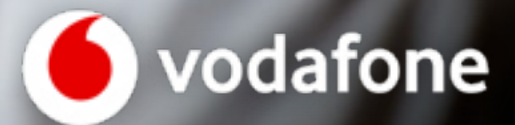


A photograph of two women wearing hijabs, one in white and one in red, looking at a smartphone together. The woman in the white hijab is smiling. A large red speech bubble graphic is overlaid on the left side of the image.

Sustainable Business Report 2019

Vodafone Group Plc



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Our business

Vodafone Group is one of the world's leading telecoms and technology service providers. We have extensive experience in connectivity, convergence and the Internet of Things, as well as championing mobile financial services and digital transformation in emerging markets.



650 million

mobile customers*



€43.7 billion

turnover



85 million

IoT connections



92,005

employees



37.1 million

mobile money customers



5.4 million

TB of data transmitted

*Including all of the customers in Vodafone's joint ventures and associates.

Our year at a glance

By empowering women and promoting gender equality, we can help communities, economies and businesses – including our own – to prosper.

📖 9



Women's empowerment

Progress towards our 2025 goals

We aim to connect an additional 50 million women living in emerging markets to mobile

19.4 million

more female customers in our emerging markets since 2016

Our ambition is for Vodafone to become the world's best employer for women

31%

of our management and leadership roles held by women



Youth skills and jobs

Progress towards our 2022 goals

Support 10 million young people to access digital skills, learning and employment opportunities

478,986

users have completed our *Future Jobs Finder* tool to understand their strengths and skills and view job opportunities in the digital economy

Provide 100,000 opportunities for young people to receive a digital learning experience at Vodafone

54,712

young people provided with workplace experience during the year

With a growing digital skills gap, we believe there is a need to help young people develop the skills they need to thrive in the digital economy.

📖 19

Urgent action is needed to address climate change. We are committed to achieving a significant reduction in the greenhouse gas emissions associated with our operations.

📖 25



Energy innovation

Progress towards our 2025 goals

To reduce our greenhouse gas emissions by 50%

3%

reduction in our total greenhouse gas emissions in the last year

Our ambition is to purchase 100% of the electricity we use from renewable sources

15%

of purchased electricity was from renewable sources

Our year at a glance

Supply chain integrity and safety

We work with our suppliers, partners and peers to drive high standards across our supply chain and do our utmost to keep everyone working in our operations safe from harm.

📖 Supply chain 37

📖 Safety 42

Key highlights of the year

Supplier Academy

Launched a common industry Supplier Academy to help build capability of suppliers

85

on-site assessments conducted within Vodafone's supply chain

Human rights

Respect for human rights, together with established processes to reduce the risk of human rights abuses, is critical to our long-term success.

Key highlights of the year

GNI assessment

completed to ensure we have measures in place to protect and advance freedom of expression and the right to privacy

Tech Against Trafficking

Joined a new multistakeholder coalition, Tech Against Trafficking, which is focused on modern slavery issues

📖 46

Privacy and cyber security

Vodafone has strict governance processes and controls in place to protect our customers' personal data, respect their privacy and proactively manage the cyber security risks that face businesses today.

Key highlights of the year

10 Privacy

'commandments'

established to help drive how we develop and operate our products and services

Vodafone Cyber Code

launched to simplify and explain our basic security controls to all employees

📖 53

Our people

Our business performance and our customers' experience of Vodafone depend on our ability to attract, develop and retain talented individuals at all levels.

Key highlights of the year

€60m

invested in employee training and development

85%

of our employees* believe that Vodafone is socially responsible

450 employees

have joined our Multicultural network, which was launched this year in the UK

📖 58

* Employees who responded to our Global People Survey

Our reporting does not stop here

 [vodafone.com/sustainability](https://www.vodafone.com/sustainability)

Mobiles, masts and health

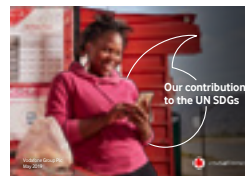
The health and safety of our customers and the wider public is a priority for Vodafone. We endeavour to address any concerns regarding the electromagnetic frequency (EMF) emissions from mobile devices and base stations by providing up-to-date, open, transparent information on our website and by engaging with local communities.

📖 56

 [vodafone.com/mmh](https://www.vodafone.com/mmh)

Reporting our contribution to the UN SDGs

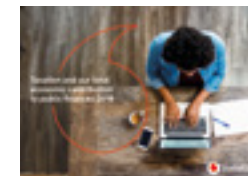
Vodafone is committed to leveraging the power of its technology, networks and services to contribute to the United Nations Sustainable Development Goals. Find out how in our report.



 [vodafone.com/sdgs](https://www.vodafone.com/sdgs)

Taxation and our total economic contribution

As a major investor, taxpayer and employer, we make a significant contribution to the economies of all the countries in which we operate. Our tax report sets out our total contribution to public finances on a cash-paid basis. Find the report online.



 [vodafone.com/tax](https://www.vodafone.com/tax)

Digital Rights and Freedoms Reporting Centre

Our transparency disclosures on matters related to digital human rights include our policies, approach and principles regarding government access to customer data, as well as our approach to managing issues such as freedom of expression, censorship and the digital rights of the child. We present our approach on these issues online in our Digital Rights and Freedoms Reporting centre.

 [vodafone.com/drfr](https://www.vodafone.com/drfr)

Chief Executive introduction

Vodafone's purpose is to connect for a better future and is supported by our commitment to improve one billion lives through an inclusive digital society while halving our environmental impact by 2025.

We have an important role to play in helping to create a digital society. Digital services, like the ones we provide, are quickly becoming the new engines of growth in the global race for economic prosperity and sustainable development. As digitisation dramatically increases the rate of change and pace of innovation, it can however, also widen existing divides in our societies. In this fast-paced journey to an exciting digital age, our goal must therefore be to democratise digitisation, making technology truly accessible to everyone while being more mindful of its impact on our planet.

As Vodafone's CEO, I am pleased to share our Sustainable Business Report 2019 with you, which outlines our progress against our sustainable business strategy and targets. It is clear that our focus on women's empowerment, youth skills and jobs and energy innovation is having a positive impact on our customers, our colleagues and the communities in which we work.

Vodafone's purpose is to connect for a better future and is supported by our commitment to improve one billion lives through an inclusive digital society while halving our environmental impact by 2025.

Inspired by our purpose and supported by our networks and technologies, we are working to ensure that our services, programmes and initiatives are helping to accelerate gender diversity and women's empowerment, and are improving young people's digital skills across our footprint, while we reduce our environmental impact. I am pleased with our progress and would particularly highlight some of the programmes and initiatives that are driving that success, including:

- In 2016, Vodafone set a target to connect an additional 50 million women living in emerging markets to mobile by 2025. To date, we estimate that we have connected an additional 19.4 million women, providing opportunities for them to enhance the quality of their lives and reach their full potential. Vodacom's *Mum & Baby* service in South Africa is one example of the programmes we are developing in pursuit of our goal. It is a platform that provides subscribers with maternal, neonatal and child health and wellbeing information, with 98% of those completing a recent independent survey saying they had taken action to improve their child's health as a result of using this service.
- In March 2018, we committed to our target to support 10 million young people to access digital skills, learning and employment opportunities by 2022. This goal was developed to address the concern that, while younger people are generally more savvy digitally, many find themselves lacking the necessary digital skills to capture new employment opportunities in a digital

society. In the first year, we have made good progress through our *Future Jobs Finder* platform, with 500,000 young people, across 20 different countries, learning more about their skills and abilities and how they can use those to find a career in the digital economy.

