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# Connecting a smarter future

Spirent Communications plc  
Sustainability Report 2017



# Reporting scope & boundaries

This Sustainability Report provides an account of the management approach and performance trends of the material environmental, social and governance issues for Spirent Communications plc.

The Report focuses on the 2017 calendar year but also includes historical performance data.

This Report includes the activities and impacts that are under the control or significant influence of Spirent Communications plc.

This Report contains standard disclosures from the Global Reporting Initiative G4 Reporting Guidelines. The Report content has been independently assured by Henriques and Co. Limited.

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### Cautionary statement regarding forward-looking statements

This Report may contain forward-looking statements which are made in good faith and are based on current expectations or beliefs, as well as assumptions about future events. You can sometimes, but not always, identify these statements by the use of a date in the future or such words as "will", "anticipate", "estimate", "expect", "project", "intend", "plan", "should", "may", "assume" and other similar words. By their nature, forward-looking statements are inherently predictive and speculative and involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future. You should not place undue reliance on these forward-looking statements, which are not a guarantee of future performance and are subject to factors that could cause our actual results to differ materially from those expressed or implied by these statements. The Company undertakes no obligation to update any forward-looking statements contained in this Report, whether as a result of new information, future events or otherwise.



### **Introduction**

It is a pleasure to introduce Spirent's 2017 Sustainability Report, which sets out our commitments and performance in this vital area of our business. I'm pleased that I can tell you that we have continued to make good progress this year across each part of our sustainability programme, FuturePositive.

We have set high standards for our environmental management, social practices and corporate governance, and our approach in each area is set out in this Report. We have also challenged ourselves to find innovation and opportunity beyond these minimum requirements.

A key theme for our work this year has been collaboration: within the Group, with our supply chain and with our customers. You will see that we have expanded our supplier auditing programme and are working with customers to reduce their environmental performance with products like Velocity.

We have also continued to reduce our own environmental impact this year, achieving a 6.5 per cent reduction in carbon emissions, however I am particularly proud of the work we are doing to support more young people and women into science and engineering. A lack of diversity poses a challenge for the whole sector, and so our partnerships with schools, colleges and our peers are vital.

Delivering on our sustainability agenda is an essential part of our success as a business and so I'm pleased that our robust approach to sustainability has been recognised and we have been included in the FTSE4Good index.

### **Eric Hutchinson**

Chief Executive Officer  
8 March 2018

## We have made good progress in all areas of our sustainability programme and are pleased to share some the highlights from the year.

### Sustainability areas



#### Performance

Return to the FTSE4Good index

Spirent has been included in the FTSE4Good\* index once again, reflecting our strong environmental, social and governance practices.



#### Product

Expansion of our sustainability product metrics across our major business units

Following the introduction of sustainability metrics into our product development process at our Positioning business unit in 2016, we have now included these metrics across the Positioning, Wireless division and Cloud & IP business units.



#### Procurement

Expanded supplier assessment and audits

We have continued to enhance our supply chain sustainability management programme. Our team conducted on-site audits at 18 of our most important suppliers, accounting for 52 per cent of our direct supply chain spend. We have set a target to audit suppliers that represent 80 per cent of our direct supply chain spend by 2020.

In a world where environmental and social impacts are often increasingly hidden in supply chains, we are aware of the need to collaborate at the industry level. We have set up initiatives with our contract manufacturers to share information about the sustainability management and performance of our Tier 2 suppliers through their own audits and the RBA VAP audit programme.



#### Property

Total carbon footprint down 6.5 per cent

We have reduced our total carbon emissions across the Group by 6.5 per cent from 2016. This is the second year running we have achieved an absolute emissions reduction with significant reductions at Crawley (28 per cent), Beijing (19 per cent), and Raleigh (17 per cent). This has been achieved through our programme of refurbishments and energy efficiency initiatives.



#### People

Re-accreditation of our work on STEM education

Science, technology, engineering and maths (STEM) education is critical to our business and our sector as a whole and we collectively face a challenge to engage young people and women in particular.

Our teams have worked hard to develop a programme that gives young people encouragement and opportunities to get involved, and our achievements were recognised by being re-accredited for the Business in the Community (BITC) Awards for our work in this area.

## 2017 highlights

Following an independent assessment by FTSE Russell, Spirent has been included in the FTSE4Good Index once again. [Read more p10](#)

Achieved a silver rating from Ecovadis, the sustainability ratings agency. [Read more p10](#)

Finalist at the QuEST Sustainability Awards. [Read more p10](#)

Introduced sustainability metrics into the product development process in our Positioning, Wireless and Cloud & IP business units. [Read more p14](#)

We have reduced the power consumption of our latest 100Gb ethernet test module by 27 per cent. [Read more p14](#)

We have helped revolutionise customers' R&D labs, reducing energy use and test durations. [Read more p16](#)

We expanded our supplier audit programme, completing 18 supplier audits across 2017, representing 52 per cent of direct spend this year. [Read more p18](#)

We ran a sustainable supply chain summit in Calabasas, CA to further improve our audit and assessment processes. [Read more p18](#)

We reduced our carbon footprint by 6.5 per cent in 2017. [Read more p20](#)

We were reaccredited for the Business in the Community (BITC) Award for our work with STEM skills in schools and universities. [Read more p23](#)

We introduced a Group-wide sustainability communications programme.

## 2018 and beyond

Remain a constituent of the FTSE4Good index and seek recognition for our strong environmental, social and governance practices from local and global advisory bodies.

Rollout product sustainability metrics into all our business units.

Continue our supplier audit programme and undertake at least a further 18 audits in 2018, working towards a target of auditing suppliers that represent 80 per cent of our direct spend by 2020.

Focus on energy efficiency in our main power using areas: our labs. The programme will include lab equipment audits and explore further opportunities to virtualise and share equipment globally.

We will expand our programmes on STEM skills, diversity and training. Our 2018 programme will also include a review of performance management, as well as a more systematic framework for volunteering and philanthropy.

\* "FTSE Russell (the trading name of FTSE International Limited and Frank Russell Company) confirms that Spirent Communications plc has been independently assessed according to the FTSE4Good criteria, and has satisfied the requirements to become a constituent of the FTSE4Good Index Series. Created by the global index provider FTSE Russell, the FTSE4Good Index Series is designed to measure the performance of companies demonstrating strong Environmental, Social and Governance ("ESG") practices. The FTSE4Good indices are used by a wide variety of market participants to create and assess responsible investment funds and other products."

We have re-segmented our business for a sharper focus on our target business opportunities.

## Operating segments

We provide innovative solutions to develop new devices and equipment and to operate networks.

We focus on providing test products and services to satisfy three customer imperatives:

- to accelerate the time to develop and launch new products into the market;
- to improve effectiveness to turn-up new services and isolate and resolve problems in the network; and
- to save money.



### Networks & Security

We delight in knowing our products and expertise help people and companies connect, communicate and stay safe online. It's all part of what we do. Our products enable vendors to accelerate the time to get their products to market while ensuring the quality and performance of their product protects their brand.

### What we do

Develop performance and security test systems to accelerate the development of new devices, networks and applications for high-speed Ethernet/IP, mobile and global satellite navigation systems.

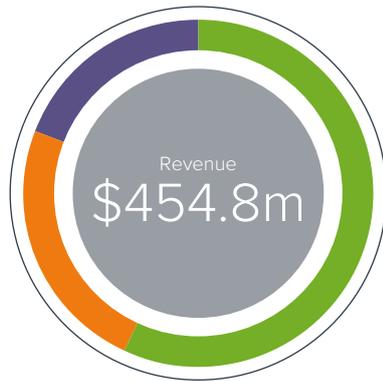
### Business focus

High-speed Ethernet, cloud performance, network functions virtualisation, cyber security, positioning and timing simulation and robustness verification.

### Highlights

- We are the industry leader in high-speed Ethernet performance test systems.
- We are the industry leader in global navigation satellite test systems.
- We launched our cyber security test product (CyberFlood) and consultancy service (SecurityLabs).

● Read more in our Annual Report on pages 32 to 35



■ Networks & Security 57%  
■ Lifecycle Service Assurance 24%  
■ Connected Devices 19%



■ Networks & Security 65%  
■ Lifecycle Service Assurance 27%  
■ Connected Devices 8%



### Lifecycle Service Assurance

Our service assurance solutions accelerate the turn-up of new services and measure network and service performance to understand and improve customer experience. We get excited when our service provider customers reduce their costs while radically reducing the time to isolate problems and improve their network performance and customer experience.

#### What we do

Develop active test and analytics solutions for service turn-up, network performance improvement and customer experience management.

#### Business focus

Business Ethernet services, mobile networks and the Internet of Things.

#### Highlights

- We installed two new large active service assurance and analytics solutions in Tier 1 service providers.
- We are the industry leader in mobile test tools for development, system integration and qualification testing.
- We have helped major manufacturers consolidate and automate their labs.

● Read more in our Annual Report on pages 36 to 39



### Connected Devices

Today, everyone wants to do things faster. Our test systems reduce the time to develop and test new devices and connect them to the network. Using our products or services, manufacturers and service providers can understand how new mobile devices operate on real networks.

#### What we do

Develop automated test systems and offer services to test new devices in the lab or in the field on networks.

#### Business focus

Voice, video, data services; location-based services; Internet of Things, 4G/LTE and 5G.

#### Highlights

- We won key deals with our new channel emulator (Vertex) with unprecedented scalability and modularity for wireless radio frequency testing.
- We released our Spirent Elevate Internet of Things Device Test solution.
- China Telecom selected our Spirent Umetrix® Voice solution for handset voice calling quality testing.

● Read more in our Annual Report on pages 40 to 43

We work closely with our customers to design innovative first-to-market products and services.



**How we create value**

**1 2**

**The markets we target**

We target large, fast-growing, complex markets, driven by a major disruption or challenge.

We serve customers who develop products and services and who operate and manage networks.

