inclusion of materials via a mass balance system. The LCA was conducted by IFEU (see quote). It showed significant reductions in environmental impacts by substituting fossil polymers with mass balanced plant-based polymers made from tall oil (a residue of paper manufacturing).

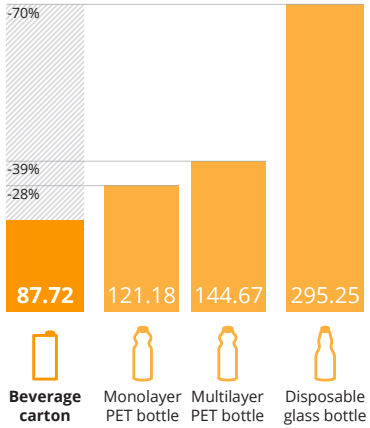
All these results are based on Europe-wide LCAs carried out by independent experts using the ISO 14040 international standard and critically reviewed by an independent panel. Detailed LCAs are available on our website.

HOW OUR STANDARD CARTON PACKS COMPARE WITH OTHER PACKAGING SOLUTIONS[4]

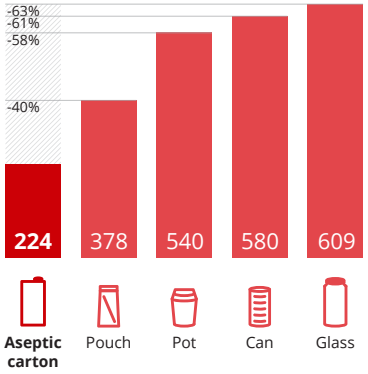
Liquid dairy
kg CO_2 equivalent per packaging required for 1000L UHT milk



Non-carbonated soft drinks
kg CO_2 equivalent per packaging required for 1000L non-carbonated soft drinks



Food
kg CO_2 equivalent per packaging required for 1000L food



HOW OUR LATEST PRODUCT INNOVATIONS COMPARE WITH OUR STANDARD CARTON PACKS[5]

	Standard SIG pack 1L Liquid Dairy with cSwift	**EcoPlus** 1L Liquid Dairy with cCap	**SIG**NATURE PACK **Full Barrier** 1L Liquid Dairy with cSwift	**SIG**NATURE PACK 100 1L Liquid Dairy with cCap
Life-cycle carbon footprint in g CO_2 equivalent for 1 litre pack format	63	45	35	26
% reduction in carbon footprint compared with standard SIG pack	n/a	–28%	–45%	–58%

"The demand for mass balance polymers from SIG could act as a driver to achieve a more significant physical share of plant-based input materials for the production of polymers. To model the examined products strictly on their physical properties would fail to acknowledge this function of the mass balance approach."

Frank Wellenreuther
Project manager, IFEU

[4] These calculations follow the UBA method which was updated in 2016/2017.
[5] Reference: **SIG**NATURE PACK ISO LCA CB-100732 from March 2018. EU28 average.

OUR PACKS

MATERIAL ISSUES
- **SUSTAINABLE PRODUCT INNOVATION**
- **RECYCLING & CIRCULAR ECONOMY**

SIGNIFICANT IMPACT
- **ENVIRONMENTAL, SOCIAL, ECONOMIC** *(SUSTAINABLE PRODUCT INNOVATION, RECYCLING & CIRCULAR ECONOMY)*

GRI INDICATOR

Environmental GRI 301-1

KEY POLICIES
- **GLOBAL R&D PROCESS HANDBOOK**
- **STANDARD OPERATING PROCEDURE TO IMPROVE USED BEVERAGE CARTON COLLECTION AND RECYCLING IN REGIONS**

RELEVANT SDGs

OUR APPROACH

Why is this material for SIG?

Helping our customers deliver nutrition in sustainable packs is at the heart of our purpose and our net positive ambition.

With growing stakeholder interest in the impacts of packaging, the strength of our packs' environmental credentials is an increasingly important differentiator across our markets. Our sustainable product innovation enables us to help customers respond to new regulatory requirements and meet their own targets for sustainable packaging.

SIG is also well positioned to support the transition to a circular economy. Separating recyclable packaging from household waste is perhaps the most tangible aspect of this for consumers and we are partnering with others to make sure more materials are recovered after use – not just from SIG packs, but from other packaging too. We can also bring additional societal benefits through the development of recycling programmes that support people in need.

Management overview

We are systematically integrating environmental factors, alongside product safety and commercial considerations, as core value drivers in our product development to promote sustainable product innovation and support the principles of the circular economy (see graphic on page 59). In 2018, we developed a system to track how many of our innovation projects include environmental performance as a core value driver.

Our standard procedures mandate that new packaging designs must demonstrate optimised resource use compared with previous models, while continuing to deliver the quality and functionality that customers and consumers demand.

Unlike most plastic packaging, our cartons are mainly made from renewable materials and we are exploring ways to increase our use of renewable content further. Some of the content in our packs uses waste materials from other industries and, to promote further use of materials, we make sure all our packs are fully recyclable by design.

Recycling our cartons keeps high-quality renewable materials from certified sources in circulation and we see a strong opportunity to support our customers and the environment by collaborating with stakeholders to enhance the rate of cartons that are collected and recycled across our markets.

The raw materials from used cartons can be separated and recycled to make new products – from cardboard boxes to roof tiles, aluminium engine parts and plastic buckets. However, in practice they are not all recycled because consumers don't always separate used cartons from household waste and local infrastructure is not always in place to collect and recycle them.

Recycling rates, regulations and infrastructure for collection and recycling of carton packs can vary widely from one country to another – and from one municipality to another. That's why we manage this issue at a local level and in partnership with other stakeholders – either directly or through industry organisations. By working together, we aim to enhance the rate of carton packs that are recycled overall in each region by strengthening programmes for collecting and segregating household waste for recycling, and raising awareness of the need to recycle.

This year, we have refined our approach to help drive progress in this area. We have established a system to work with teams in each of our regions to identify which individual countries are most in need of support to boost recycling rates – based on criteria such as national recycling

OUR GOALS

2020 TARGET

Create a 100% renewable aseptic pack
MORE WORK TO DO

Offer a carton made of 50% recycled content
MORE WORK TO DO

Ensure environmental performance is one of the core value drivers of our product innovations
ON TRACK

Partner with stakeholders to support collection and recycling of beverage cartons
MORE WORK TO DO

rates, business volume and market share, risk assessments and customer requirements. This structured approach will help us target our efforts where we can make the most impact.

In each priority country, we will work with local stakeholders to develop a strategy to implement tailored solutions. We have created a mapping questionnaire and we have begun to provide online training for local teams to help them do this. We aim to complete the process of identifying priority countries and developing suitable local strategies in 2019. Those countries that already have a strategy in place will continue implementing it with partners.

SUPPORTING THE PRINCIPLES OF THE CIRCULAR ECONOMY[6]

DESIGN OUT WASTE

The first step in the circular economy is to use resources as efficiently as possible and minimise the amount of materials needed to create products.

REGENERATE NATURAL SYSTEMS

The use of renewable materials supports the circular economy by preventing depletion of finite resources and helping to regenerate natural systems.

KEEP PRODUCTS AND MATERIALS IN USE

Recycling supports the circular economy by reusing materials from products that are no longer needed and making them available to create new products.

HOW WE CONTRIBUTE

OPTIMISING USE OF MATERIALS

Our new RS structure has saved more than 4,850 tonnes of polymer since it was introduced in 2016 and its predecessor saved around 130,000 tonnes of material from 2007 to 2015.[7] We have also reduced the amount of polymers used in our caps and spouts.

USING RENEWABLE CONTENT FROM RESPONSIBLE SOURCES

SIG packs are made up of 70-80% renewable paper board on average from suppliers whose wood supplies meet strict criteria for sustainable forestry management. EcoPlus increases this to 82% and SIGNATURE PACK **is linked to up to 100% renewable material.**

PROMOTING RECYCLING AND USING WASTE MATERIALS IN OUR PACKS

All our packs are designed to be fully recyclable and we partner with stakeholders to support efforts to increase recycling rates. We also use by-products from other industries to make our packs, such as wood chips and residues from paper production.

TRANSITION TO RENEWABLE ENERGY SOURCES

The circular economy model is underpinned by the transition to renewable energy sources.

HOW WE CONTRIBUTE

USING RENEWABLE ENERGY IN PRODUCTION

We use 100% renewable energy to produce our packs, either directly from renewable sources or, where this is not feasible, indirectly by supporting renewable energy projects certified to the recognised GoldPower® standard (see page 49).

[6] Principles set out by the Ellen MacArthur Foundation.
[7] Calculations based on packaging specifications and sales numbers.

PERFORMANCE IN 2018

Optimising use of materials

In 2018, we continued to roll out our combibloc RS structure to further pack formats. Not only is it more robust, improving stability during processing and distribution by our customers, it's also lighter to transport and cuts the carbon footprint of our packs by 5% for 1 litre packs and 6% for 200ml packs.[8]

Since the new structure was first introduced in 2016, it has saved more than 4,850 tonnes of polymer.

Increasing use of renewable content

Our standard cartons are made of 70-80% renewable materials on average. EcoPlus increased this to 82% and now **SIG**NATURE PACK is linked to up to 100% renewable materials (see page 55).

In 2018, Arla Foods Germany became the first company to opt for our **SIG**NATURE PACK from SIG, choosing this solution for its organic milk (Arla® BIO Weidemilch) to demonstrate the brand's commitment to sustainability as it strives to increase the market share of its organic dairy products. Arla's organic milk cartons now carry a clear message to consumers: buying this pack promotes the use of renewable raw materials to protect fossil resources while making a positive impact in reducing the CO_2 level compared with

*"The **SIG**NATURE PACK from SIG is a great match for our Arla® BIO Weidemilch. Consumers that choose our pure Arla® BIO Weidemilch also have an increasingly strong interest in sustainable packaging. With the value-added pack from SIG, we can demonstrate our commitment to transparency and our holistic approach to sustainability across the value chain. We are happy to be the first company to use **SIG**NATURE PACK and to be able to offer consumers in Germany this solution."*

Elise Bijkerk
Marketing Director, Arla Foods Germany

SIGNATURE PACK won the prestigious German Packaging Award for sustainability, the Environmental Award of the Year at the Gulfood Manufacturing Industry Excellence Awards in 2018, and the WorldStar Packaging Award 2019 in the category Packaging & Materials Components (announced at the end of 2018 ahead of the award ceremony in May 2019).