- Climate change remains one of the most critical global challenges facing humanity. We have committed to reducing our greenhouse gas emissions by 50% and to purchasing 100% of the electricity we use from renewable sources by 2025. These are ambitious targets for our business, as business growth and our customers' growing data usage is resulting in increased energy demand. While there is no simple global solution, I am pleased with the progress we have made this year to ensure that we will meet our targets in a credible and sustainable way.

Our strategy continues to help drive impact against the UN Sustainable Development Goals (SDGs)

Vodafone is also committed to operating responsibly and with integrity. This report outlines the policies, approach and controls we put in place to manage key risks such as digital human rights, ensuring integrity in our supply chain, health and safety, protecting our customers' data and respecting their right to privacy.

Our strategy continues to help drive impact against the UN Sustainable Development Goals (SDGs), and specifically those that relate to quality education, gender equality, decent work and economic growth, industry, innovation and infrastructure, and climate action.

Vodafone is optimistic about the benefits of a digital society. High speed networks are accelerating the availability of new technologies and innovative products and services that will help our customers and wider society to improve their lives and livelihoods. Using those new technologies, we intend to continue to help to build prosperous economies, strong communities and a sustainable planet, as we work to create a more inclusive digital society.



Nick Read

Group Chief Executive, Vodafone Group Plc



How we connect for a better future

Working across our business

Every day, our products and services play a central role in the daily lives and livelihoods of more than half a billion people, across 25 countries. We work to embed our sustainable business strategy across all our operations and are committed to building positive relations with all our stakeholders.

In our operations

Keeping the people who work for us safe is one of our most fundamental responsibilities.

We are also committed to responding openly and transparently to public concerns about mobiles, masts and health.

- 42 Safety
- 56 Mobiles, masts and health

Our employees

Our business performance and our customers' experience depend on our ability to attract, develop and retain talented individuals at all levels.

- 16 Gender equality in our workplace
- 58 Our people

For communities

Through targeted commercial propositions, we are helping women in emerging markets overcome the barriers they face in reaching their full potential, benefiting both themselves and their local communities.

- 13 Increasing access to health advice in South Africa
- 23 Providing free coding training in Turkey

Across our network

Our networks account for 94% of our total energy use. Through a number of different initiatives, we are working to improve energy efficiency across our networks and purchase 100% renewable electricity by 2025.

- 30 Our network – optimising our energy consumption
- 32 Increasing renewable energy

For our customers

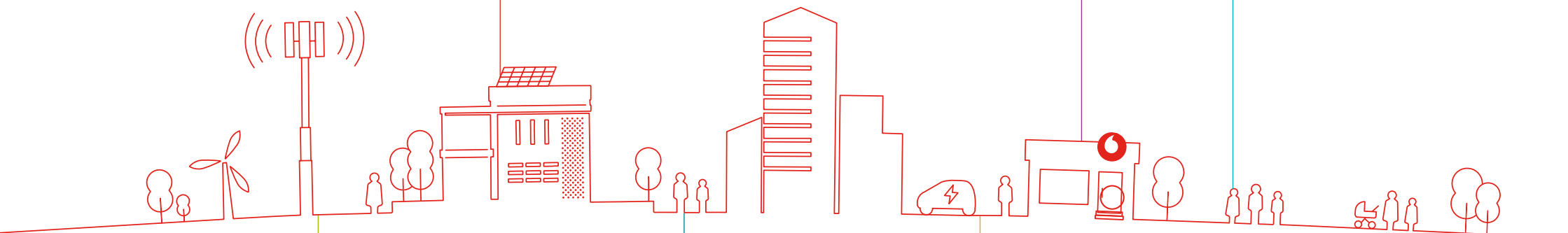
Our customers trust us with their personal information and their privacy. Protecting that information and respecting their privacy is fundamental.

- 53 Privacy and cyber security

Working with our suppliers

We work with more than 10,800 direct suppliers around the world. We have collaborated with peer companies to develop an academy to support suppliers to improve their social, ethical and environmental performance.

- 37 Our suppliers



Our sustainable business strategy

We believe that Vodafone has a significant role to play in contributing to the societies in which we operate. Our sustainable business strategy articulates our intention to deliver significant positive impact in three areas, each of which has the potential to improve the lives of our customers and wider society.

We have established long-term targets to drive change in the areas of:

- women's empowerment;
- youth skills and jobs; and
- energy innovation.

In parallel, we remain committed to ensuring that Vodafone operates responsibly and ethically, supported by our corporate transparency programme. Four areas form the focus of our efforts as we ensure detailed policies, practices and disclosures help to hold our businesses to account while contributing to the broader debate.

Our operating responsibly focus areas are:

- taxation and total economic contribution;
- supply chain integrity and safety;
- mobiles, masts and health; and
- digital rights and freedoms.



Transformation

Our sustainable business strategy articulates our intention to deliver significant positive impact in three areas, each of which has the potential to improve the lives of our customers and wider society. We have established long-term targets to drive change that focuses on women's empowerment, youth skills and jobs, and energy innovation.



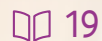
Women's empowerment

By empowering women and promoting gender equality, we can enable communities, economies and businesses – including our own – to prosper. Communications technology plays a critical role in helping women to improve their lives and livelihoods. By improving the diversity of our global workforce we will better reflect our customer base and wider society.



Youth skills and jobs

In many of the countries where we operate, youth unemployment remains at very high levels. Together with a growing digital skills gap, this creates a significant social and economic challenge. Working together, governments, educators and companies need to find ways to address future workplace needs and enhance the skills of people entering the workforce, to enable them to be better equipped to contribute to a prosperous and inclusive digital society.



Energy innovation

Our industry faces a growing greenhouse gas (GHG) emissions challenge and we have an important role to mitigate the consequences of the growth in demand for our services. We will continue to reduce the GHG emissions associated with our operations by purchasing more of the electricity we use from renewable sources. We will also continue to help our customers to reduce their emissions through the use of our Internet of Things products and services.






Women's empowerment

The equality of women remains a significant global challenge. By empowering women and promoting gender equality, we can enable communities, economies and businesses – including our own – to prosper.

For society

We are changing women's lives through mobile.

 See page 11



Our 2025 goal

We aim to connect an additional 50 million women living in emerging markets to mobile.


Progress towards our goal

19.4 million

more female customers in our emerging markets since 2016.

Within our business

Our strong commitment to diversity is a source of business strength.

 See page 16



Our 2025 goal

Our ambition is for Vodafone to become the world's best employer for women.

Progress towards our goal

This year, the 2019 Bloomberg Gender-Equality Index recognised Vodafone as one of the top companies globally leading the way towards more equal, inclusive workplaces.



The global context

Women are disadvantaged economically across all cultures, societies and economies. Globally, around 50% of women aged 15 or over are in paid employment, compared with around 75% of men¹.

According to the World Economic Forum, it will take another 202 years to close the economic 'gender gap' if significant changes are not made. Also, the comparative lack of women in senior, better-paid roles means that the global average for women's earnings is half that for men².

In emerging economies, the gender gap often affects women at an earlier age than it does in more developed economies, and barriers exist in all areas of life, including access to education, healthcare and finance. An estimated 132 million girls around the world are currently out of school, and girls are more likely to remain

excluded from education than boys³. Evidence also suggests that women in emerging markets are more likely to live in poverty than men⁴. Estimates state that every day approximately 830 women die from preventable causes related to pregnancy and childbirth⁵.

In more developed economies, young women and men enter the workplace with equivalent skills and in broadly equal numbers, but a much greater proportion of men reach middle and senior-level roles. A significant proportion of women leave the workforce or continue working in more junior roles than their male peers. A lack of support during pregnancy and the challenge of balancing childcare with work account for many women deciding to leave paid employment. Some women experience difficulties in returning to work after a career break. Those who return to work find fewer opportunities for promotion and progression than their male counterparts⁶.



The global gender gap

132 million girls

are currently out of school and are more likely to remain excluded from education than boys.