**2 7 8**

**Continuing demand for our products and solutions**

We operate in a fast-moving, technologically demanding environment in which everyone and everything is connected. Faster data speeds, complexity, security and the innovation drives the demand for our products and solutions.

**2 3**

**Competitive advantage**

We aim to be first-to-market. We register intellectual property to create high barriers to entry for competitors and maintain our high-margin and high-value position in the market.

Our competitive differentiation comes from the test methodologies we develop and our active test, automation and analytics expertise and technologies.

### Our strategy

To work closely with customers to understand their plans and challenges, and develop first-to-market products and services to fulfil their requirements and exceed their expectations.

### How our strategy and business model work together

Our business model embodies our critical success factors of working closely with customers and designing innovative first-to-market products and services and selling through our specialised sales force.

● **Read more** in our Annual Report on pages 20 and 21.



### Our customers selling proposition

Our products and services:

- reduce the time to get products and systems to market;
- ensure the quality of customers' products and networks;
- protect customers' brand reputation; and
- increase the efficiency of their operations through automation and analytics to optimise their activities and investments.



### Value-creation culture for our stakeholders and shareholders

We have a culture that focuses on creating value for our stakeholders and shareholders. We attract and retain talented people and offer career development. We have a non-discriminatory workplace and fair and competitive remuneration.

Our dividend policy is to maintain a sustainable dividend for shareholders as we consider the dividend to be a core component of shareholder return and one on which shareholders can depend.

# How we drive our business forward.

**Our strategy**

To continuously innovate test and measurement technologies to develop leading products and services to enable our customers to develop devices and equipment and operate complex networks. To be recognised by customers for the ease of use and simplicity of our solutions for testing and measuring complex systems.

1

## Grow our business in target markets

**Description**

Create new products and services, promote our products and services through creative marketing campaigns and industry involvement, and develop our sales channel to grow our business in our global target markets.

**Importance**

To achieve revenue growth, we need to identify and capitalise on emerging business opportunities in our target markets and expand the number of customers we serve.

**Performance**

**Revenue**

**\$454.8m**

2016 \$457.9m

**Commentary**

We identify, explore and assess new business opportunities in our target markets in a timely manner and objectively follow our innovation management and portfolio management processes.

**Risk**

Technology change and inadequate employee skillbase.

● Read more in our Annual Report on pages 28 and 31.

2

## Establish and maintain technology leadership

**Description**

Invest appropriately in exploring new technologies and developing our core competencies. Participate in standardisation bodies and industry groups. Work closely with our customers.

**Importance**

We operate in highly competitive and specialised markets. If we fail to invest in the business at a sufficient level, we will see our market share decrease.

**Performance**

**Investment in product development**

**\$103.0m**

2016 \$111.7m

**Commentary**

In our largest markets, we believe that we have strong technology leadership positions after the investment in the business over the last three years. We have achieved significant new product launches in the year as a result of this investment.

**Risk**

Technology change and inadequate employee skillbase.

● Read more in our Annual Report on pages 28 and 31.

3

## Strengthen our customer relationships

**Description**

Partner with our customers. Create innovative solutions meeting our customers' future needs. Adopt account-based marketing and key account sales management. Focus on quality of service, delivery and support.

**Importance**

If we work closely with our customers, we have the best chance of understanding and meeting their current and future requirements. We want our customers to view Spirent as their go-to solutions provider.

**Performance**

**Revenue from top 20 customers**

**\$231.6m**

2016 \$240.6m

**Commentary**

We have reorganised and developed our global sales team. We have implemented Salesforce customer relationship management software to improve interaction with customers.

**Risk**

Loss of customer dependence and business continuity.

● Read more in our Annual Report on page 29.

### Key strategic actions

We have identified six priorities that we believe are critical in order to achieve our strategy and, ultimately, our vision.

### Our vision

To be the leading experts in methodologies and solutions for the development and operation of communications networks, connected devices and applications.

● Read more about KPIs in our Annual Report on pages 24 and 25.

● Read more about our principal risks and uncertainties in our Annual Report on pages 28 to 31.

4

## Acquire new capabilities and technologies

### Description

Expand our portfolio through partnerships, licensing technologies, acquiring businesses, and recruiting and hiring experts in critical areas.

### Importance

We have to deeply understand technologies, networking and their application to develop methodologies and tools to test them.

### Performance

**Investment in Mergers & Acquisitions**

nil

2016 \$2.6m

### Commentary

We consolidated business units to focus on target customers. We prioritised our investments aligned to the market dynamics and business opportunities. We identified the areas of interest for potential acquisitions and alliances that fit our strategic opportunities and gaps.

### Risk

Acquisitions underperform.

● Read more in our Annual Report on page 30.

5

## Invest in our people

### Description

Attract highly qualified and skilled employees, engage our employees with exciting work and opportunities and retain the expertise and knowledge that we have built.

### Importance

Our employees are central to our strategy and success. Our strategy is built around innovation and expertise. Without the best possible team, we will not be able to deliver on our strategy.

### Performance

**Voluntary employee turnover**

7.4%

2016 9.1%

### Commentary

We work on interesting challenges at the leading-edge of the communications industry. We see the direct impact of our accomplishments in our customers' success. We continue to see voluntary turnover well below industry benchmarking.

### Risk

Reductions in employee skillbase.

● Read more in our Annual Report on page 31.

6

## Maintain financial strength and flexibility

### Description

Maintain a robust balance sheet and strong cash generation that allows us to invest in organic growth, pursue strategic acquisitions, and pay sustainable dividends to shareholders.

### Importance

Having financial strength and flexibility means that we are able to act quickly when we see an opportunity to fulfil our strategic priorities.

### Performance

**Free cash flow**

\$56.4m

2016 \$25.9m

### Commentary

We value strong financial diligence within the Group. Turning profit to cash remains a priority.

### Risk

Adverse macro-economic changes.

● Read more in our Annual Report on page 28.

# FuturePositive: Our Sustainability programme

Our sustainability programme is called FuturePositive. It aims to embed the highest standards of environmental management, social practices and corporate governance in our business and supply chain, and to help our customers create the technologies needed to secure a sustainable future.

Through this programme we look to create long-term value by:

- Developing innovative test solutions needed to develop new communications technologies to address global sustainability challenges;
- Building better relationships with our stakeholders and improving our understanding of their needs and expectations;
- Enhancing our operational efficiency;
- Creating a safe, fair and supportive work environment;
- Attracting and retaining talent and nurturing engineering skills and interest in young people;
- Reducing the whole-life environmental impacts of our products;
- Protecting our reputation and ability to grow; and
- Assessing and managing risks and opportunities from significant sustainability issues.

### Our material sustainability issues

The Board has appointed external advisers to review and prioritise the material sustainability issues for the Group. The analysis is undertaken at least every two years and was last conducted in 2016.

The 2016 materiality assessment reviewed the sustainability issues that are material to Spirent using the five criteria set out in the AA 1000 standard: direct financial impacts, policy related performance, peer-based norms, stakeholder behaviour and concerns and social norms (including legislation). The process included desk-based research as well as direct correspondence and interviews with some stakeholder groups.

The analysis highlighted the importance of anti-corruption and strong business ethics, and the importance of our product functionality in unlocking sustainability performance for our customers.

As part of our materiality analysis, we have identified the needs and expectations of four main external stakeholder groups: customers, investors, industry peers, and regulators. These were selected as they represent the most significant influencers of opinion in sustainability management in Spirent's market.

### Material issues

#### Governance

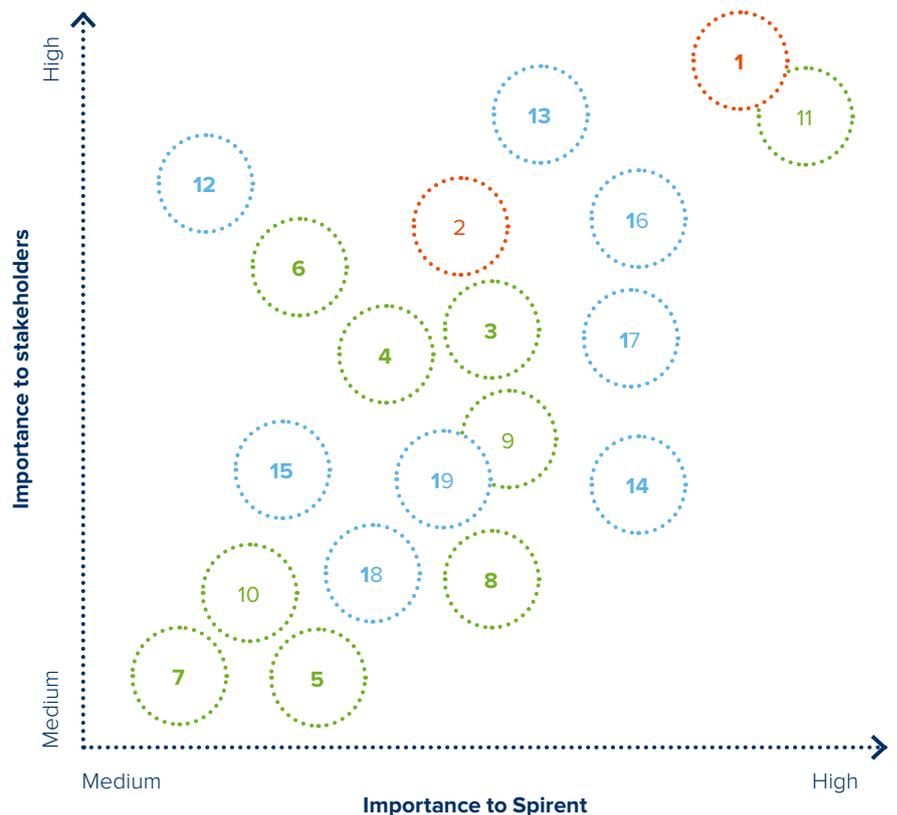
1. Corruption and business ethics
2. Disclosure and reporting

#### Environmental

3. Resource and energy efficiency
4. Product design for the environment
5. Environmental management
6. Greenhouse gas emissions and climate change
7. Waste
8. Hazardous materials (REACH, RoHS)
9. Environmental impacts of supply chain and distribution
10. Impacts at product end-of-life
11. Sustainability impact through product functionality

#### Social

12. Customer privacy and data security
13. Human and labour rights
14. Diversity and equality
15. Conflict materials
16. Skills development
17. Health and safety
18. Supporting local communities
19. Social impacts of supply chain distribution



## Our Sustainability approach

### Sustainability management and governance

We have implemented robust structures to manage sustainability at Spirent, including a mature and effective corporate governance structure. We have strong leadership from board level down and resource in place to manage sustainability issues effectively.