[8] Calculation based on SIG life-cycle assessment tool from cradle to factory gate, EU28.

a standard carton pack.

nutpods® is the first customer in North America to take up **SIG**NATURE PACK, opting for the full barrier version which includes an aluminium layer for use with a wider range of products. Using polymers linked to plant-based renewable materials in their packaging complements the company's commitment to deliver plant-based alternatives to dairy coffee creamers.

We also continue to offer EcoPlus – our aluminium-free aseptic carton made of 82% renewable liquid packaging board. Suitable for products such as milk that don't require a full-barrier solution, EcoPlus offers 28% lower life-cycle CO_2 emissions than our standard packs. Sales of EcoPlus increased by more than 12% in 2018, compared with the previous year. This increase was fuelled by growing demand for more environmentally friendly packaging solutions.

Exploring an aluminium-free full-barrier solution

KEY CHALLENGE

Developing a 100% renewable pack that maintains the full barrier properties required to preserve certain food products is much more challenging because it is difficult to find a renewable material to replace the razor-thin layer of aluminium foil that protects contents from light, oxygen and odours.

INDUSTRY LEADER

The innovative solution we have developed for our new microwavable Heat&Go packs eliminates the need for aluminium foil (see case study). This technology offers potential to further reduce the carbon footprint of our full-barrier packs as we continue to explore options for developing a 100% renewable full-barrier solution.

In the meantime, our recent certification to the new Aluminium Stewardship Initiative standard will enable us to demonstrate to customers that the

*"We are so excited to extend our plant-based story into our new plant-based packaging. One of our five core company values is to reduce our impact on the environment wherever we can. Our consumers depend on us to bring them not only the highest quality products with the best taste, but also to be stewards of our category with regard to the environment and the **SIG**NATURE PACK is one of the ways we can continue to lead."*

Madeline Haydon
Founder & CEO, nutpods

Heat&Go eliminates aluminium foil in a full-barrier aseptic carton solution

Research has shown that consumers, particularly in Asia, are looking for ready-to-drink beverages that can easily be heated and consumed on-the-go.

A microwavable aseptic carton pack was the obvious choice for hot beverages. But the aluminium foil in the cartons made this impossible. Until now.

Our new Heat&Go pack eliminates the need for the foil by using an enhanced barrier film to protect the contents from oxygen ingress, flavour migration and water, together with a pigmented laminated layer to block light. It is suitable for still drinks, juices and liquid dairy beverages.

Removing the metal foil means the carton can be safely heated in the microwave. It also reduces the life-cycle climate impact of the pack by up to 28%.[9] When promoting the new Heat&Go pack to customers, we are emphasising the dual value drivers of enhanced convenience and sustainability.

South Korea's Seoul Dairy Cooperative is the first customer to use Heat&Go – launching the pack with a nutritionally-rich, morning soy milk drink with chickpea protein, designed to be served as a warm, on-the-go breakfast.

[9] Calculation based on SIG life-cycle assessment tool from cradle to factory gate.

aluminium in our packs is sourced responsibly (see page 48).

Using waste materials in our packs

The feedstock used to produce some of the materials that go into our packs uses by-products from other industries, such as wood chips and tall oil that might otherwise be burnt to generate energy.

We are convinced that our use of these materials to create new products is a much better way to support the circular economy by retaining their natural and economic value as a resource for longer, particularly as our cartons can then be recycled into new products again after use.

However, it is unclear whether these materials can be considered as recycled content in our packs based on current definitions. We are working with suppliers to understand and measure how much content in our packs can be defined as recycled and to explore how we can integrate more recycled materials into our packs in future.

Partnering to increase recycling of carton packs

We monitor rates of recycling for beverage cartons across Europe through the European Alliance for Beverage Cartons and the Environment (ACE). In 2018, recycling rates in the EU continued to rise to 48% and we welcomed the introduction of mandatory separate collection of packaging waste as part of the new EU Packaging and Packaging Waste Directive.

Together with ACE industry partners, we have launched a new platform called EXTR:ACT to coordinate and drive solutions to enhance

SIG leads the industry with the first paper straw solution for beverage cartons

SIG is the first in the industry to offer a market-ready alternative to plastic straws to be attached to beverage cartons. This will help customers address growing consumer concerns about the impact of plastic straws on the environment and new regulations targeting straws and other single-use plastics.

The issue

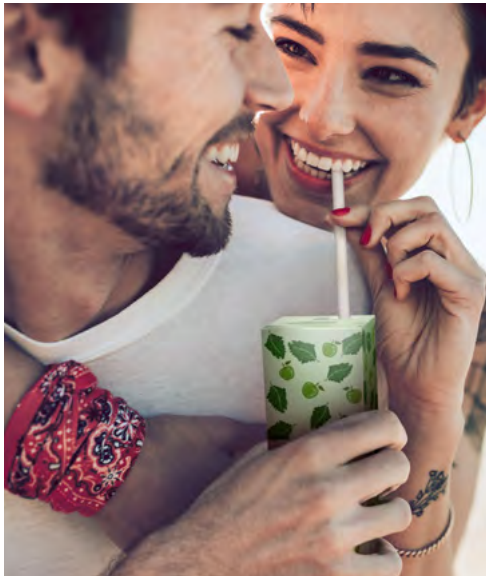
Recent high-profile campaigns have shone a spotlight on the proliferation of plastic straws found during coastal clean-ups and their potential to harm marine wildlife when discarded as litter.

Many consumers and companies are increasingly reluctant to use them and policymakers are also taking action. In 2018, Rio de Janeiro became the first city to ban the use of plastic straws and the EU is mandating member states to ban these and other single-use plastic items over time, following a consultation period.

Our response

We welcome the EU single-use plastics directive and share its ambition to transition to a circular economy.

SIG does not make plastic straws, but some of our portion-size packs are designed to be used with a straw to offer a convenient, easy-to-use solution for people on the go and help children and the elderly get essential nutrition. The plastic straws can be recycled together with carton packs when they are pushed inside the pack after use.



However, we are constantly looking for new ways to reduce our impact, and to help our customers meet their own sustainabiilty targets. We welcome international efforts to tackle the critical challenge of single-use plastic pollution and we are determined to do everything we can to be part of the solution.

Our paper straw solution

We have been investing in research and development of plant-based alternatives to plastic straws. Our new paper straw solution is renewable and recyclable.

We worked closely with a manufacturing partner to develop an innovative paper straw that is robust enough to pierce the closed straw hole of SIG's aseptic cartons. The wrapper for the straw has also been redesigned to help prevent litter by remaining attached to the pack to be recycled along with the rest of the carton.

The new paper straws will be made of paperboard from FSC™ certified forests or other controlled sources. Customers can already include the FSC label on any SIG carton and they will be able to add the label to the paper straws once the manufacturing partner has achieved FSC Chain-of-Custody certification, which is expected during the first half of 2019.

Our paper straw solution became available to customers in early 2019. Nestlé is the first customer to introduce the solution and has already tested the market launch in the Dominican Republic.

The initial volume of paper straws will be limited during the launch phase as SIG ramps up capacity with its manufacturing partner.

Exploring further innovations

The solution will not work with all our packs because the dimensions of some cartons are such that a straight straw that will fit on the side for distribution will not reach the corners when drinking the contents. To overcome this challenge, we are continuing to invest in new ways to apply this alternative straw solution to a wider variety of packaging formats.

collection, sorting and recycling of beverage cartons throughout Europe. In Germany, we are investing with industry partners in a new recycling facility for the polymer and aluminium components of beverage cartons. And in China, we partnered with others in our industry on two newly-formed committees to support government information campaigns and recycling projects.

Many of our customers are also targeting improvements in recycling rates for their products' packaging and we are exploring ways to support them. In Brazil, there is a particular urgency for our customers to support recycling programmes in order to comply with a regulation on reverse logistics that requires consumer companies to invest in projects that guarantee the return of a certain amount of consumer waste. In 2018, we ran a seminar to inform customers about this regulation and offer advice on how they can fulfil their obligations through impactful programmes. Around 100 people attended and the online webinar had more than 1,700 views.

We have developed an innovative model, in partnership with the NGO Recicleiros, for programmes to help cities improve recycling rates by investing in segregated waste collection services what they would have spent on fees to dispose of waste in landfills. More than 600 municipalities applied, pilot programmes are being planned in two cities and three more were selected to participate in 2018. Our customers can choose to invest in these programmes as a way to meet their obligations on reverse logistics.

We are partnering with customers to support targeted programmes in countries such as Indonesia and Nigeria where national recycling rates are currently very low. In Bangladesh, the packs from our flagship Cartons for Good project will be sent for recycling locally (see page 25).

Raising consumer awareness of recycling

We continued to contribute to a range of initiatives to raise awareness of recycling among consumers in 2018. In Brazil, we have launched an innovative programme with social enterprise SO+MA House that encourages people in low-income communities to recycle by enabling them to use their waste packaging as currency to pay for food and other products (see case study).

To educate children about the importance of recycling, we partnered with customers in Brazil to sponsor a play that was performed at schools in the city of Araguari and to train 50 teachers in the city of Feira de Santana. In Austria and Germany, we got children involved through games and activities to sort waste and make useful new products out of used cartons.

In Indonesia, we are working with one of our customers to raise awareness of the recyclability of our packs through a programme called 'Thanks To Nature'. We also engaged with the community near our Rayong site in Thailand to build a school canteen out of recycled cartons (see page 40).

Turning waste into essentials for low-income communities in Brazil

We're partnering with social enterprise, SO+MA, to offer loyalty points with a difference in the Brazilian city of Curitiba. Opened in December 2018, SO+MA House rewards people for recycling their waste. Over half a tonne of packaging was collected for recycling in the first two weeks.

The idea is simple. People take used packaging to the house – an old shipping container – and they are awarded loyalty points based on the weight of waste they have collected. They can then exchange their points for food and other essential products and services, or use them to pay for a training course to learn a new skill. With incentives like this, why not recycle?

Everyone wins. The environment benefits by avoiding impacts from landfill and making more materials available to be used again. Low-income communities can improve their quality of life through opportunities to save money on essentials and learn new skills. And our customers are earning brand loyalty to boost sales in the region by getting involved and donating products.