Women are 10% less likely

to own a mobile phone than men.

One-third fewer women

Around 50% of women aged 15 or over are in paid employment, compared with around 75% of men.

Our alignment to the UN Sustainable Development Goals (SDGs)

It is estimated that giving women and girls equal rights and opportunities could improve public health, increase productivity and grow prosperity, adding US\$12 trillion to global GDP by 2025⁷.

Communications technology can play a critical role in empowering women to improve their lives and livelihoods. Providing women with access to life-enhancing services can help unlock socio-economic opportunities and champion the inclusion of women in the workplace. Vodafone is committed to SDG Goal 5, which is focused on achieving gender equality.

Our approach also aligns with Goals 4 (quality education) and 8 (decent work and economic growth), as our mobile technologies also support improved education outcomes and drive financial inclusion.

Key SDGs and targets

4 Quality Education
4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.

5 Gender Equality
5.1 End all forms of discrimination against all women and girls everywhere.

5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.

5.B Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.

8 Decent Work and Economic Growth
8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.

Empowering women in emerging markets

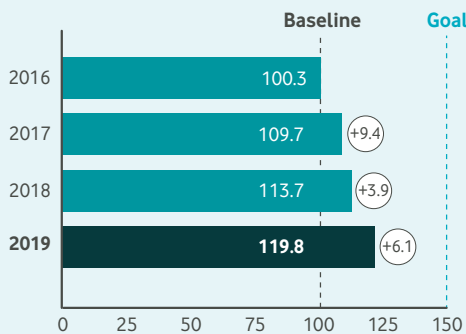
Our 2025 goal

We aim to connect an additional 50 million women living in emerging markets to mobile

Progress towards our goal

We have made progress towards our goal and now have an estimated 119.8 million active female customers, 6.1 million more than last year (and an increase of 19.4 million since 2016).

Estimated number of female customers in emerging markets (millions)



See page 71 for how we report our key performance indicators

In low and middle-income countries, women are 10% less likely to own a mobile phone than men. This equates to a 'mobile gender gap' of approximately 200 million women deprived of the benefits of mobile ownership⁸. In addition, it is estimated that over 300 million fewer women than men access the mobile internet.

Closing the gender gap in mobile ownership and usage by 2023 would provide an estimated additional US\$140 billion in revenue for the mobile industry over five years⁹.

Owning even the most basic mobile enables a woman to communicate, access information, learn, manage her finances, set up and run a business and even get help if feeling threatened. Mobile technology also enhances many public and commercial services of value to women and girls in emerging markets, from accessing vaccinations and maternal healthcare, to mobile banking and online support for smallholder farmers.

Changing women's lives through mobile

We estimate that 119.8 million of the 334.5 million active customers we serve in emerging markets are women¹⁰. However, this only represents 36% of our customer base, and a disproportionate number of women in these markets still do not own a mobile phone.

We want to bring the benefits of mobile to women through a series of targeted commercial programmes. In 2016, we set a goal to connect an additional 50 million women in emerging markets to mobile. To reach this target, we are committed to use our mobile technologies to enhance the quality of women's lives through programmes that:

- support education and skills;
- improve health and wellbeing; and
- enable economic empowerment.

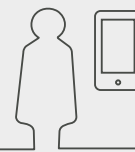
To contribute towards our goal, we have launched new commercial propositions for customers focused on helping women in emerging markets overcome the barriers they face in reaching their full potential. These include Vodacom's *Mum & Baby* initiative in South Africa, Vodafone Idea's *Sakhi* safety plan and our *Business Women Connect* programme in Tanzania and Mozambique.

Supporting education and skills

Enabling girls and women to access a good education can enhance their chances of thriving in life, yet many girls in emerging markets enter adulthood lacking basic literacy and numeracy skills. An estimated 132 million girls worldwide are out of school, including over 34 million girls of primary school age¹¹.

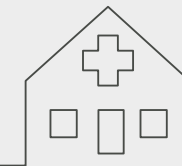
Mobile technology increases access to quality education, especially for people living in remote areas. Vodafone Foundation has pioneered the development of innovative digital teaching and remote learning technologies for deployment among some of the most vulnerable and disadvantaged communities in the world, including people living in refugee camps in sub-Saharan Africa. Its *Instant Network Schools* programme connects classrooms to the internet, providing remote and isolated communities with solar power, tablet computers and teacher training resources, together with access to educational content. Run in partnership with the United Nations High Commission for Refugees, the *Instant Network Schools* programme has given over 83,500 young refugee students access to a quality digital education.

Across our networks



37.1 million
customers using M-Pesa,
16.9 million are women

6.1 million
more female customers
than last year



1.5 million
subscribers to *Mum & Baby*
service in South Africa

Empowering girls through mobile

Across the world, millions of girls lack the information, connections, tools and services they need. Many of the everyday issues that affect them – relationships, contraception and gender-based violence – are often too sensitive to talk about openly, if at all. Boys are also one and a half times more likely to own a mobile phone than girls¹².

Vodafone Foundation, which focuses on using connectivity to drive social change, launched a partnership this year with Girl Effect, a non-governmental organisation (NGO) with expertise in using media and mobile technology to empower girls to change their lives. The partnership aims to empower 7 million vulnerable girls across eight countries, connecting them to information, support and services they need, through mobile.

The partnership will increase the reach of mobile platforms such as *Springster*, a mobile platform designed for and created by girls. The content on *Springster* helps girls understand and navigate the key social issues they face in their local area, from health and education, to financial security and personal safety. Through informal learning and by connecting girls with a supportive group of peers, the *Springster* platform aims to break the cycle of poverty by giving girls the tools, knowledge, networks and confidence they need to reach their full potential.

Vodafone Foundation has contributed US\$5 million to the project, which will be used to generate a total of US\$25 million over five years. The partnership aims to reach girls across India, Tanzania, South Africa, Lesotho, Ghana, the Democratic Republic of Congo, Kenya and Mozambique.

Improving health and wellbeing

Estimates show that at least half the world's population lacks access to essential health services¹³. Most of those people live in low to middle-income countries where access to services for screening, prevention and treatment is often limited or non-existent. Rural poor, especially women, are particularly deprived of such essential services.

Through Vodafone and Vodafone Foundation, we have developed a range of mobile technologies that enhance primary healthcare and prevention services in emerging markets. Many of these programmes are particularly important for women and young children. They include Vodacom's *Mum & Baby* service in South Africa, which provides subscribers with maternal, neonatal and child health and wellbeing information. This year we commissioned KPMG to conduct a socio-economic assessment of this service to understand its impact and identify areas where it could be enhanced in the future (see the case study on page 13 for more information).

In Tanzania, Vodafone Foundation has collaborated with the United States Agency for International Development and other partners to develop its *Mobilising Maternal Health* programme. This uses mobile technology to connect mothers to healthcare with the aim of reducing rates of maternal death and injury, indirectly reducing the number of neonatal deaths. Since the launch of the programme, over 900,000 women have been connected to treatment or free transport in emergencies. Known as *M-Mama*, the emergency transport works with a network of local drivers to act as 'taxi ambulances' in areas where ambulances are rarely available. When the patient makes a free call to a 24/7 dispatch centre, the call handler assesses the patient's condition using the *M-Mama* app, which indicates whether the patient needs transferring to a health facility. If so, the nearest taxi ambulance driver identified on the *M-Mama* app is sent to take the woman to the closest health facility. On arrival, the driver is paid for the journey via M-Pesa. *M-Mama* has helped achieve a 27% reduction in maternal mortality in the northern Lake Zones of Tanzania where it is operational.





Increasing access to health advice for mums, dads and carers

According to UNICEF South Africa¹⁴, each year 4,300 mothers die due to complications during pregnancy and childbirth, 20,000 babies are stillborn and another 23,000 die in their first month of life. Research shows that good access to reliable health information plays a crucial role in reducing maternal and infancy illness and mortality. In addition, many people in South Africa face long queues to receive health advice for themselves and their families and often have to travel long distances to reach a clinic, especially in rural areas.