We are committed to reporting our sustainability management and performance and we will set objectives and targets to drive continual improvement.



#### Product

Our aim is to embed sustainability thinking in the way we design products and provide test services.

We want our products and services to help our customers improve the sustainability of their operations and develop the technologies needed to unlock a sustainable future.



#### Procurement

We aim to ensure our suppliers maintain high standards of environmental management, social and labour practices and corporate governance.



#### People

Our aim is to provide our people with the right skills and knowledge as well as the opportunity to deliver our sustainability vision.

We want a culture that strives for equality and diversity, and supports interest and opportunities in STEM for all.



#### Property

We aim to create inspiring workplaces and minimise the environmental impact of our properties.

# Sustainability management and governance

## Key issues

- Governance: anti-bribery and corruption and business ethics
- Sustainability reporting

We have developed a robust structure to manage sustainability issues at Spirent. This section sets out our leadership structures, our approach to non-financial reporting and stakeholder engagement, and sustainability governance. Corporate governance issues are dealt with in more detail in our Annual Report, which is available at <https://corporate.spirent.com>.

### Leadership Management structure

The CEO is ultimately responsible for sustainability at Spirent and oversees how we manage our material environmental, social and governance (ESG) issues. A Sustainability Steering Committee was established in 2016, comprising senior management representatives who have responsibility for each aspect of the sustainability strategy. External advisers have been appointed (Brite Green) to support the Committee in designing and implementing our sustainability programme, FuturePositive.

The Sustainability Steering Committee meets four times a year to coordinate and maximise our sustainability activities. The Committee is chaired by the

Company Secretary who reports progress to the Board.

### Policies

Our sustainability approach is governed by an overarching Sustainability Policy. It can be found at: <https://corporate.spirent.com>

The Policy applies to the Company and all subsidiaries worldwide and commits the Group to compliance with high standards of ethics and business integrity, environmental management, and employee and community welfare.

The Sustainability Policy is supported by specific policies and programmes related to management of environmental, social and governance issues.

### Risk management

The Group acknowledges its responsibility for its system of internal control to facilitate the identification, assessment and management of risk, the protection of shareholder's investments and the Group's assets.

Effective controls ensure that the Group's exposure to avoidable risk is minimised, that adequate accounting records are maintained, that the financial information used within the business is reliable, and that the consolidated accounts preparation and financial reporting processes comply with reporting requirements. The dynamics of the Group and the environment within which it operates are continually evolving, together with its exposure to risk. Internal controls can only provide reasonable and not absolute assurance against misstatement or loss.

The directors confirm that there is an ongoing, robust process to identifying, evaluating and managing the principal risks faced by the Group and the operational effectiveness of the related controls, which have been in place. They also confirm that they have regularly reviewed the system of risk management and internal controls utilising the review process set out in the Annual Report. There are guidelines on the minimum Group-wide requirements for health and safety and environmental management. There are also guidelines on the minimum level of internal control that each of the business units should exercise of specified processes. Each business unit has developed and documented policies and procedures to comply with the minimum control standards established, including procedures for monitoring compliance and taking corrective action. The management of each business unit is required to confirm twice yearly that it has complied with these policies and procedures.

### Compliance

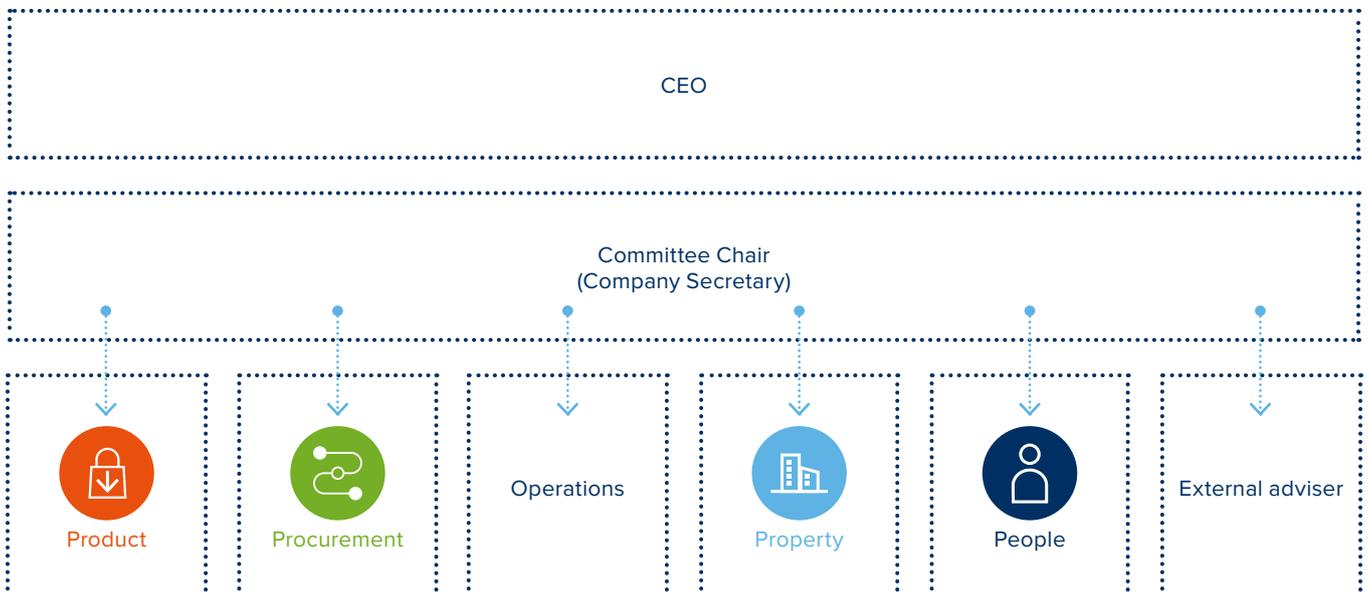
#### Communication and whistleblowing

Any critical concerns can be communicated to the Board through the Group's "whistleblowing" procedure. The policy, which forms part of the Business Ethics Policy, contains arrangements for a confidential reporting facility for reporting to the Audit Committee as appropriate. The Audit Committee review any reports and the actions arising therefrom.

#### Ethics and integrity

The Group's Business Ethics Policy sets clear standards of professionalism and integrity for all employees and

## Sustainability Steering Committee



operations. The policy can be found at <https://corporate.spirent.com>

### Anti-bribery and corruption

The Ethics Policy includes sections relating to bribery and corruption with the aim of ensuring that all of Spirent's systems, controls and training comply with the anti-bribery and corruption legislation in the countries where we operate, and that a culture of prevention and detection of all forms of bribery and corruption is in place.

The policy has been communicated to all employees and the Board, and states that employees have a responsibility for the prevention and detection of bribery and corruption. Any suspicion of corruption should be reported immediately and will be investigated vigorously. Concerns can be reported through line management structures, through the Group's "whistleblowing" procedures or directly to a member of the Board.

During 2017 anti-bribery and anti-corruption training was undertaken by all employees with customer-facing roles. This training is scheduled to be rolled out to all employees in 2018. A new third-party whistleblowing hotline will also be rolled out in 2018.

Corruption and bribery checks are included as a core aspect of our supplier due diligence and we use a third-party company to assess the bribery and corruption risk of suppliers and distributors.

### Data protection

Spirent takes data security and privacy seriously. We continually review the security of our data systems and procedures in order that we can react to areas of heightened risk promptly and effectively.

In preparation for the introduction of the General Data Protection Regulation ("GDPR") in 2017, Spirent has undertaken a full review of its data protection policies and procedures in order to comply with the new regulation.

Spirent have procedures to restrict the type and quantity of confidential information collected and stored and there are robust procedures in place to protect customer data from unauthorised access and disclosure.

### Significant sustainability issues raised by stakeholders

The latest review of stakeholder sustainability issues was conducted in 2016 and will be updated in 2018 as part of the strategy review.

Periodic information security risk assessments are performed, and training is provided to staff to prevent information security breaches. Our internal controls are audited, and we have a whistleblower procedure in place for staff to report information security concerns.

Spirent has implemented a response procedure to manage breaches of confidential information if they were to occur.

Confidential waste is shredded if in hard copy and certificates of destruction are provided for any electronic storage devices disposed of at end-of-life.

### Reporting and stakeholder engagement Non-financial reporting

We aim to give stakeholders visibility of the non-financial risks and opportunities we face and how they are being managed. We do so principally through this Sustainability Report, but we also participate in the Carbon Disclosure Project ("CDP"), complete customer sustainability questionnaires, respond to environmental, social and governance ("ESG") rating agency assessments, and disclose information in the Corporate Responsibility sections of our Annual Reports, which are available at <https://www.corporate.spirent.com>.

This Report contains standard disclosures from the Global Reporting Initiative (GRI) G4 Reporting Guidelines.

The CEO reviews and approves the Sustainability Report.

### Assurance

Our Sustainability Policy sets out our commitment to robust and transparent reporting and external assurance of data and claims is a key component. We obtain external assurance of our Sustainability Reports to ensure the data and statements we make are reliable and robust.