FILLING MACHINES & TECHNICAL SERVICE

MATERIAL ISSUES
- **SUSTAINABLE PRODUCT INNOVATION**
- **EFFICIENT FILLING MACHINES**

SIGNIFICANT IMPACT
- **ENVIRONMENTAL, SOCIAL, ECONOMIC** *(SUSTAINABLE PRODUCT INNOVATION)*

GRI INDICATORS
N/A

KEY POLICIES
- **GLOBAL R&D PROCESS HANDBOOK**
- **POLICY ON REUSE AND DISPOSAL OF USED EQUIPMENT**

RELEVANT SDGs

OUR APPROACH

Why is this material for SIG?

Our machines play an essential role in helping our customers package billions of packs of food in aseptic conditions every year, ready to deliver valuable nutrition safely to consumers.

Customers want to manage resource consumption and running costs associated with the use of our filling machines in their factories. Many of them also have objectives to cut the environmental footprint of their operations. We can help them do both through our eco-efficient design of new machines, as well as through technical service for existing machines and best practice sharing which helps us strengthen customer relationships.

Management overview

We pride ourselves on offering highly-efficient filling machines with the lowest waste rate in the industry – 0.5% or less on average.

We aim to improve efficiency with each new generation by reducing the amount of resources needed to run the machines at our customers' factories. This includes energy for heating and sealing the packs, and compressed air, hydrogen peroxide and water used in the sterilisation and packaging process.

Our Global Research and Development team tests out new technologies for our next generation filling machines and the Global Engineering & Application team focuses on product developments for our existing filling machines operating in our customer's plants.

SIG filling machines often remain in use for decades at customer facilities. We offer a range of technical service options to help optimise the technical and resource efficiency of our filling machines, and minimise downtime for repairs. These range from routine servicing plans to performance-based packages where we share responsibility with the customer to meet an agreed level of operational or technical efficiency.

Our focus on the operational efficiency of our customers' production lines is closely linked with eco-efficiency because optimising process efficiency also minimises resource use and associated running costs. For example, regular maintenance helps reduce waste of resources such as energy and water – as well as the packs and the food products that go into them – by preventing faults that could stop production or generate faulty packs that can't be sold.

We have refined our approach this year to conduct an in-depth analysis of individual customer needs to understand how we can help them improve efficiency. This includes engaging with customers about how we can support their environmental objectives, not just through technical service of our machines but by advising on environmental and technical improvements across their factories. We are adding new criteria into our customer relationship management tool to identify which of our services can offer measurable improvements in environmental performance.

As part of our commitment to responsible products across the life-cycle, we also work with customers to ensure that our filling machines and their parts are recycled or disposed of responsibly at end of life. Our policy on reuse and disposal of used equipment includes responsibility requirements for waste service.

OUR GOALS

2020 TARGET

Reduce energy use by 20% per hour of runtime in our next generation filling machine
MORE WORK TO DO

Reduce hydrogen peroxide use by 35% per hour of runtime in our next generation filling machine
MORE WORK TO DO

Reduce water use by 25% per hour of runtime in our next generation filling machine
MORE WORK TO DO

Support sustainability improvements for at least 50% of our customers through technical service
ON TRACK

PERFORMANCE IN 2018

We have re-opened the concept phase for our next generation filling machine to realign the project focus due to changes in market demands. The feasibility phase will start in 2019. It will include a new system to further reduce food waste and other features designed to reduce resource consumption and help us achieve our targets.

In the meantime, we are helping customers improve the efficiency of the SIG machines they are already using in their factories through our Technical Service solutions. In 2018, we began introducing new criteria to help us measure progress towards our goal to support sustainability improvements for at least 50% of our customers through technical service. Our initial analysis shows that 20% of our customers have been reached since 2016.

Enhancing efficiency through machine upgrades

We offer a range of upgrade kits that can be retrofitted to existing machines to enhance efficiency, such as vacuum pumps to reduce the amount of compressed air needed in production.

In 2018, we introduced a new technical service solution that helps to avoid food waste and reduce downtime when switching between different foods and beverages to be packaged. Rather than wasting any food left in the tank, this keeps it sterile during production change-overs so it can be filled into saleable packs.

We also began marketing a conversion kit that cuts water use by an estimated 50-60% in our medium format third generation machines and we plan to develop a similar solution for our small format machines. We have now begun selling cleaning machines that we developed to save water, energy and time used for manual cleaning.

Our new eco-mode solution is being piloted to help customers avoid wasting energy when there is a pause in production but the filling machine is still on. This standby mode can reduce energy use by around 80% during production breaks, while remaining sterile and ready for a quick restart. One of the first customers to pilot the solution in Europe demonstrated savings of up to 1,000 kWh of electricity in 2018.

Maintenance for optimum efficiency

Our technical service engineers provide regular maintenance of our filling machines to improve efficiency and reduce downtime.

In 2018, we started a new digital solution project in partnership with GE Digital, which improves preventative maintenance by predicting when a machine may need servicing or a part may need replacing. The digital solution monitors and analyses performance data from our machines to enable us to schedule maintenance at the right time to optimise the life of machine parts while avoiding downtime.

The system will also enable our engineers to work more efficiently by giving them real-time data on the maintenance each machine needs and supporting the transition from paper-based ways of working to smart digital tools. We aim to roll out digital services on a global basis, with pilot customers selected in 2018.

We are also continuing to explore the potential to develop a global certification programme to show that the environmental performance of a filling machine has been checked or improved through regular preventative maintenance or technical upgrades.

Sharing our expertise with customers

We train customer technicians on how to use SIG machines efficiently at our training centres around the world.

When visiting customers' facilities, our engineers don't just help customers with the efficiency of our machines, they also look out for opportunities for customers to improve efficiency and reduce environmental impacts across their factories. In response to growing customer interest in this type of service, we are developing a checklist to help our technical service teams do this in a more systematic way.

We have also begun to offer consulting services to advise customers on measures for optimisation of processes across their sites. For example, in 2018 we began a project with a customer in the US to analyse their entire production process from upstream processes to production planning, warehousing, maintenance and quality processes.

Remote service decreases downtime and travel

Downtime in production wastes time, money and resources. When problems arise, customers want solutions fast and 83%[10] said they would be interested in remote service to cut response times.

We've launched a new solution that uses state-of-the-art technology to enable our engineers to 'see' the problem remotely through video glasses worn by personnel on site. This avoids the need to travel to customer sites to diagnose issues and means we can fix more problems on our first visit by taking the right parts with us.

Our remote service solution gives customers quick access to our global experts – and helps us reduce time and environmental impacts from travel.

[10] Based on 76 customers surveyed.

THE FILLING PROCESS

Our flat-packed cartons ('sleeves') are pushed into shape and the base is sealed using heat to melt the polymer layers together.

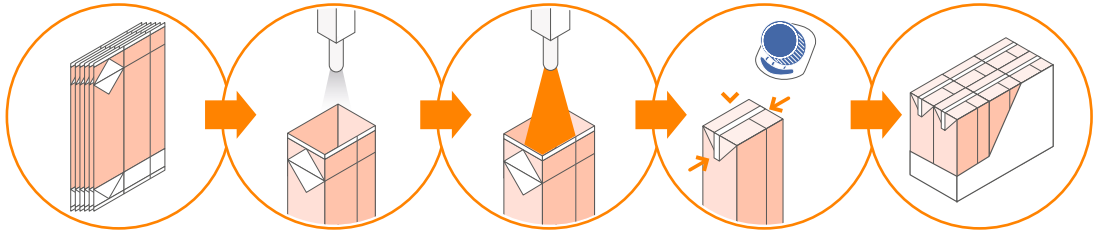
The formed cartons are sterilised with a small amount of vaporised hydrogen peroxide (35% concentration in water) and then dried.

Our customers' food product, sterilised using ultra-high temperature (UHT) equipment, is pumped in to fill the sterilised cartons inside the aseptic zone of the machine.

Filled cartons are sealed above the product level to reduce the risk of contamination from food getting caught in the sealed seam.

Optional closures, such as caps or spouts, may be applied to the filled cartons.

The filled cartons are bundled in secondary packaging ready for distribution to retail outlets.



PRODUCT SAFETY

MATERIAL ISSUES
- **SAFE NUTRITION**

SIGNIFICANT IMPACTS
- **SOCIETAL, ECONOMIC** *(SAFE NUTRITION)*

GRI INDICATOR

KEY POLICIES
- **PRODUCT SAFETY POLICY & PRINCIPLES**

RELEVANT SDG

OUR APPROACH

Why is this material for SIG?

The core function of our aseptic packaging solutions is their ability to conserve food quality to deliver nutrition to consumers in a healthy and safe way. We play an important role in supporting sustainable development by helping customers deliver nutrition safely to people around the world.

The safety and quality of our own products are critical for us to be able to fulfil this role and customers – and consumers – expect our packs to protect the food inside effectively without posing any safety risks. With strict customer requirements and regulations to meet, the safety and quality of our products are fundamental to our licence to operate.

Management overview

Aseptic processing helps to retain more colour, flavour and nutrients in food products than other sterilisation techniques and our aseptic carton packs store high-quality food for long periods of time without the need for refrigeration or preservatives.

Ensuring the quality and safety of our products is essential as defects in our packs could lead to contamination of the food inside. For example, if a carton is not sealed properly, the food inside will not be preserved effectively.

We have robust quality management systems, certified to the international ISO 9001 standard, at all our production plants and research and development centres. We train production staff annually to support the implementation of these systems and reinforce a culture of product quality through regular communication. The message is clear: make sure no defects leave our plant.

Our quality management procedures help us identify, address and monitor potential risks to product safety in our own production processes and SIG filling operations in our customers' factories.

We conduct internal audits of quality and safety criteria at our sites every year to identify and address any potential risks. As part of our commitment to product safety through the value chain, we extend quality requirements to suppliers of the materials that go into our packs and we monitor their compliance through our supplier audit process (see page 45).

Our production plants are also audited annually to retain their certification to the British Retail Consortium (BRC) packaging standard. This standard, required by many of our customers, makes sure appropriate processes are in place to ensure no foreign bodies enter our packs during production and prevent any defects that could affect the quality of the food inside.