To help address this problem, Vodacom developed *Mum & Baby*. This free-to-use (no data charges) mobile health (mHealth) intervention gives customers maternal, neonatal and child health information. The information is shared through weekly stage-based SMS messages. Additional health-related content, such as articles, videos and tutorials, is available through a mobile-optimised website. *Mum & Baby* is available in English, Zulu, Sesotho, Xhosa and Afrikaans. The service has helped over 1.5 million parents and caregivers to take positive actions to improve their children's health since its launch in 2017.

This year we commissioned KPMG to conduct an independent study to assess the socio-economic contribution of Vodacom's *Mum & Baby* service. The study found:

- 98% of the mothers and pregnant women surveyed said they had taken action to improve their child's health because of access to the information provided by the service;
- 95% of the mothers and pregnant women surveyed said that the information received influenced their decision to breastfeed, and across the focus groups a small number of participants indicated that the information received had resulted in them breastfeeding for longer than six months;
- 97% of mothers and pregnant women surveyed said the service influenced their decision to visit a health centre for check-ups; and
- 96% agreed that the information received helped with their decision to vaccinate their child. If this were representative of all *Mum & Baby* subscribers, it would suggest that the service may have influenced the vaccination decisions for the children of approximately 650,000 individuals in South Africa.



The findings of the study will be used to help shape future plans for the service and how its social impact can be enhanced.

Read the report:
Vodacom's Mum & Baby service in South Africa

Tackling domestic violence and abuse

Vodafone Foundation has more than a decade of experience developing mobile services to support victims of domestic violence and abuse. This includes the *TecSOS* technology, which has supported more than 100,000 high-risk survivors of domestic violence in five countries, along with *Easy Rescue*, which has supported over 300,000 women in Turkey, and gender-based violence hotlines in South Africa and Kenya, which have connected over 300,000 women to help during crises.

This year, Vodafone Foundation commissioned research to explore the impact of domestic violence and abuse in the workplace (see page 17 for more information on the findings). In response to the issues highlighted by the research, Vodafone Foundation announced the international expansion of *Bright Sky*, a free app that provides information and advice to those affected by domestic abuse. Created in partnership with the UK-based crisis support charity Hestia, the app enables users to locate their nearest support centre. A short questionnaire also helps users assess the safety of a relationship and provides information about different forms of abuse and the types of support available.

In conjunction with this, Vodafone has launched a global domestic violence and abuse policy (see page 17 for more information).

Helping women to feel safer in India

In India, there are over a billion mobile connections and while almost half of the population is female, only 59% of them own a mobile phone¹⁵. This year, Vodafone Idea (our joint venture in India) launched a new mobile service for female customers called *Sakhi* that includes a special set of security and safety features, including:

Emergency Alerts

Location alerts that can be sent to ten pre-registered contacts in an emergency.

Emergency Balance

Ten free minutes of call time that can be used during emergencies, even with zero credit.

Private Number Recharge

Provides a dummy ten-digit number to ensure the privacy of customers when they recharge at retail outlets, avoiding the need for them to have to reveal their mobile number to an unknown retailer.

Female customers using Vodafone Idea prepaid or postpaid services can sign up to *Sakhi* for free, and can use the service on any type of phone, even without credit or access to mobile internet.

To date, millions of women from both rural and urban areas have subscribed to *Sakhi*, giving them the confidence to travel further from home to pursue education and employment opportunities, while feeling safer and less at risk of harassment.

Enabling economic empowerment

More than 2 billion people in the world, most of them women, still have no access to banking facilities¹⁶, and women have less access to financial services than men in 40% of the world's countries¹⁷. Finding ways to improve their access to financial services will bring significant social benefits and economic opportunities.

In 2007, together with our Kenyan associate, Safaricom, we developed the first mobile money transfer service, M-Pesa. This is a simple, secure, cheap and convenient solution now offered to customers across eight markets: the Democratic Republic of Congo, Egypt, Ghana, India, Kenya, Lesotho, Mozambique and Tanzania. The service enables customers to safely and securely send, receive and store money via a basic mobile phone and, more recently in some markets, using a smartphone app.

As of March 2019, 37.1 million customers were using M-Pesa¹⁸, with over 11 billion transactions having been made through a network of more than 395,000 agents.

With a mobile phone and an M-Pesa account, people on low incomes have more control over their financial affairs. It also reduces the associated risks of robbery and corruption in a cash-based society. Thanks to the development of additional services such as M-Shwari, M-Pawa and KCB M-Pesa, our customers can also save money through interest-bearing

accounts and arrange micro-loans to help fund their businesses. M-Pesa is also widely used to manage business transactions and to pay salaries, pensions, agricultural subsidies and government grants.

With M-Pesa, women can take greater control over their own and their family's finances. For example, in Kenya, research estimated that with mobile money access through M-Pesa, 185,000 women have been able to switch from subsistence farming to business or sales as their primary occupation¹⁹. In addition, the research also found that M-Pesa has helped lift 194,000 households, or 2% of Kenyan households, out of poverty. We estimate that 16.9 million women were actively using M-Pesa in 2018, accounting for 46% of our M-Pesa customer base.

Goal 10 of the UN SDGs is to 'reduce inequality within and among countries'. Within this, target 10.c is to reduce the cost of sending remittances to less than 3% of transaction costs by 2030. This has already been met by M-Pesa in those markets where it has regulatory approval to offer outbound remittances. In Kenya this year, in partnership with Western Union, we launched [M-Pesa Global](#). This service allows M-Pesa customers to send and receive money across 200 countries and territories. M-Pesa also continues to expand its partnerships across the globe for inward remittances, helping migrants and their families receive their money in a fast, secure and convenient manner.



Supporting female entrepreneurs

In addition to financial services, Vodafone's networks and technologies support businesses of all sizes, including entrepreneurs. For example, research commissioned in Ghana by Vodafone found that 70% of micro-entrepreneurs would face difficulties continuing their business without a smartphone²⁰. This constant connectivity allows entrepreneurs to connect with customers, search for new business ideas and track competitors' prices.

Through Vodafone Business in our local markets, we provide products and services for small and medium-sized (SME) and small-office home-office (SOHO) businesses. Our aim is to be a digital solutions provider for this market and help guide small businesses through technology choices that are moving at an unprecedented pace. For example, this year Vodafone Ireland launched *Open Conversations*, an initiative to help our SME customers gain insights on the future of business.

Vodafone also supports female entrepreneurs through local Vodafone Foundation programmes. The Vodafone Institute in Germany developed *F-LANE*, a seven-week acceleration programme for high-potential digital impact ventures and the first accelerator in Europe aimed exclusively at women. The programme's mission is to foster the participation of women in technological development and to empower women of all ages around the world through technology. In the most recent round, 180 start-ups from 57 countries were identified for consideration and review. The final five applicants took part in the full programme of support, which included mentorship, training, networking and funding.

Supporting businesswomen in Tanzania and Mozambique

Since 2016, we have built on the success of our M-Pesa money transfer and M-Pawa money saving services. We are a partner in Business Women Connect (BWC), a service specifically designed for women who run micro-businesses. Created in partnership with the ExxonMobil Foundation, World Bank and Centre for Global Development, BWC enables women to save and access useful business skills training, delivered by the NGO TechnoServe.

Since its launch, nearly 6,000 Tanzanian women have benefited from BWC's business skills training and learned how to use M-Pawa. The World Bank has analysed the results, which show that women who are introduced to M-Pawa and have business skills training are statistically more likely to move their savings into their phones and improve their business practices.