### Stakeholder engagement

We respond to stakeholder sustainability requests and questions and have started a process to actively engage with customers and suppliers on sustainability issues.

In 2017 we responded to all requests for information from customers relating to our management of environmental, social and governance issues. Greenhouse gas emissions and diversity are of interest to some of our customers. In response, we have completed the CDP supply chain questionnaire and disclosed key diversity data.

Our investors have engaged with us directly on climate change through the CDP, and we have also received and responded to questions relating to our disclosure and emissions performance from individual investors and to ESG rating agencies.

We have initiated closer collaboration with our contract manufacturers to improve our understanding of sustainability management and performance in our Tier 2 suppliers. In particular we share information about supplier audits and performance.

In addition, we engage with our employees on sustainability issues in our regular "town-hall" meetings and employee surveys. In 2017 we commenced a programme of monthly sustainability communications for our employees using emails, posters and the company intranet InsideSpirent.

Stakeholder group	Customers	Investors	Industry peers	Regulators
<b>How we engaged</b>	Structured interviews and desk-based research	Direct correspondence and desk-based research	Desk-based research	Desk-based research
Issues of concern:				
Energy use	✓	✓	✓	✓
Energy use in products			✓	
Climate change	✓	✓	✓	✓
Greenhouse gas emissions	✓	✓	✓	✓
Hazardous materials	✓		✓	✓
Material use in products			✓	
Labour rights	✓		✓	✓
Equality and diversity	✓		✓	✓
Restricted materials (including conflict minerals)	✓		✓	✓
Business ethics	✓		✓	✓



### Product

#### Key issues

- Sustainability impact through product functionality
- Product design for the environment
- Hazardous materials (REACH, RoHS)
- Impacts at product end-of-life
- Conflict minerals

Spirent Communications is a global leader in test and measurement solutions. Our products are used in development labs, IT organisations and communications networks across the world to enable today's communications technologies and develop emerging networks, devices, services and applications.

Our product sustainability programme focuses on two main areas:

#### Unlocking a sustainable future

Communications networks are essential for many of the technologies needed to address critical sustainability challenges. Spirent test solutions will be essential for many of the innovations we need to secure a sustainable future, including smart energy networks and the next generation of electric and connected vehicles.

#### Sustainable product design

Many of Spirent's test solutions rely on physical test equipment used in-situ by our customers. We are working to reduce the life-cycle impacts of our products and environments they are used in through a range of ways:

- Design for environment and end-of-life, including compliance with all legal requirements;
- Reduce the size, weight, noise and power use of our products;
- Virtualisation and the development of Test-as-a-Service;
- Improve utilisation and automation; and
- In-field servicing and upgrades.

We have expanded the use of formal sustainability metrics into the product development process across our Positioning, Wireless and Cloud & IP business units.

#### Significant power reduction in Spirent's latest 100Gb ethernet test solutions

Our ethernet test solutions are a core part of our Cloud & IP business. Energy performance is one of our key design objectives and we have been able to reduce the energy consumption of our latest mX3 test module by 27 per cent.

#### Context:

As demand for bandwidth continues to grow, network equipment has been developed to support multiple speeds from a single port, from 10Gb to 100Gb. Service providers and data centres are using this multi-rate networking infrastructure and need to be able to test it thoroughly before deployment.

#### What Spirent does:

Housed in Spirent's N11U or 4U chassis, our ethernet test modules are able to simulate the huge volume of data needed to test and validate the next-generation of data centre infrastructure and service provider routers. Historically, testing at this scale has been energy intensive, but the latest version of our multi-speed ethernet test modules include a raft of innovations aimed at improving energy efficiency.

#### The outcome

The mX3 is a multi-speed ethernet test module, designed to test multi-terabit routers and high-scale cloud infrastructure. We have reduced the power consumption per port of the latest version by 27 per cent compared to the previous model.

Energy performance has been an important consideration during the design process, and the mX3 benefits from the latest semi-conductor technology, with smaller components and more ports per board. We have also made significant improvements in heat management, improving air-flow and heat sink design. We have introduced intelligent power controls that shut down unused test modules, along with variable speed fans and more efficient power supplies.

In addition, the large N11U chassis also includes from a number of additional energy saving functionality, including intelligent power and fan control.

We have been working with customers to revolutionise their R&D labs. Using our Velocity product, we are working with hardware developers to increase test equipment utilisation in their labs, consolidate their labs and dramatically reduce the total test duration through test automation and equipment sharing.

**Reducing the impacts of our products** We aim to reduce the overall social and environmental impacts of our test solutions across their lifecycles.

**Designed for the environment** Our products are designed to maximise recycling rates, with the following design principles used as standard:

- Connectors are used instead of hard-wired connections;
- Joints, snaps or screws are used instead of welding, soldering or glue;
- Minimised packaging materials including reusable pallets, totes and packing boxes;
- Designed to suit common hand tools;
- Modular design for ease of assembly and disassembly; and
- Improving product efficiency with product sustainability metrics.

Having introduced formal product sustainability metrics at our Positioning business in 2016, we have incorporated them into the product development process in two more divisions in 2017. Energy performance and material efficiency is now formally managed and monitored as part of the development process across the Positioning, Wireless and Cloud & IP business units.

**Reducing product impacts with Test-as-a-Service** Virtualising test equipment allows us to reduce the environmental impact across our products' whole lifecycle. We have developed virtual products including the Temeva platform and a virtual version of our powerful TestCenter products.

**Virtualising physical testing** Testing mobile communication and navigation equipment in real world environments is an important part of product development and often involves extensive field testing in vehicles. Spirent's Live2Lab Virtual Drive test tool reduces the expense and environmental impact of extensive drive testing by giving developers real-life radio frequency conditions in the lab.

The Live2lab tool is able to record signals captured in the field and replay them in the lab. This means research teams can minimise expensive drive testing, improve test effectiveness, and reduce the time-to-market.

**In-field repairs and upgrades** Our modular components and licence key design means we can repair and upgrade our products in the field, allowing us to avoid shipping equipment for repair between our customers' sites and own. This approach lowers our carbon emissions from freight and makes repairing equipment more convenient for customers.

#### **Electronic waste and use of hazardous materials**

The Group's business units comply with the EU's Waste Electrical and Electronic Equipment Regulations 2013 and Batteries Directive and the California Electronic Waste Recycling Programme.

Spirent's hardware products are classified as Category Nine (Monitor and Control Equipment) and came into scope of the EU's Restriction of Hazardous Substances Directive ("RoHS") in July 2017 and all comply with the requirements of the Directive.

#### **Conflict minerals**

The Group is not directly required to comply with or report under Section 1502 of the Dodd-Frank Act, the US Conflict Minerals law. However, it has robust procedures in place to ensure that it would be in compliance if it were brought in within the scope of this legislation. The Group will be subject to the EU Directive on Conflict Minerals when it is enacted into national policy in the UK. We are confident our existing practices will meet the standards required and are monitoring their development.

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## **Helping to revolutionise R&D labs: dramatically reducing test time and environmental impacts**

Automation and virtualisation are key design objectives for Spirent, as they can dramatically reduce environmental impact of a product across its whole life-cycle. Spirent's product Velocity helps customers to share lab equipment globally and automate tests, significantly reducing the equipment needed, energy usage, the test duration, and costs.

### **Context:**

Hardware R&D labs are energy intensive places, with test equipment and development hardware mounted in racks in a noisy, air-conditioned environment. They can also be inefficient with unused equipment left on, equipment duplicated across teams either in the same lab or in other locations globally, and there can be long delays between tests as equipment needs to be configured manually.

Spirent's Velocity product helps companies to revolutionise their labs, dramatically reducing the time taken to complete tests whilst slashing environmental impacts.

### **How it works:**

Velocity allows test equipment to be configured and accessed remotely and provides the architecture to automate and schedule tests. Given the typical levels of inefficiency, this can significantly reduce the equipment needed and allow companies to downsize and consolidate their labs, reducing both capital and operating costs as well as their environmental footprint. Velocity can also integrate with hardware power controls, switching off equipment when it's not needed, unlocking further efficiencies.

By deploying Velocity in R&D labs, Spirent has helped customers to:

- Reduce testing time: Velocity has helped complete tests 4 times quicker;
- Reduce equipment needed: Velocity allows global sharing of equipment and automates test scheduling, improves equipment utilisation by up to 77 per cent;
- Consolidate Labs: Velocity allows engineers to use and configure equipment from anywhere in the world, which means fewer labs are needed. In 2017, we helped a customer consolidate ten labs into one, and will help them consolidate an additional 13 labs into that same single lab in 2018;
- Automate power controls for each device: Velocity can automatically switch off equipment when it's not needed;
- Reduce energy use and carbon emissions: The improved equipment utilisation can reduce energy use and carbon emissions by up to 63 per cent; and
- Reduce noise exposure: Engineers no longer need to work in the lab, reducing their exposure to the high noise environment.

### **Sustainable product design**

Spirent's product sustainability programme is focused on embedding sustainability considerations into the product lifecycle, from their design, through their use, and at the end of their useful life.

We have incorporated sustainability metrics into our product design process and have also developed Software-as-a-Service and Lab-as-a-Service offerings that increase access to testing while reducing its environmental footprint.

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## Performance against 2017 targets

Area of focus	Target	Status
Management	Roll out sustainable product metrics to all business units.	<b>In progress</b> We introduced sustainability metrics across our Positioning, Wireless and Cloud & IP business units in Q4, but have not yet finalised the design of the appropriate metrics for our smaller business units. It is expected that this preliminary work will be completed in 2018.
Compliance	Ensure all products are RoHS compliant by June 2017.	<b>Completed</b> Following a comprehensive review of all our products, all are compliant with the RoHS directive.
Training	Carry out sustainability training for all engineering divisions in 2017.	<b>In progress</b> Training on the new metrics has been delivered for the engineering managers who have implemented the metrics. Formal staff training has only been completed at Paignton to date. Training for the other business units is planned for 2018.