We also emphasise quality by design, working with customers to make sure product quality and safety are maintained when our packs are assembled and filled in their factories. This includes training for customer teams and maintenance of the filling machines by our technical service engineers. We regularly assess the health and safety impacts of all our products and services and use our management systems to support continuous improvement.

OUR GOALS

2020 TARGET

All production plants certified based on ISO 9001:2015 and all sleeves and spout production plants certified based on BRC Packaging Issue 5 with AA Grade

ON TRACK

PERFORMANCE IN 2018

Certifying our quality management systems

In 2018, we completed our transition to the revised ISO 9001:2015 standard, achieving group-wide certification for our quality management systems.

Five of our production plants achieved AA Grade certification to the revised Issue 5 of the BRC packaging standard in the latest round of audits in 2017/18. Two retained their A grade status and are working towards AA Grade.

This year, we extended our annual internal quality assessments for production sites to our New Zealand paper mill for the first time in its role as an internal supplier of liquid packaging board for our packs. The site also achieved AA Grade in its BRC audit.

The six production sites that make our products for the US market have been approved by the US Food and Drug Administration (FDA) and in 2018 we received FDA approval for our new small format filling system.

ABOUT OUR **REPORTING**

This appendix explains how we identified our material issues and determined the content of this report, maps our reporting against the United Nations Global Compact principles and the Global Reporting Initiative Standards, and provides an external assurance statement and a summary of our key performance indicators.

IN THIS SECTION

DETERMINING REPORT CONTENT

We updated our materiality assessment in 2018 to determine the issues that are most important to our business and our stakeholders – and identify where we have the most significant impacts. The resulting material issues influence the focus areas for our responsibility roadmap and the content for our reporting.

GRI INDICATOR

General Disclosures GRI 102-46

General Disclosures GRI 102-47

Identifying our material topics and impacts

We worked with expert sustainability consultants to identify the CR topics that are relevant to our industry. Some new topics were added to the list in 2018. Others were grouped or refocused to better reflect our net positive approach.

We used a variety of internal and external inputs to assess the importance of each issue to different stakeholder groups and key areas of our business. We also analysed where we have the greatest impact on the economy, environment and society.

The results were plotted on a materiality matrix (see page 17) and we set a threshold to identify our most material issues as those scoring 80% or above on either or both axes.

Our Responsibility Steering Group and Group Executive Board reviewed the findings of our materiality assessment, and validated the prioritisation of topics and most significant impacts. We also obtained external validation through a review by informed sustainability experts.

Defining reporting boundaries

The table below defines our most material issues and the boundaries of where each impact occurs within or outside the organisation. It also highlights the six material issues where we believe our activities have the most significant environmental, economic and societal impact.

Our material issues determine the content of our reporting, including which of the GRI Standards to report on – as noted in our index of reporting against the GRI Standards (see page 72) – and the level of coverage and boundaries for each. We also report on some additional strategic topics that are included in our responsibility roadmap (see page 18).

MATERIAL ISSUE	DEFINITION	BOUNDARIES				SIGNIFICANT IMPACT
			OUTSIDE ORGANISATION			
		WITHIN ORGANISATION	SUPPLIERS	CUSTOMERS	CONSUMERS	
DIVERSITY & EQUAL OPPORTUNITY	Efforts to prevent discrimination on any grounds and create an inclusive workplace where a range of nationalities and cultures are represented, and where there are equal professional opportunities regardless of gender, age or disability.	■				
TALENT DEVELOPMENT	Investing in and developing employees to create a workforce that meet the needs of the business now and in the future.	■				
EMPLOYEE ENGAGEMENT	Efforts to listen to employees and respond to their views to sustain strong levels of job satisfaction, motivation and engagement in the business.	■				
EMPLOYEE REWARD & RECOGNITION	Ensuring the company offers fair pay, rewards employees based on performance and is transparent about remuneration practices.	■				

MATERIAL ISSUE	DEFINITION	BOUNDARIES				SIGNIFICANT IMPACT
			OUTSIDE ORGANISATION			
		WITHIN ORGANISATION	SUPPLIERS	CUSTOMERS	CONSUMERS	
OCCUPATIONAL HEALTH & SAFETY	Efforts to eliminate all serious accidents and manage occupational health and safety risks to ensure that employees do not come to any harm while at work.	■				
FAIR LABOUR PRACTICES	Efforts to uphold labour rights, including preventing modern slavery (human trafficking, forced and compulsory labour, bonded labour and slavery) and preventing the use of child labour in the company's operations.	■				
RESPONSIBLE SUPPLIERS	Efforts to ensure that suppliers uphold appropriate standards on sustainability issues such as ethical conduct, labour practices, and environmental and health and safety management.		■			
SUSTAINABLE RAW MATERIALS	Efforts to use raw materials from responsible and sustainable sources, including upholding indigenous rights and ensuring a security of supply of raw materials.	■	■			●
THRIVING FORESTS	Efforts to use pulp and paper products from responsible and sustainable sources that promote thriving forest ecosystems and support the people who depend on these.	■	■	■		●
SAFE NUTRITION	Efforts to support the delivery of safe nutrition by providing high-quality products to ensure the quality, hygiene and safety of the food contained in the company's packaging.	■			■	●
SUSTAINABLE PRODUCT INNOVATION	Investing in research and development to better meet the needs of consumers and customers, including enhancing the environmental credentials of the company's packaging products and filling machines.	■		■		●
EFFICIENT FILLING MACHINES	Efforts to minimise customers' environmental impacts by ensuring that the company's filling machines are energy and water efficient and do not produce excessive waste.			■		
RECYCLING & CIRCULAR ECONOMY	Efforts to support the principles of a circular economy by designing out waste, ensuring that the company's products are easily and fully recyclable, ensuring/improving recyclability of plastics, supporting the development of appropriate infrastructure to collect and recycle the company's products after consumer use, keeping products and materials in use by using recycled content, transitioning to renewable sources and regenerating natural systems.	■	■	■	■	●
TACKLING CLIMATE CHANGE	Efforts to mitigate climate change by reducing greenhouse gas emissions associated with the company's value chain (through, for example, energy efficiency and use of renewable energy) and efforts to adapt to a changing climate to ensure continuity of production and supply.	■	■	■	■	●
MINIMISING PRODUCTION WASTE	Efforts to reduce and recycle waste from the company's operations.	■				

UNITED NATIONS GLOBAL COMPACT: COMMUNICATION ON PROGRESS 2018

We support the United Nations Global Compact's 10 principles on human rights, labour, environmental protection and anti-corruption.

GRI INDICATOR

General Disclosures GRI 102-11

This report is our annual Communication on Progress for 2018. The table below sets out our approach to upholding each of the principles, highlighting specific progress and outcomes in 2018 where applicable.

For more information on our commitment to support the United Nations Sustainable Development Goals, see page 14.

UN GLOBAL COMPACT
COMMUNICATION ON PROGRESS

This is our **Communication on Progress** in implementing the principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

GLOBAL COMPACT PRINCIPLE	OUR APPROACH	FIND OUT MORE
Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights	We are committed to respecting human rights in our business and our supply chain through the SIG Code of Conduct and the SIG Business Ethics Code for suppliers. Regular Supplier Ethical Data Exchange (SEDEX) Members Ethical Trade Audits (SMETA) of our business help to ensure that we uphold high standards on human rights. All our production sites were audited in 2016 and the next audits of these sites are due in 2019. Our New Zealand paper mill also completed a SMETA audit in 2018.	SIG Code of Conduct SIG Business Ethics Code See pages 38 and 45
Principle 2: Businesses should make sure that they are not complicit in human rights abuses		SIG Business Ethics Code
Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	We respect the right to freedom of association and collective bargaining, and the SIG Business Ethics Code requires suppliers to uphold these rights too. A significant proportion of our employees are covered by collective labour agreements and, in Europe, many are represented by works councils.	SIG Business Ethics Code

GLOBAL COMPACT PRINCIPLE	OUR APPROACH	FIND OUT MORE
Principle 4: Businesses should uphold the elimination of all forms of forced and compulsory labour **Principle 5: Businesses should uphold the effective abolition of child labour**	We do not tolerate forced, compulsory or child labour and we require the same commitment from suppliers through the SIG Business Ethics Code.	SIG Business Ethics Code
Principle 6: Businesses should uphold the elimination of discrimination in respect of employment and occupation	We do not tolerate discrimination of employees or suppliers' workers based on race, religion, national origin, sex, sexual orientation, disability, age or any other relevant category. In 2018, diversity and inclusion has emerged as a material issue for SIG for the first time and we have set a target to establish a strategy and steering group to strengthen our approach in this area.	SIG Code of Conduct SIG Business Ethics Code See page 31
Principle 7: Businesses should support a precautionary approach to environmental challenges	We comply with applicable environmental legislation across our operations and we require our suppliers to do the same. We take a precautionary approach to environmental challenges such as climate change by proactively identifying and managing emerging risks. This applies across our value chain and specific policies also address environmental risks associated with sourcing of our three key raw materials: liquid packaging board, polymers and aluminium.	SIG Code of Conduct SIG Business Ethics Code Liquid Packaging Board Purchasing Policy
Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility	Environmental responsibility is an integral part of our business strategy. We aim to minimise our environmental impacts and we are striving for a net positive footprint by contributing more to the environment than we take out across our value chain. In 2018, our greenhouse gas reduction goals were approved by the Science-Based Targets Initiative, we completed the switch to 100% renewable energy at our production sites worldwide and our new technical centre in China achieved platinum certification to the LEED sustainable building standard. We demand high standards of environmental responsibility from our suppliers. The SIG Business Ethics Code requires suppliers to run their business in a way that protects and preserves the environment. We also encourage suppliers to adopt their own net positive commitment and one of the main suppliers of liquid packaging board for our packs, the Stora Enso Consumer Board Division, is a fellow member of the Net Positive Project. We are partnering with peers and stakeholders to improve infrastructure for collecting and recycling beverage cartons after use, and in 2018 we announced several major new initiatives in Europe and Brazil.	SIG Code of Conduct SIG Business Ethics Code See pages 27-30, 41-52, 53-65
Principle 9: Businesses should encourage the development and diffusion of environmentally friendly technologies	Our corporate purpose sets out our commitment to partner with customers to deliver food and beverages to consumers across the world in a sustainable way. Our goal is to offer the most sustainable food packaging solutions on the market. In 2018, independent life-cycle assessments showed that our **SIG**NATURE PACK, the world's first aseptic carton linked to up to 100% forest-based renewable material,[1] has a significantly lower carbon footprint than our standard packs. Our combibloc RS structure, launched in 2016, reduces the amount of polymer needed to make our packs and we have introduced further technical upgrades to improve the environmental performance of filling machines in our customers' factories.	See pages 53-65
Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery	We have zero tolerance for bribery or corruption in any form. Our anti-corruption policy is included in the SIG Code of Conduct and reinforced through training. In 2017 and 2018, we completed training on our new gifts policy for around 230 employees in high-risk roles. We encourage people to report any concerns about bribery, corruption or any other ethical issues via our ethics and compliance hotline. We investigate any suspected breaches and take disciplinary and other appropriate actions accordingly.	SIG Code of Conduct See page 38

[1] Via a mass balance system

GLOBAL REPORTING INITIATIVE INDEX

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option. The index below shows which indicators are material to SIG, which are reported and where to find more information.