Building on this success, we supported a pilot involving 500 businesswomen in Mozambique in 2017. After the training, women's savings by phone increased from 56% to 93%, and the number keeping business records increased from 25% to 60%. The pilot also found a high use of phones among urban businesswomen and a growing interest in mobile payments.

Over the coming year, TechnoServe and Vodacom plan to explore a new partnership in Mozambique to support female agents who run kiosks where M-Pesa customers can deposit and withdraw money. One of the main objectives will be to provide financial literacy, business and agent skills so that more women can become successful entrepreneurs.



Women First in Entrepreneurship

Through Vodafone Turkey Foundation's *Women First in Entrepreneurship* programme, more than 36,000 women have received training on entrepreneurship, communications and finance. Once trained, they can use their new skills to make and sell handmade items on a bespoke website. Launched in 2015, the programme is run in partnership with the Ministry of National Education and the Turkish Informatics Foundation.

This year, a new mobile application was launched to enable women to access e-learning content and manage their products. The application has been downloaded over 21,000 times, with over 50% of the users completing the e-learning.

Gender equality in our workplace

Our 2025 goal

Our ambition is for Vodafone to become the world's best employer for women

Progress towards our goal

This year, the 2019 Bloomberg Gender-Equality Index recognised Vodafone as one of the top companies globally leading the way towards more equal, inclusive workplaces.



The Index scored Vodafone between 82% and 100% across several categories, including gender employment statistics, employer policies, company products and company community engagement.



Vodafone was also recently named in The Times Top 50 Employers for Women 2018, recognising our leadership on workplace gender equality in the UK.

Vodafone employs over 36,500 women directly and provides employment opportunities for hundreds of thousands more across our global supplier base. We believe that achieving greater gender equality strengthens our company significantly, giving us a better understanding of the needs of the women, men, families and businesses who rely on our networks and services.

Achieving gender equality in the workplace, at all levels, remains a significant challenge for most businesses, especially those of a global nature. To address this issue, Vodafone has a long-term ambition to become the world's best employer for women by 2025.

Our commitment to gender equality

We have embedded our commitment to diversity and gender balance into how we work at Vodafone. In our induction programme for senior leaders, they are required to complete unconscious bias training to help them recognise the assumptions and beliefs that can skew their decision making. A number of our training programmes focus on making sure our recruitment processes are balanced and help to develop the skills required to manage diverse teams. This year, we piloted a global female development programme, *ConnectedSheCan*, providing in-depth coaching and training to 15 senior leaders from across the business. The programme forms part of the succession plan for employees destined for more senior roles.

Our new Group Chief Executive, Nick Read, continues the commitment to act as a corporate champion for the UN Women's global solidarity movement for gender equality, *HeforShe*. On a quarterly basis, we assess our progress to

increase the global proportion of women in management and leadership. HR directors in our local markets and professional functions use quarterly analysis to identify and address challenges. Twice a year, our Group Executive Committee (ExCo) reviews Vodafone's gender balance and discusses key initiatives to increase the proportion of female employees. The Vodafone Group Board is updated regularly on progress.

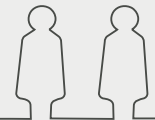
We have active women's networks in many of the countries in which we operate. These networks are founded and managed by employees. They offer women at all levels a supportive and informative environment in which to network, share and learn.

This year, Vodafone Business created a forum to bring together global female senior leaders, with 70 invited to a specific event in December 2018. During the forum, participants shared best practices on how to create an inclusive business environment and discussed challenges facing women in the workplace.

We also celebrate women's achievements with visible support from our senior leaders. We hold a week-long celebration to coincide with International Women's Day. On March 8, 2019 more than 6,300 employees watched a global webinar led by our Group Chief Executive. Our global programme saw over 60 events being held worldwide, including roundtable discussions, networking events, training, and role-modelling and mentoring sessions.

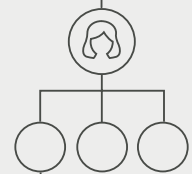
Across our business

We employ over **36,500** women directly.

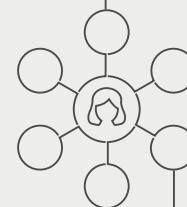


40% of our total workforce are women, which enables us to have a stronger gender equality base.

Women hold **31%** of our management and leadership roles.



Our Women in Technology Network now has **more than 1,300 members** and we now have active women's networks in many of the countries in which we operate.



Supporting employees suffering from domestic violence and abuse

During the year, Vodafone Foundation commissioned research to assess the impact of domestic violence and abuse on people's work-life and career. The study surveyed 4,715 women and men in the workplace across nine countries (the UK, Germany, Ireland, Turkey, South Africa, Kenya, India, Italy and Spain). The research found that more than one in three workers had experienced domestic violence and abuse, and 67% of those said that the abuse affected their career progression. Furthermore, 51% felt too ashamed to discuss their abuse at work.

Using these insights, Vodafone designed and introduced a new global HR policy specifically for victims of domestic violence and abuse in all our markets. Employees now have access to support and specialist counselling, as well as up to 10 days' additional paid 'safe leave'. The extra safe leave gives them time to manage their situation, which can be used for seeking professional help and counselling, attending police or court appointments, making arrangements to move house and supporting their children. In addition, specialist training is provided for HR managers to help them support employees experiencing domestic violence or abuse.

Flexibility and support for working parents

Research by KPMG estimates that the cost to the global economy of replacing women who do not stay in the workforce after having a baby could be as much as US\$47 billion every year²¹. We encourage and support our employees to return to work with us after the birth or adoption of a child.

In 2015, we introduced a global minimum maternity policy covering all Vodafone employees. Over the past four years, more than 7,000 women working for Vodafone have gone on maternity leave. All of them were eligible to benefit from at least 16 weeks' fully paid maternity leave, plus full pay for a 30-hour week for the first six months of their return. Last year, we also launched a global paternity policy that set a minimum standard for all men and secondary carers who work for Vodafone to be entitled to two weeks' paid paternity leave.

Launched in 2016 across all our markets, our *ReConnect* initiative aims to bring talented women back into the workplace after a career break. The programme includes training, coaching and a specially designed induction to help those returning to refresh and enhance the professional skills they need to return to work and progress their careers. *ReConnect* joiners are also offered flexible working options and a phased return to work.

Our target is to hire 1,000 *ReConnect* women across our markets by 2020. To date, 310 women have been recruited through the programme. While there are a significant number of vacancies on offer at Vodafone at all times, it is important to ensure we match the skills the roles require with those of the candidates who have applied. We do not always find the appropriate skills mix in the *ReConnect* candidates who apply. This year we will be launching a new, more targeted campaign to attract women with the skills we need for the future, with a particular focus on digital talent.

We also have flexible working, part-time and homeworking policies in place across a large number of our local markets, and many employees are using our remote working technologies. These include opportunities such as working from home one day a week, allowing for earlier or later start or finish times and, in some markets, having on-site childcare services for employees.

Our programmes in action: *ReConnect*

"I know many women like me, who are attempting to support their family and further their professional career at the same time. When I heard about ReConnect, I thought how refreshing to find a business that sees value in attracting talent back into the workplace! ReConnect has helped me rebuild my confidence, achieve my aspirations and relaunch my career."



Alison Davies – Senior Customer Experience Manager, Vodafone UK



Bringing our gender equality strategy to life in Portugal

Since 2017, Vodafone Portugal has implemented a number of different initiatives to support gender equality. For example, in the last two years, 33 female employees have been recruited through *ReConnect* in Portugal. In addition, the business has strengthened its recruiting procedures to ensure that there are at least two credible females in every shortlist. These initiatives, along with working closely with third party labour providers, have helped increase the number of females hired in front line positions (such as within call centres and retail stores) by 154% in the last year.

Vodafone Portugal has also focused on training leaders to promote gender equality through incorporating unconscious bias workshops as part of its leadership learning and development curricula.