## Plan for 2018

Area of focus	Objective	Target
Management	Monitor, measure and improve the sustainability performance of our products.	Implement formal product sustainability metrics into all business units, governing both hardware and software development processes.
Training	Set up a working group to co-ordinate and align product sustainability initiatives globally.	Establishing a product sustainability working group and meet four times in the year.
	Provide all employees with management responsibilities for engineering and design with sustainability training.	Provide training on product sustainability to employees working in hardware and software development.



### Procurement

#### Key issues

- Supplier labour practices
- Supplier environmental practices
- Supplier governance and business ethics practices

Spirent has a global supply chain, including contract and component manufacturers across the world. The majority of Spirent's sustainability risks and impacts occur in the supply chain, so it is an important area of focus for the Company's sustainability programme, FuturePositive.

The objective of our supply chain sustainability programme is to ensure our vendors achieve the expected standards of environmental management, social conduct and corporate governance.

In 2017 we ran a sustainable supply chain summit in Calabasas, CA to further improve our audit and assessment processes.

We conducted on-site audits at 18 (2016: 6) of our largest Tier-1 and key suppliers in 2017, representing 52 per cent of our total spend. In addition, we have continued to collaborate with our contract manufacturers, sharing information about audit performance of suppliers.

#### Management approach

##### Code of conduct

In 2016 we introduced a new Supplier Code of Conduct, based on the Responsible Business Alliance (RBA) Code of Conduct v5.1. This Code sets out our expectations for environmental management, health and safety, labour rights, and management systems as well as the provision of sustainability data and is available at <https://corporate.spirent.com>

##### Supplier assessment and approval

Suppliers are assessed before they can work with Spirent. In 2017, we expanded our supplier questionnaire to cover more sustainability issues in more detail, incorporating additional information security questions. The assessment includes detailed disclosures on financial security, quality, health and safety, information security, and environmental management, as well as business ethics and management systems.

The approval status of key suppliers is reviewed each quarter.

##### Supplier audits

Spirent commenced a programme of on-site supplier audits in 2015, and we set a target of conducting audits on the companies that represent at least 80 per cent of our direct spend by 2020. This is around 40 companies and we aim to assess around 25 per cent of this group each year.

In 2017, we conducted 18 suppliers audit (2016: 6), representing 52 per cent of direct spend in the year.

The audits identified no significant issues or instances of non-compliance.

We focus our supplier audits on companies that we do the most business with, who supply critical components, and those who operate in higher risk geographies and undertake activities with the largest potential impact.

In addition to our direct audits, we are collaborating closely with our contract manufacturers to expand our visibility of sustainability management and performance further down our supplier chain. Drawing on the RBA industry-wide validated audit process (VAP) and audits conducted by the contract manufacturers themselves, we are able to determine compliance further across our supply chain.

The contract manufacturer and VAP audits did not raise any significant issues or instances of non-compliance.

We set a target for 2017 to ensure that 60 per cent of all parts purchased would be from verified sources: that is, from suppliers who had either been audited by Spirent directly, by our contract manufacturers or through the RBA VAP audit programme. We have achieved 70 per cent of products from verified sources, exceeding our target.

In addition, we set a target for at least 70 per cent of our new suppliers categorised as Risk A in 2017 to satisfactorily completed a vendor assessment survey. There were 10 new Risk A vendors in 2017 and seven completed a survey satisfactorily, meeting the target set. Typically, components from new vendors are used in prototypes or new products. Of the three vendors who did not pass the assessment in 2017, two remain "in-review" and have an improvement plan in place and one supplier has been discontinued.

### Training

Key members of the supply chain team attended training on auditing and assessing supplier sustainability management. The training comprised an introduction to the key sustainability issues in supply chains, the supplier assessment methodology, and techniques to audit performance on environmental and social issues.

### Management team

Sustainability issues are managed as a core part of our supply chain management process by our procurement team, led by the Director, Global Procurement with executive oversight from the VP, Global Operations.

### Performance against 2017 targets

Area of focus	Target	Status
Supplier audit	Conduct 15 site audits on our priority suppliers.	<b>Completed</b> 18 supplier audits completed.
	Source 60 per cent of components from verified sources (audited by Spirent, a contract manufacturer or as part of the RBA VAP audit.	<b>Completed</b> 70 per cent of components sourced from verified sources in 2017.
	70 per cent of Risk A vendors satisfactorily completing the supplier questionnaire.	<b>Completed</b> 70 per cent of Risk A vendors completed the supplier questionnaire satisfactorily. Two of the remaining vendors remain "in-review" and the third was discontinued.
RBA VAP audit coverage	Set targets for coverage of RBA VAP audits in supply chain.	<b>Completed</b> Target set as part of the verified sources target.
Sustainability training	Complete skills-needs assessment and provide any training needed.	<b>Complete</b> Training provided on supply chain sustainability management, including auditing and interpreting questionnaire responses.

### Plan for 2018

We will continue to conduct vendor audits in 2018 and have set a target to complete 18 more during the year. The planned audits will cover an additional two per cent of direct spend, and so we have also set a modest increase in our target for components from verified sources. We have maintained our target of auditing suppliers representing 80 per cent of spend by 2020 and the target of ensuring at least 70 per cent of Risk A vendors satisfactorily complete the vendor assessments.

Area of focus	Objective	Target
Components from verified source	Ensure components are sourced from verified sources (vendors that have been audited by Spirent, our contract manufacturers, or as part of the RBA VAP audit programme).	71.4 per cent of all component parts from verified sources.
Supplier audit	Conduct 18 supplier on-site audits.	Conduct 18 on-site audits.
Supplier audit	Conduct on-site audits for suppliers representing 80 per cent of direct spend by 2020.	Audit suppliers representing 80 per cent of hardware spend by 2020. We have revised our supplier audit target for 2010 to reflect the changes in our supply chain. We have an increasing numbers of suppliers with low spend levels and providing services where on-site auditing is not considered necessary. We have amended our target to focus on our hardware suppliers, where on-site audits are appropriate.
Risk A vendor satisfactory questionnaire response	Ensure that at least 70 per cent of all new vendors rated Risk A satisfactorily complete a vendor questionnaire.	Minimum of 70 per cent of Risk A vendors.

## Property



### Property

#### Key issues

- Energy and climate change
- General environmental management

Spirent operates from 33 sites across 13 countries. The Group headquarters is in Crawley, UK and we have eleven significant engineering sites across the world which house development and customer service labs. We also have smaller sales or administrative offices across the world.

All product manufacturing is completed by contract manufacturers and only limited production processes such as quality testing, loading firmware, and minor repairs are completed on our sites.

We have implemented a programme of site moves and refurbishments over recent years to upgrade our staff facilities and invest in energy reduction technologies. The total floor area of our estate has remained similar to last year, with only a small number of moves and lease terminations. We have instigated a sustainability communications plan with a focus on energy efficiency and our property managers have begun a programme of energy and occupancy audits during 2017.

#### Management approach

##### Policy

The Group Environmental Policy applies to the Company and all its property. Specifically, it ensures that each site across the world works to minimise environmental impacts and prevent pollution.

##### Metrics

##### Energy

Energy use across the Company decreased by around 7 per cent in 2017 to 15,604 MWh (2016 16,044 MWh). This reduction was the result of the Group's refurbishment programme, continued site consolidation initiatives and the behaviour change campaign.

Energy use decreased at Crawley by 28 per cent and at Beijing by 19 per cent due to the reduction of equipment in use at Crawley and reducing the area occupied in Beijing, including changes to the customer service labs. Some sites increased energy usage over the year. Energy consumption at Holmdel, NJ increased by 17 per cent, San Jose, CA increased by 14 per cent and Plano, TX increased by 10 per cent. Increases are due to growth in the business in Plano and Holmdel and new equipment being brought online in the labs in San Jose.

#### Our main engineering sites



The largest energy-using sites in 2017 were:

	Occupied area (m <sup>2</sup> )	Total Energy Use 2017 (MWh)	Total Energy Use 2016 (MWh)	Change 2016 to 2017 (per cent)
Calabasas	7,789	4,221,020	4,118,261	+2%
Frederick	4,470	2,678,172	2,850,795	-6%
San Jose	4,859	1,570,831	1,375,039	+14%
Plano	2,370	1,281,083	1,168,056	+10%
Beijing 1	2,896	1,230,370	1,517,024	-19%
Eatontown	5,017	1,175,862	1,300,416	-10%
Honolulu	2,023	720,914	693,051	+4%
Paignton	2,575	488,846	509,607	-4%
Holmdel	1,556	357,602	306,859	+17%
Raleigh	1,169	232,250	218,109	+6%

### GHG emissions

Greenhouse gas emissions are a material issue for Spirent and we are committed to reporting emissions and acting to combat climate change. The Group once again reported to the Carbon Disclosure Project in 2017, completing the Climate Change and Supply Chain questionnaire. In 2017 we achieved a B score (2016: A-).

Year	Program	Disclosure Score	Performance Band
2017	Climate Change 2017	N/A	B
2016	Climate Change 2016	N/A	A-
2015	Climate Change 2015	95	C
2014	Climate Change 2014	73	D

In 2017, total Group emissions decreased by about 6.4 per cent from 2016 to 6,200 tonnes of CO<sub>2</sub>e.