GRI INDICATOR

SIG MATERIAL TOPIC	GRI No.	DISCLOSURE	WHERE TO FIND IT IN THE REPORT/OMISSIONS
		Management Approach 103	
Talent development **Employee engagement** **Employee reward & recognition** **Diversity and equal opportunity**	**103-1**	Explanation of the material topic and its Boundary	See Determining report content, page 68.
	103-2	The management approach and its components	See Employees on page 31 for policies, commitments, goals, resources and specific actions. Responsibilities: The Global Human Resources team is responsible for managing our approach and delivering our goals in these areas, and our newly appointed Group HR Manager Corporate Social Responsibility will help to drive progress. Grievance mechanism: We are always open to employee feedback and employees can report concerns through their supervisors or the Ethics & Compliance Hotline.
	103-3	Evaluation of the management approach	We evaluate our performance through our biennial company-wide employee survey and regular dialogue with our people.
Occupational health and safety	**103-1**	Explanation of the material topic and its Boundary	See Determining report content, page 68.
	103-2	The management approach and its components	See Health and safety, page 35 for policies, commitments, goals, resources and specific actions. Responsibilities: The Group Executive Board reviews a dashboard of health and safety metrics each month and safety performance is highlighted by the CEO on a quarterly call with executives. Grievance mechanism: We are always open to employee feedback and employees can report concerns through their supervisors or the Ethics & Compliance Hotline.
	103-3	Evaluation of the management approach	We evaluate how effectively our sites manage health and safety through annual self-assessments, based on OSHAS 18001 and audited by our Group Corporate Responsibility team. The team monitors health and safety performance monthly using a dashboard of metrics that includes both lagging indicators (such as the lost-time case rate) and leading indicators (such as implementation of safety programmes).

SIG MATERIAL TOPIC	GRI No.	DISCLOSURE	WHERE TO FIND IT IN THE REPORT/OMISSIONS
Tackling climate change **Minimising production waste**	**103-1**	Explanation of the material topic and its Boundary	See Determining report content, page 68. Scope 1 and 2 emissions from our paper mill in New Zealand are reported separately and included in the Scope 3 total as the mill is treated as an internal supplier.
	103-2	The management approach and its components	See Environmental footprint on page 27 and energy sourcing on page 49 for policies, commitments, goals, resources and specific actions. See also the related topics (below) of Sustainable raw materials, Sustainable product innovation, and Recycling and circular economy, which support our efforts to mitigate and adapt to climate change. Responsibilities: Dedicated environmental teams at each production plant are responsible for raising awareness and promoting initiatives to improve energy efficiency and reduce waste, with support and oversight from the Group Corporate Responsibility team. Our Global Sourcing and Procurement team is responsible for energy sourcing. See also the related topics (below) of Sustainable raw materials, Sustainable product innovation, and Recycling and circular economy. Grievance mechanism: Concerns related to any responsibility issues can be reported through our Ethics & Compliance Hotline.
	103-3	Evaluation of the management approach	The Group Corporate Responsibility team monitors performance related to our operational environmental footprint using a dashboard of metrics that is reviewed monthly by the Group Executive Board. These include lagging indicators (such as energy consumption, greenhouse gas emissions and waste, and associated rates) and leading indicators (such as the number and status of environmental projects, the effectiveness of environmental training and the timely completion of actions following environmental audits). Our performance on energy sourcing is reviewed quarterly by the VP of Global Sourcing and Procurement who reports to the Responsibility Steering Group.
Fair labour practices	**103-1**	Explanation of the material topic and its Boundary	See Determining report content, page 68.
	103-2	The management approach and its components	See Governance and ethics on page 38 and Responsible suppliers on page 45 for policies, commitments, goals, resources and specific actions. Responsibilities: Responsibility for fair labour practices lies with our Global Human Resources team in our own operations and with the Global Sourcing and Procurement in our supply chain. Global Legal and Compliance team is responsible for ethics and governance, and leads investigations into any reported concerns with support from Global Human Resources and Internal Audit. Grievance mechanism: Employees can seek advice or raise concerns through their line managers, the Global Legal and Compliance team or anyone within or outside our business can raise concerns confidentially (and anonymously where permitted by local legislation) via our 24-hour external ethics and compliance hotline.
	103-3	Evaluation of the management approach	Our commitment to fair labour practices is evaluated through Supplier Ethical Data Exchange (SEDEX) Members Ethical Trade Audits (SMETA) at our sites and assessments of our global policies and performance by EcoVadis. This topic is also part of supplier assessments and audits of high-risk suppliers and performance (see responsible suppliers below).
Responsible suppliers **Sustainable raw materials** **Thriving forests**	**103-1**	Explanation of the material topic and its Boundary	See Determining report content, page 68.
	103-2	The management approach and its components	See Responsible suppliers on page 45 and Sustainable raw materials on page 47 for policies, commitments, goals, resources and specific actions. Responsibilities: The VP of Global Sourcing and Procurement is responsible for the management of our responsible sourcing activities, implemented by his team and supported by the Global Corporate Responsibility team. Global Category Leads and Regional Strategic Sourcers are responsible for the implementation of our requirements on responsible sourcing in our local procurement processes and for monitoring suppliers' compliance. Responsible sourcing for our machine assembly division is managed by the Global Head of ESP who reports to the Global Assembly & SCM Director. Grievance mechanism: Concerns related to any responsibility issues can be reported through our Ethics & Compliance Hotline.
	103-3	Evaluation of the management approach	We evaluate our suppliers' policies and performance on CR topics through assessments and audits of high-risk suppliers. Our performance in this area is reviewed quarterly by the Vice President of Global Sourcing and Procurement who reports to the Responsibility Steering Group twice a year.

SIG MATERIAL TOPIC	GRI No.	DISCLOSURE	WHERE TO FIND IT IN THE REPORT/OMISSIONS
Sustainable product innovation **Efficient filling machines**	**103-1**	Explanation of the material topic and its Boundary	See Determining report content, page 68.
	103-2	The management approach and its components	See Our Packs on page 58 and our Filling machines and technical service on page 64 for policies, commitments, goals, resources and specific actions. Responsibilities: Sustainable product innovation in our packs is led by our Global Technology team, with support from our Global Marketing team and our Chief Market Officer who sits on the Group Executive Board. The technology and sourcing divisions work closely together to source suitable materials to help make our products more sustainable. Our Global Technology team is responsible for sustainable product innovation in our filling machines. Grievance mechanism: Concerns related to any responsibility issues can be reported through our Ethics & Compliance Hotline.
	103-3	Evaluation of the management approach	We evaluate performance through internal audits and regular reviews of progress by our Responsibility Steering Group and our Group Executive Board.
Recycling and circular economy	**103-1**	Explanation of the material topic and its Boundary	See Determining report content, page 68.
	103-2	The management approach and its components	See Our packs on page 58 for policies, commitments, goals, resources and specific actions. Responsibilities: Design for recycling and recycled content is led by our Global Technology team as part of our focus on sustainable product innovation, with support from our Global Marketing team and our Chief Market Officer who sits on the Group Executive Board. See also Sustainable product innovation above. Our Regional Presidents for Americas, Asia Pacific and Europe, who sit on our Group Executive Board, are responsible for driving and monitoring progress on supporting collection and recycling of used beverage cartons. The development and roll-out of this approach is led by the Regional President for Europe. Grievance mechanism: When partnering with stakeholders to implement local collection and recycling initiatives, we make sure these include grievance mechanisms for those involved to raise any concerns. Concerns related to any responsibility issues can also be reported through our Ethics & Compliance Hotline.
	103-3	Evaluation of the management approach	We will evaluate progress on recycling through a range of indicators, including the percentage of priority countries with a recycling strategy and suitable stakeholder partnership or industry collaboration in place to help improve recycling rates. The effectiveness of our approach is monitored through internal audits and as part of the Group Executive Board's regular review of performance against our responsibility roadmap. See also Sustainable product innovation above.
Safe nutrition	**103-1**	Explanation of the material topic and its Boundary	See Determining report content, page 68.
	103-2	The management approach and its components	See Product safety, page 66 for policies, commitments, goals, resources and specific actions. Responsibilities: Designated quality management and product safety representatives in each location and department are responsible for implementing our quality and safety management systems, under the guidance of the Head of Global Quality Management Responsibility. Grievance mechanism: We welcome customer feedback and any customer complaints or critical incidents are escalated to management through our integrated complaint and claim management system, and our CEO is kept informed.
	103-3	Evaluation of the management approach	Product quality is closely monitored through our global quality and product safety management reporting system and the Group Executive Board receives a monthly report on our quality management.