Finally, the business has worked to create a pipeline for female graduates through its internship programme, which has helped lead to over 60% of female graduates recruited in the last two years. As part of the internship programme, the students with the most potential are invited to become Vodafone Campus Ambassadors, 64% of which are currently female. This provides the interns with an opportunity to become advocates of Vodafone through organising and participating at university job fairs and open days across the country.

Women in technology

Vodafone has placed specific focus on increasing the proportion of women in technology roles, particularly within senior roles. Initiatives such as ensuring that female candidates are included in interview shortlists and setting internal targets have helped increase the proportion of females working in technology. During the year, 21% of our technology management and leadership roles were held by women²². Though this represents progress compared to previous years, we know that there is more we can do to increase this proportion.

Through our Women in Technology network, we are working to better support women in technology roles. This now has more than 1,300 members and holds quarterly webinars and local face-to-face meetings. Programmes such as #Codelikeagirl (see page 23), and our work with schools and universities to promote women in technology, underpin our wider strategy to have a positive impact on women taking up technology careers.

Our performance

We have met our target of 30% of management and leadership roles being held by women across our local markets and professional functions ahead of our deadline of 2020. As of 31 March 2019, women held 31% of our management and leadership roles, and we have now set a revised target for women to hold 40% of our management and leadership roles by 2030.

In four of our local markets (Ireland, Romania, Albania and Tanzania), women already hold more than 40% of all management roles. In addition, women make up 40% of our total workforce, which gives us a stronger base from which to drive our gender equality initiatives.

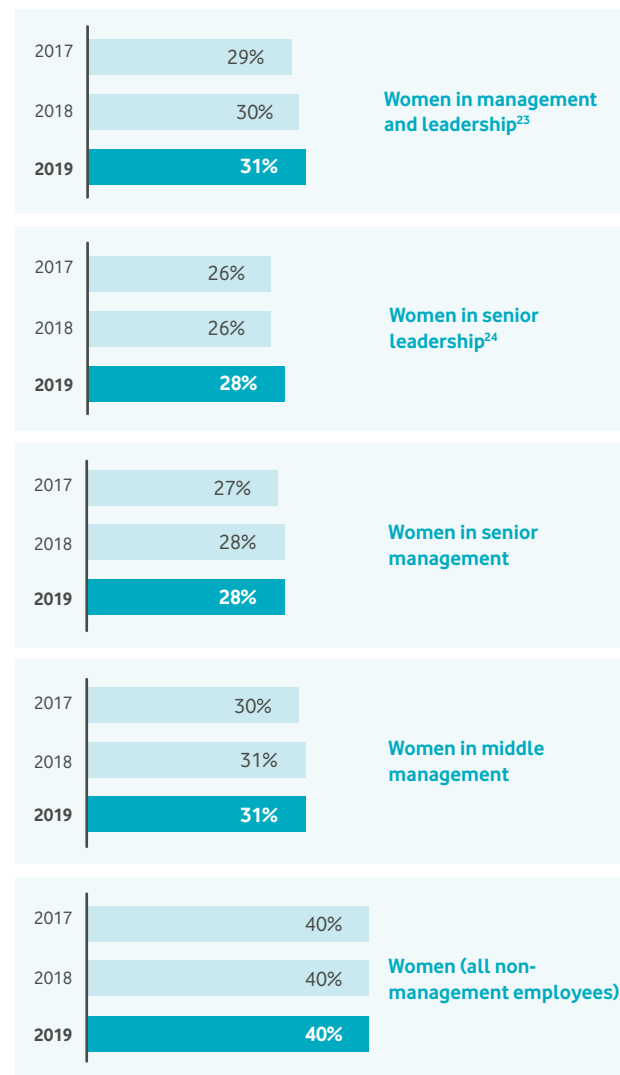
The percentage of women in Vodafone's global senior leadership – including ExCo members – increased from 26% in 2018 to 28% in 2019. Women's representation in our senior management community remained the same, also at 28%.

This year, the ExCo team female representation increased significantly, from 14% to 25%, with four roles now occupied by women (General Counsel, HR Director, CFO and EU Cluster Director).

This year, 52% of the places on our *Discover* graduate development programme were held by women, along with 46% of the places on our *Columbus* fast-track graduate scheme. Increasing the proportion of women on these schemes gives us confidence that women are playing an increasingly important part in leading Vodafone.

As of 31 March 2019, 42% of the directors of the Vodafone Group Plc Board were women. Twice yearly, senior management reviews the proportion of women serving as directors on our subsidiary company boards. As part of this review, opportunities for increasing gender diversity are identified and progress is tracked. We also encourage greater female participation in non-executive and advisory roles outside Vodafone.

Female employees at Vodafone*



* 2017 and 2018 data has been restated to exclude employees from our joint ventures in the Netherlands and India, and Vodafone Qatar, which was sold in March 2018.

- 1 [Leave No One Behind, UNHLP, 2016](#)
- 2 [The Global Gender Gap Report, WEF, 2018](#)
- 3 [Fact Sheet No. 48, UNESCO Institute for Statistics, 2018](#)
- 4 [The Full Participation Report, Clinton Foundation and Bill & Melinda Gates Foundation, 2015](#)
- 5 [Maternal mortality factsheet, WHO, 2016](#)
- 6 [KPMG research for Vodafone, 2017](#)
- 7 [Delivering the Power of Parity, McKinsey Global Institute, 2016](#)
- 8 [GSMA Mobile Gender Gap Report, 2019](#)
- 9 [GSMA Mobile Gender Gap Report, 2019](#)
- 10 Based on 30-day active customer figures for the nine emerging markets in the 50 million women goal. 2019 annual data only includes data from Vodafone India up to August 2018, prior to the merger of this business with Idea Cellular to create Vodafone Idea.
- 11 [Fact Sheet No. 48, UNESCO Institute for Statistics, 2018](#)
- 12 ['Real girls, real lives, connected', Girl Effect and Vodafone Foundation, 2018](#)
- 13 [Tracking Universal Health Coverage: 2017 Global Monitoring Report, WHO and World Bank](#)
- 14 [UNICEF, 2019](#)
- 15 [GSMA Mobile Gender Gap Report, 2019](#)
- 16 [Powering Potential, BNY Mellon and UN Foundation, 2018](#)
- 17 [The Global Gender Gap Report, WEF, 2018](#)
- 18 30-day active customers (financial transaction within last 30 days)
- 19 ['The long-run poverty and gender impacts of mobile money', Suri and Jack, Science, 2016](#)
- 20 ['Smartphones and micro-entrepreneurship: evidence from Ghana', Vodafone, 2016](#)
- 21 [KPMG research for Vodafone, 2017](#)
- 22 Defined as management and leadership roles in our Technology function and Vodafone Shared Services Technology
- 23 This includes women in senior leadership, senior management and middle management
- 24 Our most senior employees (approx. 200 employees in total), including ExCo members




Youth skills and jobs

High levels of youth unemployment and a growing digital skills gap are significant social and economic challenges. Our *What will you be?* programme aims to help young people develop their digital skills and access learning and employment opportunities so they can thrive in the digital economy.

For society

We are supporting young people to thrive in the digital economy.

 See page 21



Our 2022 goal

Support 10 million young people to access digital skills, learning and employment opportunities.


Progress towards our goal

533,698

young people supported to date.

Within our business

Providing young people with a digital learning experience.

 See page 23



Our 2022 goal

Provide 100,000 opportunities for young people to receive a digital learning experience at Vodafone.

Progress towards our goal

54,712

opportunities provided for young people to receive a digital learning experience this year.



The global context

The International Labour Organization (ILO) estimates that 209 million young people either are unemployed or work but live in poverty¹. In many of the countries where we operate, youth unemployment continues to remain at very high levels: 53% in South Africa, 40% in Greece, 34% in Spain and 32% in Italy².