	2017 Tonnes of CO <sub>2</sub> e	2016 Tonnes of CO <sub>2</sub> e
<b>Emissions from:</b>		
Combustion of fuel & operation of facilities (scope 1)	100.50	139.30
Electricity, heat, steam and cooling purchased for own use (scope 2)	6,099.70	6487.40
Total emissions	6,200.20	6,626.70
<b>Emissions intensity metrics:</b>		
Normalised per square metre of gross internal area of our facilities	0.137	0.145
Normalised per \$ million of revenues	13.63	14.47

### Methodology

Reporting on emission sources is required under the Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013 and these sources fall within our consolidated financial statements. We have reported on all the emission sources that fall within our consolidated financial statements. We do not have responsibility for any emission sources that are not included in our consolidated financial statements. We have used the GHG Protocol Corporate Accounting and Reporting Standard (Revised Edition), data gathered to fulfil our requirements under these Regulations, and emission factors from the UK Government's GHG Conversion Factors for Company Reporting 2017 for the UK sites, and 2015 factors for all other countries except the for the United States where US EPA 2015 eGrid emissions factors for individual states were used.

### 2017 Performance against targets

The Group set a target to reduce carbon emissions by 5 per cent relative to revenue from 2016 figures. We have achieved this target, making good progress in reducing our carbon footprint, reducing our absolute emissions by 6.4 per cent from 2016, and achieving absolute reductions in GHG emissions of 5 per cent or more in 19 of our 33 sites. Primarily these reductions have been driven by our ongoing estate rationalisation programme and energy efficiency campaigns.

## Property

continued

### Performance against 2017 targets

Area of focus	Target	Status
Carbon emissions	Reduce carbon emissions relative to revenue by 5 per cent from 2016 levels.	<b>Achieved</b> Carbon emissions per £m revenue reduced by 5.79 per cent.
Management	Develop sustainable property manual and engineering standards.	<b>Complete</b> Property engineering standards have been developed.
Monitoring	Install energy metering.	<b>On hold</b> Energy audits being trialled instead.
Awareness and communications	Undertake and energy reduction campaign.	<b>Complete</b> A programme of monthly communications was run during 2017.
Training	Complete sustainability training for property team.	<b>Complete</b> Sustainability training provided to property team in May 2017.

### Action plan for 2018

Area of focus	Objective	Target
Carbon emissions	Reduce our carbon footprint and improve the scope of our carbon reporting.	Reduce scope 1 and 2 carbon emissions relative to revenue by 5 per cent from 2017 levels.  Collect and report our material scope 3 emissions sources.  Explore the options to set longer-term science-based carbon reduction targets.
Energy efficiency	Reduce the energy use in our labs.	Conduct preliminary reviews of the equipment in our labs and conduct detailed audits at 2 sites at least.

# People



## People

### Key issues

- Human and labour rights
- Diversity and equality
- Skills development
- Health and safety
- Supporting local communities

At 31 December 2017, Spirent employed 1,454 people in 13 countries across the world. Our competitive advantage relies on the market-leading skills and knowledge of our staff, and as such we have a strong focus on attracting, retaining and developing the best people. We also recognise the challenges that the technology and engineering sectors face, including decreasing interest in Science, Technology, Engineering and Mathematics (“STEM”) subjects among young people and a lack of gender diversity, particularly in technical roles.

Our programme in 2017 continued to focus on training and development for our staff and supporting interest and opportunities in STEM for young people and women in particular.

Our STEM programmes with student, colleges and university has been reaccredited with the Business in

the Community (BITC) Inspiring Young Talent awards.

We have also continued our involvement in projects within the communities in which we work and live, through volunteering and charitable giving initiatives.

### Management approach

#### Human and labour rights

##### Business ethics and labour rights

Our workplace practices are governed by our global Business Ethics Policy and a suite of HR policies.

The Business Ethics Policy commits Spirent to the highest standards in human and labour rights, employee conduct and compliance with all applicable legislation. It prohibits corruption and bribery, unethical business practices, political contributions and governs conflict of interest and gifts.

The Board oversees implementation of the Business Ethics Policy.

#### Human rights

Spirent recognises human rights as set out in the Universal Declaration of Human Rights and enshrined in EU and UK law through the European Convention on Human Rights and the Human Rights Act 1998. Our Business Ethics Policy sets out our commitment to protecting the human rights of all those who work for or on behalf of the Company.

#### Freedom of association

Spirent’s Business Ethics Policy sets out our commitment to ensuring employees have the freedom to associate or collectively bargain without fear of discrimination against the exercise of such freedoms. No Spirent employees were members of a trade union during 2017.

Spirent suppliers are expected to meet the same standards of freedom of association, and compliance of key suppliers is assessed through supplier questionnaires. Given Spirent’s supply chain includes a wide range of electronic component manufacturing activities across a number of emerging economies, the business ethics of suppliers are assessed as part of the procurement process and through announced site audits.

#### Diversity

We recognise workplace diversity as a strength and our Business Ethics and HR policies set out commitments to encourage diversity and prevent discrimination in any form. All people are treated fairly and honestly regardless of their colour, race, ethnic and national origins, sexual orientation or gender, marital status, disability, religion or belief, being a part time employee or on the grounds of age.

Diversity remains an area we need to improve in, with women and young people under-represented in our workforce.

#### Gender

There have been only minor changes in the gender balance in the Company from 2016. At 31 December 2017, around 21 per cent of our employees are female (2016: 22 per cent) and 22 per cent of our managers are female (2016: 24 per cent). One women served on our Board of 5 (29 per cent representation although this has increased since that date) but only 5 per cent of our senior managers and 19 per cent of our engineering staff are female.

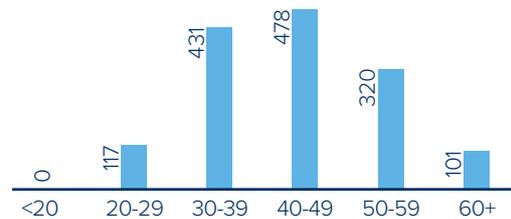
The under-representation of women in the technology sector is a key challenge for us. Our STEM programme has specifically looked to address the gender gap in our business and sector.

### Gender diversity



**Age**

Spirent's workforce has a diverse age distribution. The largest age group remains 40-49 (33 per cent) but less than 10 per cent of our employees are under 30 and Spirent has no employees under 20.



**Diversity in science and engineering – the global challenge**

Our industry faces a challenge to attract young people and particularly women into engineering and technology roles.

**An ageing workforce**

According to the 2016 National Science and Engineering Indicators report, the average age of scientists and engineers in the US labour force has increased to 43 in 2013 from 41 in 1993. This is mirrored in the age profile of our own employees. Whilst we recognise that people are now working longer, the low proportion of staff under 30 is also a key factor.

**Too few women in STEM**

Whilst the total number of women enrolling on engineering and computer science degree courses has increased over the last 20 years, the proportion of women on courses remains low. The 2017 report on Women, Minorities and Persons with Disabilities in Science and Engineering by the National Science Foundation in the US, sets out the most recent statistics. In 2014, women accounted for just 18-20 per cent of computer science and engineering bachelor degrees, and whilst Master's level participation is slightly higher, women are strongly under-represented in this field. Women make up only 27 per cent of computer and maths scientists and 15 per cent of engineers in the workforce.

At Spirent, the proportion of our staff and engineers are roughly in line with these figures, but we are committed to changing to status quo.

It is recognised that there are a range of barriers that might discourage women from pursuing a career in engineering and computer science, from gender stereotypes to a lack of female role models, and our STEM programme has been designed to help address them where we can.

**Our programme: encouraging young people in science and engineering**

Our STEM programme aims to get more young people interested in science and technology and provide practical opportunities to start a career. Our STEM programme was re-accredited with a BITC award for Inspiring Young Talent.

**Stem in schools – our stem ambassador programme**

Our staff volunteer as STEM ambassadors and run workshops in schools and colleges to raise awareness of the types of jobs there are in science and engineering. As part of the STEMnet programme, staff run high school workshops and projects to get young people interest in science and technology and showcase the types of jobs there are in the sector.

In 2017 Spirent has 23 STEM ambassadors in the UK registered with STEMnet (2016 11), who ran a programme of 15 events across the year including design and manufacturing competitions, talks and events.

**Creating opportunities – apprenticeships and student placements**

For older students, we run apprenticeships and industrial placement, and sponsor the most promising students in their final year at college. In 2017, we ran programmes in China and East Asia, UK, US and India.

We work closely with local colleges and universities and provide input to the curriculum to ensure the most up to date skills and technologies are included.

In the UK, we ran eight university events during the year and hired two new apprentices. Our aim is for all apprentices to be taken on as permanent members of staff after their training and the three apprentices who have completed their training have been employed. In addition, three students have been given 12-month placements and 14 students have been given shorter work experience placements, including three PhD students.

11 students joined our internship programme in the US during summer of 2017.



**Intern**

**Tanvi Vidante**  
**San Jose, CA**

Tanvi joined Spirent as a Development Operations Engineer Intern for the summer of 2017.

“My internship has been a really worthwhile experience. I have been exposed to new tools and technology and I’ve had the opportunity to design, programme and automate tasks. After completing my Master of Science in Computer Science, I hope to come back to Spirent as a full time employee.”



**Hardware Engineer Apprenticeship**

**Daniel Martin**  
**Paignton, UK**

Daniel joined Spirent on our apprenticeship programme in Paignton, UK.

“From early on, I’ve been given the opportunity to get properly involved in real projects. For me, the best one was helping to test the 200D Detector. I even learned how to configure parts of it and got the chance to design and write a utility programme. I would recommend an apprenticeship with Spirent to anyone – you are constantly learning new things with great support from experts.”



**Graduate Engineer**

**Lui Ying**  
**Beijing, China**

Having previously completed a summer internship, Lui joined Spirent after graduating and works on software product verification in our Cloud & IP Division.

“I wanted to join Spirent after graduating to put what I learnt during my time at university into practice. I had previously been at Spirent on their internship programme, where I learnt a lot and really enjoyed the work atmosphere.”



**Senior Software Engineer**

**Lui Xiaozhi (Ashley)**  
**Beijing, China**

Ashley has been with Spirent for nine years and is a script master in charge of a team of eight software engineers.

“I’ve had a lot of development opportunities during my time here and Spirent has supported me to progress up the career ladder. What I particularly enjoy about working at Spirent is that we are actively encouraged to innovate and improve our skills.”