TOPIC	No.	DISCLOSURE	MATERIAL (Y/N)	REQUIRED FOR CORE	REPORTED (Y/N/ PARTIAL)	REASON FOR OMISSION	WHERE TO FIND IT IN THE REPORT
		General Disclosures 102					
Organisational profile	**102-1**	Name of the organisation		Y			SIG Combibloc Group AG and its affiliates (together "SIG")
	102-2	Activities, brands, products, and services		Y	Y		SIG's primary brand as an integrated packaging systems supplier is the SIG brand. Our primary products and services are food and beverage carton packages and closures, filling machines and secondary packaging machines (downstream), and technical services including spare parts. We combine and apply our various products and services into integrated customer solutions. See Our business, page 7.
	102-3	Location of headquarters		Y	Y		Neuhausen, Switzerland. See Our business, page 8.
	102-4	Location of operations		Y	Y		See Our business, page 8.
	102-5	Ownership and legal form		Y	Y		The parent company of the SIG Group is SIG Combibloc Group AG, with domicile in Neuhausen, Switzerland. Since 28 September 2018, it has been listed on the SIX Swiss Stock Exchange. Prior to that it was owned by Onex Corporation, a Canadian private equity firm.
	102-6	Markets served		Y	Y		See Our business, page 7.
	102-7	Scale of the organisation		Y	Y		See Our business, page 7.
	102-8	Information on employees and other workers		Y	Y		We have more than 5,000 employees around the world and a small number of contractors also work regularly at our sites, mainly for catering, cleaning and security. See Employees, page 32.
	102-9	Supply chain		Y	Y		See Our supply chain, page 44.
	102-10	Significant changes to the organisation and its supply chain		Y	Y		There was a significant change to the ownership of our organisation in the reporting period (see 102-5 above).
	102-11	Precautionary Principle or approach		Y	Y		See United Nations Global Compact Communication on Progress, page 71.
	102-12	External initiatives		Y	Y		We support the United Nations Global Compact (see page 70) and the United Nations Sustainable Development Goals (see page 14). SIG is a member of the Supplier Ethical Data Exchange (SEDEX), is rated Gold by EcoVadis, and is certified to recognised standards such as ISO 9001 and ISO 14001. We also participate in certifications initiatives run by the Forest Stewardship Council (FSC), Aluminium Stewardship Initiative (ASI), and International Sustainability and Carbon Certification (ISCC).
	102-13	Membership of associations		Y	Y		At corporate level SIG is a member of various industry associations and advocacy organisations. Key organisations include: Alliance for Beverage Cartons and the Environment (ACE); Aluminium Stewardship Initiative (ASI), The Consumer Goods Forum; European Bioplastics Association; European Organisation for Packaging and the Environment (EUROPEN); Flexible Packaging Europe (FPE); Forum for the Future; Forest Stewardship Council (FSC) International; The Net Positive Project; The Science Based Targets Initiative; Technical Association of the Pulp and Paper Industry (TAPPI). In addition, SIG is member of numerous national alliances and initiatives in our core markets.

TOPIC	No.	DISCLOSURE	MATERIAL (Y/N)	REQUIRED FOR CORE	REPORTED (Y/N/ PARTIAL)	REASON FOR OMISSION	WHERE TO FIND IT IN THE REPORT
Strategy	**102-14**	Statement from senior decision-maker		Y	Y		See Message from our CEO, page 5.
	102-15	Key impacts, risks, and opportunities		N	P	Not required for core	A list of key business risks related to CR topics is reported. See Responsibility built in, page 9.
Ethics and integrity	**102-16**	Values, principles, standards, and norms of behaviour		Y	Y		See Responsibility built in on page 9 and Governance and ethics on page 38.
	102-17	Mechanisms for advice and concerns about ethics		N	Y		See Governance and ethics, page 38.
Governance	**102-18**	Governance structure		Y	Y		See Responsibility built in, page 9.
	102-19 to 102-39			N	N	Not required for core	
Ethics and integrity	**102-40**	List of stakeholder groups		Y	Y		See Listening and responding to stakeholders, page 15.
	102-41	Collective bargaining agreements		Y	Y		See Governance and ethics, page 38.
	102-42	Identifying and selecting stakeholders		Y	Y		We identified relevant stakeholders and considered the topics that are most important to them through our materiality process. The list of stakeholders we engage most with is included in Listening and responding to stakeholders, page 15.
	102-43	Approach to stakeholder engagement		Y	Y		See Listening and responding to stakeholders, page 15.
	102-44	Key topics and concerns raised		Y	Y		See Listening and responding to stakeholders, page 15.
Reporting practice	**102-45**	Entities included in the consolidated financial statements		Y	Y		Parent company: SIG Combibloc Group AG, Switzerland (prior to September 2018, the parent company was SIG Combibloc Group Holdings S.à r.l., Luxembourg) Subsidiaries: SIG Combibloc Holdings GP S.à r.l, SIG Combibloc Holdings S.à r.l., SIG Combibloc PurchaseCo S.à r.l., SIG Schweizerische Industrie-Gesellschaft GmbH, SIG Combibloc US Acquisition Inc., SIG Combibloc US Acquisition II Inc., SIG Combibloc Argentina S.R.L., Combibloc S.R.L., Whakatane Mill Australia Pty Ltd., SIG Austria Holding GmbH, SIG Combibloc GmbH, SIG Combibloc GmbH & Co. KG, SIG Combibloc Bangladesh Ltd., SIG Beverages Brasil Ltda., SIG Combibloc do Brasil Ltda., SIG Combibloc Chile Ltda., SIG Combibloc (Suzhou) Co. Ltd., SIG Combibloc s.r.o., SIG Combibloc S.à.r.l., SIG Combibloc GmbH, SIG Combibloc Holding GmbH, SIG Combibloc Systems GmbH, SIG Combibloc Zerspanungstechnik GmbH, SIG Euro Holding GmbH, SIG Information Technology GmbH, SIG International Services GmbH, SIG Combibloc Kft., SIG Combibloc India Private Ltd., P.T. SIG Combibloc Indonesia, SIG Combibloc S.r.l., SIG Combibloc Korea Ltd., SIG Combibloc Malaysia SDN. BHD, SIG Combibloc México, S.A. de C.V., SIG Combibloc B.V., Whakatane Mill Ltd., SIG Combibloc Sp. z o.o., SIG Combibloc Services S.R.L., OOO SIG Combibloc, SIG Combibloc S.A., SIG Combibloc AB, SIG allCap AG, SIG Combibloc Services AG, SIG Combibloc Procurement AG, SIG Combibloc Receivables Management AG, SIG Technology AG, SIG Combibloc Taiwan Ltd., SIG Combibloc Ltd., SIG Combibloc Ltd., SIG Combibloc Inc., SIG Holding USA, LLC, SIG Vietnam Ltd. Joint ventures: SIG Combibloc Obeikan Company Ltd., SIG Combibloc Obeikan FZCO, DNP SIG Combibloc Co., Ltd.
	102-46	Defining report content and topic Boundaries		Y	Y		See Determining report content, page 68.

TOPIC	No.	DISCLOSURE	MATERIAL (Y/N)	REQUIRED FOR CORE	REPORTED (Y/N/ PARTIAL)	REASON FOR OMISSION	WHERE TO FIND IT IN THE REPORT
	102-47	List of material topics		Y	Y		See Our priorities on page 17 and Determining report content on page 68.
	102-48	Restatements of information		Y	Y		Some data from previous years has been restated as we have strengthened our reporting systems or in line with our recalculation policy (see page 86). In addition, we have restated two of our targets, one as a result of an error in the previously published wording (see page 27) and one to make the target more meaningful (see page 39).
	102-49	Changes in reporting		Y	Y		We have reviewed and updated our list of material issues, based on our latest materiality assessment. See Our priorities, page 17.
	102-50	Reporting period		Y	Y		See Welcome to our Corporate Responsibility Report, page 2.
	102-51	Date of most recent report		Y	Y		See Welcome to our Corporate Responsibility Report, page 2.
	102-52	Reporting cycle		Y	Y		See Welcome to our Corporate Responsibility Report, page 2.
	102-53	Contact point for questions regarding the report		Y	Y		See Welcome to our Corporate Responsibility Report, page 2.
	102-54	Claims of reporting in accordance with the GRI Standards		Y	Y		See Welcome to our Corporate Responsibility Report, page 2.
	102-55	GRI content index		Y	Y		See this GRI content index.
	102-56	External assurance		Y	Y		See Welcome to our Corporate Responsibility Report, page 2 and Assurance statement on page 84.
		201: Economic Performance					
Economic performance	**201-1**	Direct economic value generated and distributed	NM	N	N	Not material	
	201-2	Financial implications and other risks and opportunities due to climate change	NM	N	P	Not material	We have identified risks and opportunities for our business due to climate change that could substantively impact our operations and have a strategic or financial implication. These include physical and transition risks such as the impact of changing consumer demands for packaging, more extreme weather patterns affecting forest resources and the availability and price of raw materials such as energy and water. Opportunities include consumer and customer demand for non fossil raw materials and reduced exposure to fossil fuel price increases from reduced energy demands.
	201-3 to 204		NM	N	N	Not material	
Anti-corruption	**205-1**	Operations assessed for risks related to corruption	NM	N	N	Not material	
	205-2	Communication and training about anti-corruption policies and procedures	NM	N	P	Not material	See Governance and ethics, page 38. Number and percentage of employees that received training on anticorruption has not been recorded.
	205-3	Confirmed incidents of corruption and actions taken	NM	N	Y		No significant risks of corruption and no cases of corruption were identified in 2018.
Anti-competitive Behaviour	**206-1**	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	NM	N	Y		No legal actions for anti-competitive behaviour, anti-trust or monopoly practices in 2018.

TOPIC	No.	DISCLOSURE	MATERIAL (Y/N)	REQUIRED FOR CORE	REPORTED (Y/N/ PARTIAL)	REASON FOR OMISSION	WHERE TO FIND IT IN THE REPORT
		301: Environmental performance					
Materials	**301-1**	Materials used by weight or volume	M	Y	Y		See Our packs on page 60 and Sustainable raw materials on page 48.
	301-2	Recycled input materials used	M	N	N	Not required for core	
	301-3	Reclaimed products and their packaging materials	NM	N	N	Not material	
Energy	**302-1**	Energy consumption within the organisation	M	Y	Y		See Environmental footprint, page 29.
	302-2	Energy consumption outside of the organisation	NM	N	N	Not material	
	302-3	Energy intensity	M	Y	Y		See Environmental footprint, page 29.
	302-4	Reduction of energy consumption	M	Y	Y		See Environmental footprint, page 29.
	302-5	Reductions in energy requirements of products and services	M	N	N	Not required for core	
Water	**303**		NM	N	N	Not material	We use relatively little water in our operations and water use is not considered a material impact for SIG. However, we recognise that water is an increasingly important issue for stakeholders, particularly in water-scarce regions. Our production processes do not require water, except at our paper mill in New Zealand, so our main focus for reducing water use is on improving the efficiency of our filling machines (see page 64).
Biodiversity	**304**		NM	N	N	Not material	Our own operations do not have a significant impact on biodiversity, and we minimise any potential impacts through our environmental management systems. The main biodiversity impact of our business is in the forests we source raw materials from and we manage this by setting strict standards for suppliers through FSC™ certification (see Sustainable raw materials, page 47). In 2018, we also worked with peers to develop recommendations on how life-cycle assessment can be used to better address land use impacts on biodiversity (see Driving the net positive agenda, page 13).
Emissions	**305-1**	Direct (Scope 1) GHG emissions	M	Y	Y		See Environmental footprint on page 28.
	305-2	Energy indirect (Scope 2) GHG emissions	M	Y	Y		See Environmental footprint on page 28.
	305-3	Other indirect (Scope 3) GHG emissions	M	Y	Y		See Environmental footprint, page 28.
	305-4	GHG emissions intensity	M	Y	Y		See Environmental footprint on page 28.
	305-5	Reduction of GHG emissions	M	Y	Y		See Environmental footprint on page 28.