Unemployment can have a negative impact on young people's wellbeing; even a short period of unemployment can have a long-term effect on self-esteem and confidence³. By tackling this issue and reducing the number of youth out of work or in vulnerable work, societies have much to gain in terms of growth and reducing costs associated with supporting unemployed young people, while ensuring better inclusion and more shared prosperity in the long run.

The impact and opportunity of technology

Mobile communications and digital technology are transforming every aspect of our lives. For many, this is positive, bringing increased access to information and services as well as the ability to share and learn. Businesses benefit too, as they are able to achieve productivity and efficiency gains.

However, some advances in technology may lead to disruption: automation, robotics and artificial intelligence (AI) may increase productivity, but they are also likely to shift labour needs and potentially reduce employment opportunities. These changes in technology are having an impact on the skills required by businesses from their employees and altering the nature of work itself.

While digital technology is disrupting traditional work patterns, this same disruption is also creating new employment opportunities.



In a future where AI and robotics are commonplace, certain skills and abilities will be highly valued. The European Commission has stated that around 90% of all jobs – from nursing to engineering to accountancy – already require some form of digital skills⁴.

Working together, governments, educators and companies need to find ways to address future workplace needs and develop the skills of current workers and the younger generation, enabling them to be better equipped for a prosperous and inclusive digital society.

Our alignment to the UN Sustainable Development Goals (SDGs)

Youth unemployment is a significant social and economic challenge in many of our markets. We believe urgent action is needed to help young people develop their digital skills and access learning and employment opportunities that will help them thrive in the digital economy.

Our commitment to help young people to address these dual challenges supports Goal 8, which aims to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Key SDGs and targets



4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.



8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalisation and growth of micro-, small- and medium-sized enterprises, including through access to financial services.

8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training.

Global youth employment

209 million

young people are either unemployed or work but live in poverty.



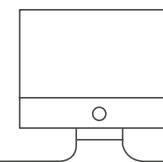
In many of the countries where we operate, youth unemployment remains at high levels.

53% South Africa **40%** Greece **34%** Spain **32%** Italy



Around 90%

of all jobs – from nursing to engineering to accountancy – already require some form of digital skills.



Our future jobs strategy

Our 2022 goal

Support 10 million young people to access digital skills, learning and employment opportunities.

Progress towards our goal

Through our *Future Jobs Finder* and provision of digital learning experiences, we have supported 533,698 young people to date.

478,986

completions of *Future Jobs Finder*

54,712

digital learning experiences provided

Our role in closing the digital skills gap

Despite high levels of youth unemployment, demand for digital skills already outstrips the supply of available talent. While many young people are 'digital natives', most do not leave education with the depth of technical skills to create and run the technologies our economies are increasingly reliant on, such as writing code, mitigating cyber security risks or designing, configuring and maintaining electronic devices and wireless or fixed-line networks. The EU Digital Skills and Jobs Coalition reports that 37% of EU workers have insufficient digital skills⁵ and there are clear signs that the digital skills gap is widening. By the end of next year, there could be almost 500,000 unfilled digital technology jobs in Europe⁶.

We believe that there is a need for training for young people to be ready for a digital society. This view is supported by the European Commission in its Skills Agenda for Europe⁷, which calls on governments, industry NGOs and educators to work together towards this objective. Vodafone is committed to doing our part to support digital learning and digital skills for youth.

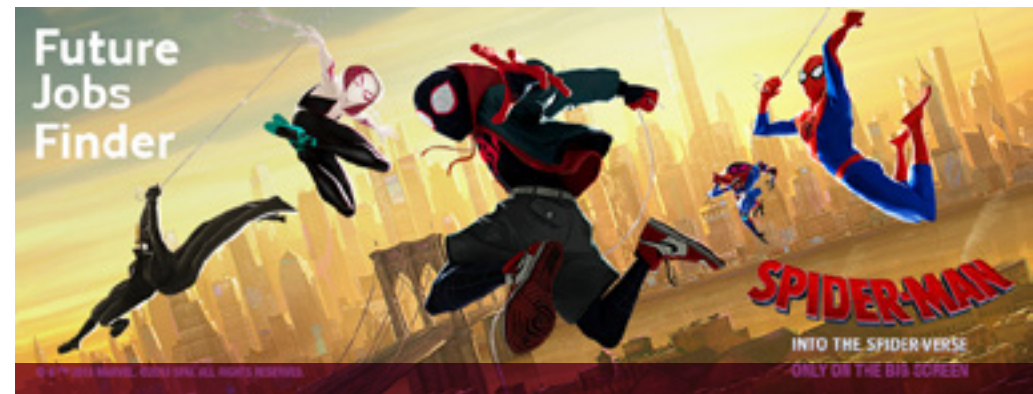
What will you be?

Vodafone's *What will you be?* programme has been designed to respond to the digital skills gap challenge. This programme has two objectives: deepening the understanding of youth on how they can contribute to the digital economy and identifying how we can provide workplace digital experiences.

By 2022, our targets are:

- to support 10 million young people to access digital skills, learning and employment opportunities; and
- to provide 100,000 opportunities for young people to receive a digital learning experience at Vodafone.

We have developed a new platform, *Future Jobs Finder*, which offers young people a simple but comprehensive gateway to new skills and opportunities for employment in the digital economy. Using the platform, young people are able to identify their strengths and skills and are then matched to available digital jobs and training opportunities in their region and beyond. This platform is free to use for young people regardless of their mobile provider.



Future Jobs Finder

Last year, we launched a free smartphone-based platform called *Future Jobs Finder*, designed to inspire and help young people to understand their strengths and skills and to find the right job opportunity in the digital economy.

Available in 12 languages, the platform identifies young people's skills and interests through a series of short tests developed with psychologists, careers experts and training providers. By responding to these questions, young people can better understand where their potential lies and find live local job opportunities in multiple digital industries that are matched to their skills.

If a user is not quite ready to apply, the *Future Jobs Finder* also offers the ability to match training needs to online digital skill providers and access specific courses, many of which are free (including edX, Coursera, Udacity, Cognitive Class, Udemy and the Khan Academy).

This year, we collaborated with Sony Pictures to use the release of *Spider-Man: Into the Spider-Verse* to introduce young people to the *Future Jobs Finder* service. A global digital campaign drew on the film's central theme that anyone can achieve their full potential with the right skills and support. As part of the campaign, we ran a global competition asking young people to share their career superpower. Over 28,000 people entered the competition. The two winners were given the opportunity to visit and learn from the team who created the film and to discover how digital skills are applied in animation and film making.

Since launching in March 2018, 478,986 unique users have completed the tool (including 369,495 from this year), introducing each of them to the top five jobs that match their individual test results.

Supporting education and building skills

Through our local operating companies and foundations, Vodafone has also launched a number of programmes that help young adults develop their skills, including digital ones, and support the development of young entrepreneurs. The following provides some examples of the programmes we have around the world.

Spain

Through its *Campus Lab* initiative, Vodafone Spain has developed an online innovation platform where young people from different disciplines can work together to solve different challenges. The winners receive a €20,000 prize alongside mentoring to develop their idea.

South Africa

Vodacom's flagship mobile education ('mEducation') programme, developed in partnership with the South African Department of Basic Education, has provided information and communications technology (ICT) equipment and free internet access to 3,000 schools and 92 teacher centres across South Africa. In addition, over 251,000 teachers have been trained on the use of ICT in the classroom. Vodacom has also entered into partnerships with 19 universities to provide free access to curriculum content they provide. More than 619,000 learners have had free access to quality digital educational content through the [Vodacom e-School](#).