**Knowledge Transfer Partnership Associate**

**Talini Pinto Jayawardena**  
**Paignton, UK**

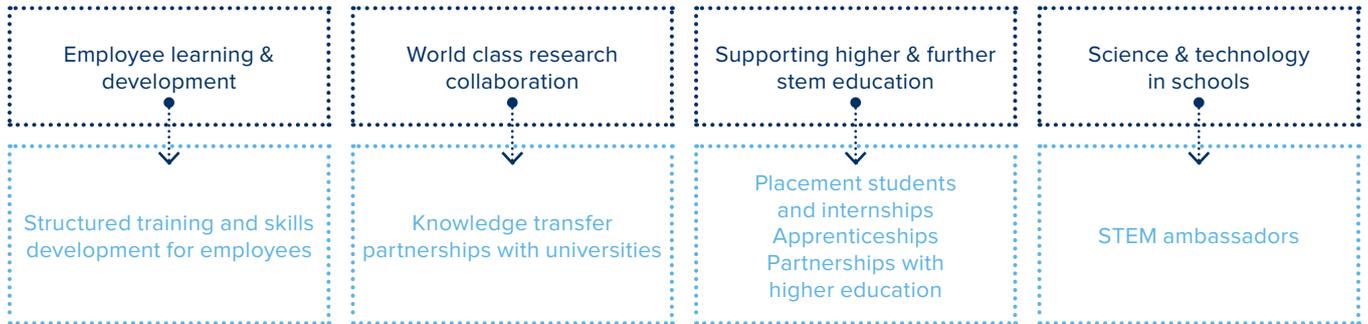
Talini is a systems engineer and worked on the Knowledge Transfer Partnership (KTP) between Spirent and the University of Bath. The partnership focused on space weather effects on Global Navigation Satellite System (GNSS) simulator capabilities.

“The KTP between the University of Bath and Spirent was very appealing because of the nature of the work and the training within the programme. The chance to transfer research in my field into industry and the real world was a key factor. The high level of support and flexibility offered at Spirent was also attractive and it is a great environment to work in.”

**Training and skills**

Spirent has well-developed technical and compliance training processes in place for its employees, but also recognises the importance of supporting wider science and technology education, and of providing opportunities for young people to enter the sector.

Our training and skills approach focuses on four key areas:



**Employee learning and development**

Spirent has a well-established learning and development programme, providing employees with technical and business administration training. Training is managed through personal development plans, and delivered through online and in-person training, peer mentoring and informal skills sharing.

**Knowledge transfer partnerships**

In 2015 we instigated a knowledge transfer partnership with the Department of Electronic and Electrical Engineering at the University of Bath to investigate and develop new functionality for Global Navigation Satellite System (GNSS) simulations. The two-year research partnership, which concluded in 2017, had a particular focus on threat simulation and the Research Associate was based on-site at our Positioning business unit.

**Women in STEM**

We have included a number of projects in our 2017 STEM programme to actively encourage interest in STEM careers amongst girls and young women.

STEM ambassadors from our Positioning business unit in Paignton, UK teamed up with The Spires College to take part in the Manufacturing Activities Designed to Engage (MADE) project. Student teams competed against each other and then against other schools, and the all-girl team from the Spires won the inter-school competition.

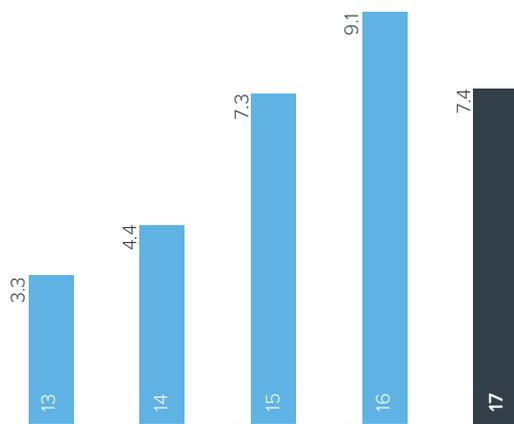
Our STEM ambassadors also took part in the Big Bang UK Young Scientists and Engineers Fair. Spirent teamed up with the Royal Institute of Navigation and Torquay Girls Grammar School and ran interactive events and games to encourage the young people to explore science and engineering careers.

Our HR Director, EMEA also ran an event for 13 to 15 year old females at South Devon College for International Women in Engineering Day.

### Employee turnover

Spirent's success is dependent on its talented employees and therefore retaining them is extremely important. In 2017, Spirent made 231 new hires and 310 terminations, with voluntary employee turnover of 7.4 per cent. Spirent's voluntary employee turnover remains below the industry average of 13.3 per cent in 2017.

### Voluntary employee turnover %



### Health and safety

The Board has designated the Chief Financial Officer as responsible for health and safety performance within the Group and procedures are in place for incidents to be reported through the Audit Committee to the Board as necessary.

Spirent has health and safety committees at each business unit, with our Paignton, UK site also having a health and safety management system, certified to OHSAS 18001.

There were no reportable accidents in 2017.

There are no roles which have high incidence or high risk of diseases related to their occupation. There are no formal agreements with trade unions which cover health and safety as no Spirent employees were trade union members in 2017.

### Employee benefit plan coverage

Spirent offers a comprehensive suite of benefits to employees across all regions.

	North America	APAC	EMEA
Health insurance	Yes	Yes	Yes
Life insurance	Yes	Yes	Yes
Disability	Yes	Yes	Yes
401(k)/Pension	Yes	Yes	Yes
Parental Leave	Yes	Yes	Yes
PTO/Vacation	Yes	Yes	Yes

### Parental leave

All staff entitled to parental leave during 2017 took leave. The return rates and retention rates after 12 months are as follows:

Region	Gender	Entitled	Taken	Return rate (%)	Employed after 12 months (%)
North America	Male	5	5	100	80
	Female	8	8	75	63
APAC	Male	7	7	100	100
	Female	8	8	75	75
EMEA	Male	6	6	100	100
	Female	0	0	100	100

**Support programmes at career endings**

Spirent provides a flexible outplacement service for staff who are made redundant. Staff are allocated a budget to spend as they see best on a range of support services including personal coaching, training and job search support.

**Talent and performance reviews**

Spirent undertook a comprehensive global talent review in Q4 of 2017, which assessed the current competencies and training requirements of all members of staff.

**Community projects**

Spirent contributes to good causes and encourages employees to volunteer in the communities in which we work. We encourage each of our teams at each site to identify projects that are important for their community and offer paid volunteering days for our employees. This year, a key theme for some of our community projects has been disaster relief.

Staff from our Calabasas office had a volunteer event for victims of Hurricane Harvey, where over 30,000 people were forced from their homes. The Spirent team assembled thousands of first responder kits for emergency teams as well as collecting clothing for the victims of the worst storm in the last 10 years in the US. In addition to the volunteering efforts of our employees, we made a donation of \$5,000 to the Hurricane Harvey Relief Fund.

For the fifth consecutive year, Spirent employees in New Jersey volunteered their time and skills to continue to rebuild properties damaged by Hurricane Sandy. The team volunteered through St. Bernard's Project, helping to rebuild homes far below the market rate.

**Performance against 2017 targets**

Area of focus	Target	Status
STEM skills	Expand EMEA STEM programme into APAC and North America and complete a programme in all areas across 2017.	<b>In progress</b> STEM has been added to the agenda of the Global HR Directors' meetings and STEM activity is now coordinated across all regions. The STEM programme in APAC and North America does not yet include all aspects of the EMEA programme.
Training	Complete training needs assessments for all divisions and provide training required.	<b>Complete</b> A global talent review was completed in Q4 which assessed the current competencies and training requirements across all business units.
Women in STEM	Introduce a programme to encourage and support women into STEM subjects and apply for jobs at Spirent.	<b>Complete</b> A programme of events to support women into STEM was run in 2017.

## Action plan for 2018

Area of focus	Objective	Target
Gender Pay Equality	Conduct a detailed review of pay and gender in line with the Gender Pay Gap regulations and report.	Complete gender pay report for our UK employees. <sup>1</sup>
STEM skills	Encourage young people to take up STEM subjects and provide opportunities for them to join the sector.	<p>Define a global STEM strategy by April 2018. The strategy will support and promote STEM initiatives across all regions, engage and grow local talent, and set SMART performance targets.</p> <p>We will aim to complete at least one STEM event in each region by December 2018.</p>
Training	Ensure all staff have the appropriate skills and training in their current and future roles.	<p>Development plans and successions plans will be defined and implemented for all staff by December 2018.</p> <p>We will also design and roll-out our FutureLeader program to develop talent within our business.</p>
Sustainability awareness	Ensure all members of staff are aware of Spirent's sustainability programme, FuturePositive.	We will run an internal communications campaign to ensure all staff are aware of Spirent's sustainability programme.
Volunteering	Provide support to our local communities.	<p>We will expand our community volunteering programme to our APAC business and actively promote the opportunities for community volunteering to staff.</p> <p>We will monitor the number of employee volunteering days and set targets to expand participation.</p>

<sup>1</sup> Although Spirent is not required to comply with the Equality Act 2010 (Gender Pay Gap Information) Regulations 2017, we will report on Gender Pay on a voluntary basis for our UK operations

## Auditor's Assurance Statement

### Scope and objectives

Spirent Communications plc ("Spirent"), acting through Brite Green Ltd ("Brite Green"), commissioned Henriques & Co. Ltd (the "Auditor") to undertake independent assurance of its 2017 Sustainability Report (the "Report"). Henriques & Co. Ltd has no other relationships with Spirent or Brite Green that might compromise its independence. The assurance process was conducted in line with AA1000AS (2008) and designed to provide Type 1 moderate assurance. The Global Reporting Initiative (GRI) Quality of Information Principles were used as criteria for evaluating performance information.