TOPIC	No.	DISCLOSURE	MATERIAL (Y/N)	REQUIRED FOR CORE	REPORTED (Y/N/ PARTIAL)	REASON FOR OMISSION	WHERE TO FIND IT IN THE REPORT
Emissions	**305-6**	Emissions of ozone-depleting substances (ODS)	NM	N	N	Not material	
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	NM	N	N	Not material	
Effluents and Waste	**306-1**	Water discharge by quality and destination	NM	N	N	Not material	
	306-2	Waste by type and disposal method	M	Y	Y		See Environmental footprint, page 30.
	306-3	Significant spills	NM	N	N	Not material	
	306-4	Transport of hazardous waste	NM	N	N	Not material	
	306-5	Water bodies affected by water discharges and/or runoff	NM	N	N	Not material	
Environmental Compliance	**307-1**	Non-compliance with environmental laws and regulations	M	Y	Y		No significant fines or non-monetary sanctions for non-compliance with environmental laws and regulations in 2018.
Supplier Environmental Assessment	**308-1**	New suppliers that were screened using environmental criteria	M	Y	Y		See Responsible suppliers, page 45.
	308-2	Negative environmental impacts in the supply chain and actions taken	M	N	N	Not required for core	
		400: Social Performance					
Employment	**401-1**	New employee hires and employee turnover	M	Y	Y		See Employees, page 32.
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	M	N	N	Not required for core	
	401-3	Parental leave	M	N	N	Not required for core	
Labour/Management Relations	**402-1**	Minimum notice periods regarding operational changes	M	N	N	Not required for core	
Occupational Health and Safety	**403-1**	Workers representation in formal joint management–worker health and safety committees	M	N	N	Not required for core	
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	M	Y	P	Occupational diseases not yet reported. Health rate metric is currently in development	See Health and safety, page 36 and 37.

TOPIC	No.	DISCLOSURE	MATERIAL (Y/N)	REQUIRED FOR CORE	REPORTED (Y/N/ PARTIAL)	REASON FOR OMISSION	WHERE TO FIND IT IN THE REPORT
Occupational Health and Safety	**403-3**	Workers with high incidence or high risk of diseases related to their occupation	M	N	N	Not required for core	
	403-4	Health and safety topics covered in formal agreements with trade unions	M	N	N	Not required for core	
Training and Education	**404-1**	Average hours of training per year per employee	M	Y	Y		See Employees, page 33.
	404-2	Programmes for upgrading employee skills and transition assistance programmes	M	N	N	Not required for core	
	404-3	Percentage of employees receiving regular performance and career development reviews	M	N	N	Not required for core	
Diversity and Equal Opportunity	**405-1**	Diversity of governance bodies and employees	M	Y	Y		See Employees, page 34.
	405-2	Ratio of basic salary and remuneration of women to men	M	N	N	Not required for core	
Non-discrimination	**406-1**	Incidents of discrimination and corrective actions taken	NM	N	Y		No reported incidents of discrimination in 2018.
Freedom of Association and Collective Bargaining	**407-1**	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	NM	N	N	Not material	
Child Labour	**408-1**	Operations and suppliers at significant risk for incidents of child labour	NM	N	N	Not material	
Forced or Compulsory Labour	**409-1**	Operations and suppliers at significant risk for incidents of forced or compulsory labour	NM	N	N	Not material	
Security Practices	**410-1**	Security personnel trained in human rights policies or procedures	NM	N	N	Not material	
Rights of Indigenous Peoples	**411-1**	Incidents of violations involving rights of indigenous peoples	NM	N	Y		No reports of incidents of violations involving rights of indigenous people in 2018.

TOPIC	No.	DISCLOSURE	MATERIAL (Y/N)	REQUIRED FOR CORE	REPORTED (Y/N/ PARTIAL)	REASON FOR OMISSION	WHERE TO FIND IT IN THE REPORT
Human Rights Assessment	**412-1**	Operations that have been subject to human rights reviews or impact assessments	NM	N	Y		Human rights criteria are included in SMETA audits of our production sites. See Governance and Ethics, page 38.
	412-2	Employee training on human rights policies or procedures	NM	N	P	Not material	The SIG Code of Conduct, and accompanying training, addresses various aspects of human rights that are relevant to SIG's operations. See Governance and Ethics, page 38.
	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	NM	N	N	Not material	
Local Communities	**413-1**	Operations with local community engagement, impact assessments, and development programmes	NM	N	N	Not material	
	413-2	Operations with significant actual and potential negative impacts on local communities	NM	N	N	Not material	
Supplier Social Assessment	**414-1**	New suppliers that were screened using social criteria	M	Y	Y		See Responsible suppliers, page 45.
	414-2	Negative social impacts in the supply chain and actions taken	M	N	N	Not required for core	
Public Policy	**415-1**	Political contributions	NM	N	N	Not material	
Customer Health and Safety	**416-1**	Assessment of the health and safety impacts of product and service categories	M	Y	Y		See Product safety, page 66.
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	M	N	Y		See Key Performance Indicators, page 86.
Marketing and Labelling	**417-1**	Requirements for product and service information and labelling	NM	N	N	Not material	
	417-2	Incidents of non-compliance concerning product and service information and labelling	NM	N	N	Not material	
	417-3	Incidents of non-compliance concerning marketing communications	NM	N	N	Not material	
Customer Privacy	**418-1**	Substantiated complaints concerning breaches of customer privacy and losses of customer data	NM	N	N	Not material	
Socioeconomic Compliance	**419-1**	Non-compliance with laws and regulations in the social and economic area	NM	N	Y		No significant fines or non-monetary sanctions for non-compliance with laws and regulations in the social and economic area to report.

GREENHOUSE GAS EMISSIONS BASIS OF REPORTING

SCOPE 1 & 2 EMISSIONS (TONNES CO_2 EQUIVALENT)

	2016	2017	2018
Scope 1	99,450	103,586	92,488
Scope 2 (market based)	98,319	19,894	16,696

SCOPE 1 AND 2

Greenhouse gas (GHG) emissions for Scope 1 and Scope 2 are reported following the GHG protocol. Data on Scope 1 and 2 emissions cover production plants worldwide, which use the majority of energy in our business. Data excludes energy use and emissions from machine assembly plants, development departments and offices.

Scope 2 emissions from purchased electricity are reported using a market-based approach. We also report Scope 2 emissions according to the location-based approach using grid average emission factors for each country (see page 28).

Throughout this report, the data relating to emissions from energy use are accurate to within a tolerance of 0.5 thousand tonnes.

SCOPE 3

Building on a materiality assessment of our greenhouse gas (GHG) emissions in 2016, we have refined our data collection and calculation procedures to meet the requirements of the GHG Protocol. We reported the resulting Scope 3 emissions in 2017, together with a recalculated baseline for 2016. These figures were used to define our value chain emissions reduction target and baseline, which have been approved by the Science Based Targets Initiative.

To help us further improve the accuracy of our reporting, we have a policy for recalculating our GHG emissions. This is designed to distinguish changes that reflect actual reductions in the totals from changes that are simply data improvements.

The inventory boundaries of SIG's GHG accounting were chosen considering all the relevant GHG Protocol standards. SIG's GHG accounting includes all six GHGs covered by the Kyoto Protocol as required by the GHG Protocol: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF6), and nitrogen trifluoride (NF_3). These are typically included in the emission factors we use and converted using IPCC 2013 conversion factors.

SCOPE 3 EMISSIONS (TONNES CO_2 EQUIVALENT)

	2016	2017	2018
1 Purchased goods and services	905,769	810,522	839,591
3 Fuel and energy-related activities	44,063	45,729	44,392
4 Upstream transportation and distribution	90,852	86,312	87,225
5 Waste generated in operations	582	605	598
6 Business travel	7,893	9,142	16,118
9 Downstream transportation and distribution	49,286	49,554	50,775
11 Use of sold products	131,512	161,853	165,942
12 End-of-life treatment of sold products	151,412	161,179	177,239
12 Biogenic carbon	*118,846*	*124,199*	*126,891*

The reporting boundary for our Scope 3 GHG emissions is the same as for our Scope 1 and Scope 2 reporting. It covers all production facilities under SIG's operational control, excluding smaller production units such as our spare parts plant in Neuss (Germany), joint ventures and offices (unless they are directly attached to a production facility).

For emissions related to recycling, we use the A 0:100 allocation as recommended by the GHG Protocol, which means that recycled materials such as production waste (category 5) or used products (category 12) are cut off at the sorting plant/next processing step. The same applies to waste that is incinerated for energy recovery. Biogenic carbon emissions can be released from the liquid packaging board in our cartons, depending on their treatment after use, and these are reported separately.

The following categories included in SIG's Scope 3 emissions:

Category 1: Purchased goods and services

Category 1 emissions account for the largest share of SIG's value chain GHG emissions. This category includes all materials used to produce and ship our cartons (including closures and straws), the materials used to produce the liquid packaging board that goes into our packs, and the materials used to manufacture our filling

machines. Services, ICT and items such as office equipment are excluded as they represent a very small share in this category.

Category 3: Fuel and energy-related activities

Category 3 covers the upstream emissions occurring related to purchased electricity and energy carriers at the production facilities that are in scope. Small amounts of diesel are also purchased to fuel trucks and cars, and the related emissions are captured in Category 6 on business travel (below).