### Responsibilities of the directors of Spirent Communications plc and of Henriques & Co. Ltd

The directors of Spirent have sole responsibility for the preparation of the Report, which was produced for them by Brite Green. This statement represents the Auditor's independent opinion and is intended to inform Spirent management. The Auditor was not involved in the preparation of the Report. The work was performed by Adrian Henriques; see [www.henriques.info](http://www.henriques.info) for information on independence and competence.

### BASIS OF OUR OPINION

The Auditor's work was designed to gather evidence with the objective of providing assurance as defined in AA1000AS (2008).

To prepare this statement, the Auditor reviewed the Report and supplementary information, and interviewed Brite Green and Spirent staff. Feedback was provided to Spirent on drafts of the Report and other material and where necessary changes were made.

### Findings and opinion

On the basis of the work we have done, we believe the Report fairly represents Spirent's principal stakeholder relationships, impacts on its stakeholders and its responses to their concerns.

On the basis of the work undertaken, nothing came to our attention to suggest that the Report does not properly describe Spirent's adherence to the principles.

### Observations

Without affecting our assurance opinion, we also provide the following observations related to the principles.

#### *Inclusivity*

The Report as a whole sets out a clear and systematic approach to dealing with Spirent's sustainability impacts. It is welcome to see Spirent extending its engagement with its supply chain, including second-tier suppliers, on a range of issues.

Spirent continues to engage appropriately with most of its stakeholders. However it is not clear to what extent Spirent consults its staff on their issues.

#### *Materiality*

The Report covers the key material issues that Spirent faces. This includes both its direct impacts including energy use as well as indirect impacts related to the use of its products. In order to reflect its impacts in a balanced way, the Report in future years needs to set the impact of particular products in the context of the impact of Spirent's whole product range and address social as well as environmental impacts.

Corruption has been identified as a material issue. Spirent appears to have an appropriate set of processes in place to deal with corruption. The Report, however, needs to report more extensively on these practices and its approach to the issue in general.

#### *Responsiveness*

Spirent has set targets for all the key areas of its impact. However the nature of the targets, particularly for products and properties should focus more on measurable performance tracked over time, rather than on management processes.

It is welcome to see continued overall progress on energy reduction from both its sites of operation and its products. Future reports should set these, and other aspects of performance, in the context of relevant global goals.



**Adrian Henriques**  
Henriques & Co. Ltd  
London  
February 2018

## GRI Index

This Report includes standard disclosures from the Global Reporting Initiative (GRI) G4 Sustainability Reporting Framework. This index sets out the indicators we have and have not included, those that are not material to Spirent and where we have provided partial information from a particular disclosure.

### Key

Y Reported      NM Not Material      P Partially Reported      N Not Reported

Aspects	Indicators	Reported	Report page
	G4-DMA Disclosures on management approach (DMA)	11	11
<b>Category: Economic</b>			
Economic Performance	G4-EC1 Economic value	Y	4
	G4-EC2 Climate change risks	P	21
	G4-EC3 Benefit plan coverage	N	–
Market Presence	G4-EC4 Financial assistance from the government	NM	–
	G4-EC5 Ratio of entry level wage to local minimum wage	N	–
	G4-EC6 Proportion of senior management hired from the local community	N	–
Indirect Economic Impacts	G4-EC7 Infrastructure investments	N	–
	G4-EC8 Indirect economic impacts	N	–
Procurement Practices	G4-EC9 Local suppliers	N	–
<b>Category: Environmental</b>			
Materials	G4-EN1 Materials by weight or volume	N	–
	G4-EN2 Recycled input materials	P	14
Energy	G4-EN3 Energy consumption (Scope 1 + 2)	Y	21
	G4-EN4 Energy consumption (Scope 3)	N	–
	G4-EN5 Energy intensity	Y	20
	G4-EN6 Energy reductions	Y	14, 21
	G4-EN7 Energy reductions in products and services	P	14
Water	G4-EN8 Water withdrawals by source	NM	–
	G4-EN9 Water sources affected by withdrawals	NM	–
	G4-EN10 Water recycled and reused	NM	–
Biodiversity	G4-EN11 Facilities in or near areas of high diversity	NM	–
	G4-EN12 Impacts on biodiversity	NM	–
	G4-EN13 Habitats protected or restored	NM	–
	G4-EN14 IUCN Red List species	NM	–
Emissions	G4-EN15 GHG emissions (Scope 1)	Y	21
	G4-EN16 GHG emissions (Scope 2)	Y	21
	G4-EN17 GHG emissions (Scope 3)	N	–
	G4-EN18 GHG emissions intensity	Y	21
	G4-EN19 Reduction of GHG emissions	Y	21
	G4-EN20 Ozone-depleting substances (ODS)	N	–
	G4-EN21 NOx, SOx and other emissions	N	–
Effluents & Waste	G4-EN22 Water discharge	NM	–
	G4-EN23 Waste by type and disposal method	N	–
	G4-EN24 Significant spills	NM	–
	G4-EN25 Hazardous waste	N	–
	G4-EN26 Biodiversity affected by runoff	NM	–
Products & Services	G4-EN27 Mitigation of environmental impacts of products and services	Y	14
	G4-EN28 Products and packaging materials reclaimed	P	15
Compliance	G4-EN29 Environmental fines and sanctions	NM	–
Transport	G4-EN30 Environmental impacts from product distribution and employee travel	N	–
Environmental Investments	G4-EN31 Environmental investments	N	–
Supplier Environmental	G4-EN32 New suppliers screened using environmental criteria	Y	18
	G4-EN33 Supply chain environmental impacts	Y	18
Environmental Grievance Mechanisms	G4-EN34 Environmental grievances	NM	–

## GRI Index

continued

Aspects		Indicators	Reported	Report page
<b>Category: Social</b>		Sub-category: Labour Practices & Decent Work		
Employment	G4-LA1	Number and rate of new employee hires and turnover	N	–
	G4-LA2	Benefits provided to full-time employees	N	–
	G4-LA3	Return to work and retention rates after parental leave	N	–
Labour/ Management Relations	G4-LA4	Notice periods regarding operational changes	N	–
	G4-LA5	Workforce represented in health and safety committees	Y	27
Occupational Health & Safety	G4-LA6	Rates of injury, occupational disease, lost days, absenteeism, and work-related fatalities	Y	27
	G4-LA7	Workers with high incidence risk of diseases	Y	27
	G4-LA8	Health and safety topics covered in agreements with trade unions	Y	27
	G4-LA9	Average hours of training for employees	N	–
Training & Education	G4-LA10	Programs for skills management managing career endings	P	28
	G4-LA11	Employees receiving performance and career development reviews	P	28
	G4-LA12	Composition of governance bodies and employees	P	23
Diversity	G4-LA13	Ratio of basic salary and remuneration of women to men	N	–
Equal Pay for Women & Men	G4-LA14	New suppliers that were screened using labour practices criteria	Y	18
	G4-LA15	Negative impacts for labour practices in the supply chain	P	18
Labour Practices Grievance Mechanisms	G4-LA16	Grievances about labour practices	Y	23
	<b>Category: Social</b>		Sub-category: Human Rights	
Human Rights Investments	G4-HR1	Investment agreements and contracts that include human rights clauses or underwent screening	N	–
	G4-HR2	Employee training on human rights	Y	23
Non-discrimination	G4-HR3	Incidents of discrimination	N	–
Freedom of Association	G4-HR4	Significant risk of freedom of association in operations and suppliers	Y	23
Child Labour	G4-HR5	Significant risk of child labour in operations and suppliers	Y	23
Forced or Compulsory Labour	G4-HR6	Significant risk of forced or compulsory labour in operations and suppliers	Y	23
Security Practices	G4-HR7	Security personnel trained in the organization's human rights policies	NM	–
Indigenous Rights	G4-HR8	Incidents of violations involving rights of indigenous peoples	NM	–
Human Rights Assessments	G4-HR9	Operations that have been subject to human rights assessments	P	23
	G4-HR10	New suppliers screened for human rights	Y	23
Supplier Human Rights Assessments	G4-HR11	Human rights impacts in the supply chain	Y	23
Human Rights Grievance Mechanisms	G4-HR12	Grievances about human rights impacts	NM	–

Aspects		Indicators	Reported	Report page
<b>Category: Social</b>		Sub-category: Society		
Local Communities	G4-SO1	Local community engagement, impact assessments and development programs	P	28
	G4-SO2	Negative impacts on local communities	N	–
Anti-corruption	G4-SO3	Risks related to corruption	Y	13
	G4-SO4	Communications and training on anti-corruption	Y	13
	G4-SO5	Confirmed incidents of corruption	Y	13
Public Policy	G4-SO6	Political contributions	Y	23
Anti-competitive Behaviour	G4-SO7	Anti-competitive behaviour	Y	23
Compliance	G4-SO8	Fines for non-compliance with laws	Y	23
Supplier Assessment for Impacts on Society	G4-SO9	New suppliers screened for impacts on society	Y	18
	G4-SO10	Negative impacts on society in the supply chain	N	–
Grievance Mechanisms for Impacts on Society	G4-SO11	Grievances about impacts on society	N	–
<b>Category: Social</b>		Sub-category: Product Responsibility		
Customer Health & Safety	G4-PR1	Health and safety impact assessments of products and services	P	14
	G4-PR2	Non-compliance concerning the health and safety impacts of products and services	N	–
Product & Service Labelling	G4-PR3	Product and service information required for labelling	N	–
	G4-PR4	Non-compliance with regulations concerning product and service labelling	N	–
	G4-PR5	Surveys measuring customer satisfaction	N	–
Marketing & Communications	G4-PR6	Sale of banned or disputed products	N	–
	G4-PR7	Non-compliance with regulations concerning marketing communications	N	–
Customer Privacy	G4-PR8	Complaints regarding breaches of customer privacy and losses of customer data	N	–
Product Compliance	G4-PR9	Fines for non-compliance with laws and regulations concerning products and services	NM	–

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