Category 4: Upstream transportation and distribution

Category 4 covers all transportation activities for materials delivered to the production plants and all purchased outbound transports. Intercompany transportation is considered to be negligible. SIG packs are shipped as empty sleeves to SIG customers. This is usually managed by SIG's Supply Chain Management (SCM). In some cases, SIG customers arrange these transports themselves. The resulting emissions are reported in Category 9. Deliveries other than packed sleeves (straws, closures and machines) do not contribute significantly to this category and are not reported.

Category 5: Waste generated in operations

Category 5 includes emissions related to recycling, thermal treatment or landfill of waste from our operations (measured as non-product output) and hazardous waste. All production wastes (>95 %) undergo further treatment and recycling as they are well sorted. Transportation related emissions related to of waste material from our plants to waste processing facilities are included.

Category 6: Business travel

Category 6 includes flights, public transport, and the use of company cars and rental cars for business travel. Data on business travel is well documented in Europe but less so in other regions. Therefore, the number of employees per region is used as a basis for extrapolation. Flights are relatively well documented and account for almost 90% of emissions from business travel.

Category 9: Downstream transportation and distribution

Category 9 covers transportation of SIG carton packs from our plants to customers' facilities which are not purchased by SIG, the distribution of filled packs from customers' facilities to retailers, and onward transportation from retailers to end consumers. Distribution of filled packs includes only the emissions related to the SIG products. Pallets, trays or foil are therefore omitted due to their small share.

Category 11: Use of sold products

Category 11 covers the use of SIG's filling machines and applicators to mount closures to the filled cartons, which occur in customers' facilities. All new and refurbished filling machines that are manufactured and sold at SIG for the reporting year are characterised by average electricity demand and the need for pressurised air, steam and hydrogen peroxide for the estimated lifetime capacity of the machine/device using the emission factors of the reporting year. Filling machines that are installed in SIG service centres for demonstration purposes are not included. Emissions from the use phase of our cartons relate primarily to the contained product and are excluded.

Category 12: End-of-life treatment of sold products

Used beverage cartons usually end up in household waste streams, which differ locally. For each country that SIG cartons are shipped to, we collect data covering recycling rates, landfill rates (managed or unmanaged) and incineration rates (with or without energy recovery). The amount of waste is allocated to different forms of treatment based on the weight of sold packages per country and the rates for the respective country. Major amounts of biogenic greenhouse gas emissions relate to the different end-of-life treatments from the liquid packaging board and are determined and reported separately.

SIG filling machines are generally in use for decades and used filling machines are mainly refurbished or recycled so their contribution to this category is considered to be negligible.

ASSURANCE STATEMENT

INDEPENDENT PRACTITIONER'S REPORT ON A LIMITED ASSURANCE ENGAGEMENT ON SUSTAINABILITY INFORMATION

To SIG Combibloc Group AG, Linnich

We have performed a limited assurance engagement on the disclosures denoted with "✓" in the sustainability report of SIG Combibloc Group AG, Linnich (hereinafter: "the Company"), for the period from 1 January to 31 December 2018 (hereinafter: "Report"). Our engagement in this context relates solely to the disclosures denoted with the symbol "✓".

GRI INDICATOR

General Disclosures
GRI 102-56

Responsibilities of the Executive Directors

The executive directors of the Company are responsible for the preparation of the Report in accordance with the principles stated in the Sustainability Reporting Standards of the Global Re-porting Initiative (hereinafter: "GRI-Criteria") and for the selection of the disclosures to be evaluated.

This responsibility of the Company's executive directors includes the selection and application of appropriate methods of sustainability reporting as well as making assumptions and estimates related to individual sustainability disclosures, which are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal control as they have considered necessary to enable the preparation of a Report that is free from material misstatement whether due to fraud or error.

Independence and Quality Control of the Audit Firm

We have complied with the German professional provisions regarding independence as well as other ethical requirements.

Our audit firm applies the national legal requirements and professional standards – in particular the Professional Code for German Public Auditors and German Chartered Auditors ("Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer": "BS WP/vBP") as well as the Standard on Quality Control 1 published by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany: "IDW"): Requirements to quality control for audit firms (IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitätssicherung in der Wirtschaftsprüferpraxis – IDW QS 1) – and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Practitioner's Responsibility

Our responsibility is to express a limited assurance conclusion on the disclosures denoted with "✓" in the Report based on the assurance engagement we have performed.

Within the scope of our engagement we did not perform an audit on external sources of information or expert opinions referred to in the Report.

We conducted our assurance engagement in accordance with the International Standard on As-surance Engagements (ISAE) 3000 (Revised): Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the IAASB. This Standard requires that we plan and perform the assurance engagement to allow us to conclude with limited assurance that nothing has come to our attention that causes us to believe that the disclosures denoted with "✓" in the Company's Report for the period from 1 January to 31 December 2018 have not been prepared, in all material aspects, in accordance with the relevant GRI-Criteria. This does not mean that a separate conclusion is expressed on each disclosure so denoted.

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 practitioner's judgment.

Within the scope of our assurance engagement, we performed amongst others the following assurance procedures and further activities:

- Obtaining an understanding of the structure of the sustainability organisation and of the stakeholder engagement
- Inquiries of personnel involved in the preparation of the Report regarding the preparation process, the internal control system relating to this process and selected disclosures in the Report
- Identification of the likely risks of material misstatement of the Report under consideration of the GRI-Criteria
- Analytical evaluation of selected disclosures in the Report
- Comparison of selected disclosures with corresponding data in the consolidated financial statements and in the group management report
- Evaluation of the presentation of the selected disclosures regarding sustainability performance

Assurance Conclusion

Based on the assurance procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that the disclosures denoted with "  " in the Company's Report for the period from 1 January to 31 December 2018 have not been prepared, in all material aspects, in accordance with the relevant GRI-Criteria.

Intended Use of the Assurance Report

We issue this report on the basis of the engagement agreed with the Company. The assurance engagement has been performed for purposes of the Company and the report is solely intended to inform the Company as to the results of the assurance engagement. The report is not intended to provide third parties with support in making (financial) decisions. Our responsibility lies solely toward the Company. We do not assume any responsibility towards third parties.

Munich, 20 March 2019

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Hendrik Fink
Wirtschaftsprüfe
(German Public Auditor)

ppa. Juliane v. Clausbruch

KEY PERFORMANCE INDICATORS

The table below provides a summary of the key performance indicators we use to measure our performance on our most material issues. The data shown here has been assured with limited assurance by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (except where otherwise noted).

DATA ASSURED

	MATERIAL ISSUE	METRIC	2015	2016	2017	2018
RESPONSIBLE COMPANY	**Tackling climate change**	Scope 1 greenhouse gas emissions (thousand tonnes CO_2 equivalent)[1]	21.3	29.0	34.5	**30.9**
		Scope 2 greenhouse gas emissions (market based) (thousand tonnes CO_2 equivalent)[1]	80.7	78.4	0	**0**
		Scope 1 and 2 greenhouse gas emissions rate (tonnes CO_2 equivalent/million m^2 of sleeves produced)[2, 4]	70	72	24	**21**
		Change in Scope 1 and 2 greenhouse gas emissions rate (% change from 2014 baseline)[2, 4]	–11.3	–8.9	–69.4	**–73.4**
		Scope 3 greenhouse gas emissions (million tonnes CO_2 equivalent)[4, 5]	-	1.4	1.3	**1.4**
		Scope 1, 2 and 3 greenhouse gas emissions rate (grams CO_2 equivalent/litre of food packed)[3, 4]	-	105	96	**95**
		Operational energy use (GWh)[1]	276	312	323	**324**
		Energy rate (MWh/million m^2 of sleeves produced)[2, 4]	181	203	217	**210**
		Change in energy rate (% change from 2014 baseline)[2, 4]	–4.2	7.2	14.8	**11.1**
	Minimising production waste	Waste rate (tonnes non-product output/million m^2 of sleeves produced)[2]	37	35	37	**35**
		Change in waste rate (% change from 2014 baseline)[2]	5.7	0	4.0	**–1.6**
	Occupational health and safety	Lost time cases[4]	23	26	16	**20**
		Lost time case rate (per 200,000 hours worked)[4]	0.55	0.62	0.38	**0.49**
	Employee engagement	Sustainable engagement score (% favourable responses)	-	74	-	**78**
		Employee Net Promoter Score (% promoters minus % detractors)	-	–16	-	**–1**
	Talent development	Training and development investment (average training hours/employee)[4]	37.5	34.6	32.1	**30.4**
	Fair labour practices	Plants completed SEDEX Members Ethical Trade Audit	-	7	8	**9**
	Diversity & equal opportunity	Diversity of governance bodies and employees	-	-	-	See page 34
RESPONSIBLE SOURCING	**Sustainable raw materials**	A-materials from certified sources (% by spend)	27	39	47	**45**
		Energy in production plants from renewable sources or compensated using Gold Standard CO_2 offset (%)[1]	23.1	22.6	58.4	**100**
	Thriving forests	Packs sold labelled with FSC™ logo (%)	42	56	80	**93**
	Responsible suppliers	New suppliers screened using social responsibility criteria (%)	-	100	100	**100**
RESPONSIBLE PRODUCTS	**Sustainable product innovation**	Impact mitigation potential of innovations related to current standard product	See 2016 CR Report: page 45	See 2017 CR Update: pages 20-22[6]	See pages 57-65[6]	
	Recycling and circular economy	SIG packaging portfolio that is recyclable (%)	100	100	100	**100**
	Efficient filling machines	Sustainability improvements through technical service products (% of SIG customers supported since 2016)	-	-	-	**20**
	Safe nutrition	Significant product and service categories for which health and safety impacts are assessed for improvement (%)	100	100	100	**100**
		Non-compliance concerning the health and safety impacts of products and services (number of incidents)	-	0	0	**0**

[1] Excludes emissions from our paper mill in New Zealand.

[2] Sleeves production only. Excludes our paper mill in New Zealand and our closures plant in Neuhausen.

[3] Includes most material Scope 3 categories only: goods and services, use of our products (filling machines) and end of life treatment (cartons).

[4] Data from previous years has been restated as we have strengthened our reporting systems or in line with our recalculation policy (see relevant sections of report for explanation).

[5] See page 82 for a breakdown of Scope 3 categories.

[6] Not assured.