Vodafone Foundation's *Instant Schools* is a free-to-access online platform that hosts educational resources in local languages in the Democratic Republic of Congo, Ghana, Lesotho, Tanzania, Mozambique and South Africa (as e-School). There is no charge for the content or for the data to access the platform. *Instant Schools* has been developed in conjunction with Learning Equality – a not-for-profit provider of open-source educational technology solutions – and with educational partners, ministries of education and local education experts in each country.

Italy

Vodafone Italy has worked with the Ministry of Education to design a work experience programme, *Alternanza Scuola-Lavoro*, to reach 2,000 students in 25 schools across the country. Employee volunteers go to the schools for a day, where they guide and support students aged 15–16 on their possible future careers. The *Future Jobs Finder* tool is introduced to students so they can discover their digital opportunities and participate in workshops to help them find the right career.

Egypt

The Vodafone Egypt Foundation has launched *Knowledge is Power Schools*, building on its adult literacy programme, *Knowledge is Power*. This programme is focused on helping public primary schools support students, teachers and parents through e-learning modules for the classroom. This includes literacy ICT activities to build students' confidence. The programme also provides teacher training and supports parents with literacy and vocational training classes. The project is now active in 100 schools. It has reached 50,000 students, 2,500 teachers and 7,000 parents.

Kenya

In Kenya, the M-Pesa Foundation Academy is a state-of-the-art, mixed boarding high school aimed at providing an education for talented but economically disadvantaged students with leadership potential. Since 2003, through its two charitable arms, the Safaricom and M-Pesa Foundations, Safaricom has impacted over 1.2 million learners by supporting primary, secondary and vocational training institutions across the country.

Ghana

In August 2018, the Vodafone Ghana Foundation launched a national coding programme to provide training for young people on coding basics. Since launch, 400 people have participated in the programme, which has an ambition to reach 10,000 young people by 2023.



Digital workplace experience

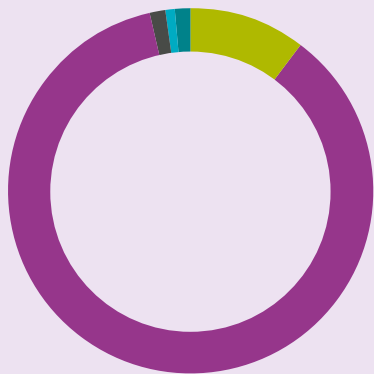
Our 2022 goal

Provide 100,000 opportunities for young people to receive a digital learning experience at Vodafone.

Progress towards our goal

We are over halfway towards meeting our goal, with 54,712 opportunities provided for young people to receive a digital learning experience at Vodafone this year.

Opportunities for young people to receive a digital learning experience at Vodafone during 2019



- Direct hires (5,710)
- Digital work experience (46,833)
- Apprenticeships (518)
- Graduates (677)
- Internships (974)

See page 72 for how we report our key performance indicators

This year, 5,710 new recruits aged 26 or under joined Vodafone across our global footprint. We also indirectly create employment opportunities for many young people in our supply chain and retail distribution networks. We run well-established apprenticeship, internship and graduate schemes across our business and offer a wide range of work experience opportunities. Last year, we committed to providing 100,000 opportunities for young people to receive a digital learning experience at Vodafone by 2022⁸.

Digital work experience

In 2019, we provided opportunities for 46,833 young people through digital work experience programmes. This encompassed a number of different programmes, including one-week placements, job shadowing and insight-into-work days, alongside innovative experiences such as our *Coding Tomorrow* programme in Turkey and *#Codelikeagirl*, which offers 14 to 18-year-old girls immersive digital training during the school holidays.

Since its launch in 2017, Vodafone's *#Codelikeagirl* programme has reached over 3,000 girls in 23 markets. The programme, launched in partnership with Code First: Girls, has the mission to tackle the disproportion of girls in STEM (science, technology, engineering and mathematics) education. Through the programme, we offer girls aged 14–18 an immersive one-week digital experience where they learn to code a website. The training the girls receive provides basic knowledge of computer languages and development programs, allowing them to gain skills for the future.

Coding Tomorrow

In Turkey, the Vodafone Turkey Foundation launched its *Coding Tomorrow* project in 2016 with the aim of tackling the digital divide by providing children aged 7–14 with free training in coding and robotics, along with other essential skills for future employment.

Run in partnership with the Habitat Foundation, the project focuses on helping children gain new digital skills and become active producers of technology rather than just being passive consumers of it. In addition, besides building coding capabilities, participants also develop skills such as problem solving, teamwork, creativity and algorithmic thinking.

Scratch, the free programming language developed for children by the Massachusetts Institute of Technology, is used in the training. Children learn how to use Scratch to help them think creatively and design their own interactive stories, games and creations. They are also provided with introductory training on robotics programs and learn the basics of electronics and circuit systems.

To expand the reach of the project to more remote rural areas, the Vodafone Turkey Foundation delivers some of the training using a specially customised truck, which travelled over 6,000 km in 2018. Since the launch of the project in 2016, more than 43,400 children across 60 cities have participated, including 30,992 during the last year.



Internships

Our internship programmes provide opportunities for undergraduate students to work with us for up to six months while they complete their degree. These opportunities expose students to challenging business-critical activities and projects, enabling them to gain relevant business experience to support their studies. Participants can apply to return to Vodafone once they have graduated and can participate in our *Discover* graduate programme. During the year, 974 young people gained an experience of Vodafone's digital workplace through our internship programmes around the world.

This year, Vodafone Group piloted its *Explore Industrial Placement* intern programme with a small group of students currently studying in the UK. The placement year is for students in their third year of studies who need to complete a placement in business as part of their course. The students join a team in Vodafone for the year with the aim of joining the *Discover* graduate programme after graduation. Following the completion of the pilot, we hope to attract 60 students to the placement programme next year.

In Spain, the *Vodafone yu New Talent* internships programme is aimed at students in the final year of their bachelor's or master's degree. Participants combine part-time work at Vodafone with their academic studies. This year, 76 interns participated in the programme.

Apprenticeships

We continue to expand our vocational training and apprenticeships across our business. These programmes enable young people who have chosen not to go to university to join Vodafone in permanent roles while being supported through continuous learning in order to gain a formal qualification in their chosen fields.

During 2019, 518 young people joined one of our apprenticeship schemes. We offer opportunities at the heart of our operations with our Technology and Customer care divisions.

Graduates

Our *Discover* graduate programme, which has been running for over 10 years, offers young people with a bachelor's or master's degree a series of assignments across our business areas and local markets. Over 5,300 graduates have been through our structured development schemes over the last 10 years, with 677 recruited this year, helping to provide us with a strong pipeline of future talent.

Our *Discover* programme is highly diverse; more than 52% of new entrants are female, and recruits are drawn from 23 different countries. Those who do not progress into a full-time role with Vodafone at the end of their training are well placed to secure good job opportunities elsewhere.

With the aim of attracting more talented youth, increasing eligibility and achieving even higher diversity and social mobility across the *Discover* programme, this year we lowered the academic entry requirement to a 2:2 degree classification (or equivalent) across all operating markets.

In addition to *Discover*, we run *Columbus*, a leadership fast-track graduate scheme that this year welcomed 13 graduates. This programme offers graduates who have completed the *Discover* scheme an additional two-year international assignment that aims to equip them with the knowledge and insights that will prepare them for the next stage of their Vodafone career.

Digital Degree Apprenticeship

In the UK, we offer advanced, higher and degree apprenticeships to students aged over 16 in a range of areas across the business. For example, technology apprentices are given the opportunity to work in cyber security, software testing and network engineering, while our customer service apprentices support our customer-facing activities.

This year, Vodafone UK partnered with the University of Birmingham to design a Digital Degree Apprenticeship, providing opportunities for students to be at the forefront of digital innovation. Students study a BSc in Computer Science full time at the University and, as a Vodafone employee, also receive a competitive salary across the four years, fully funded tuition fees and access to all employee benefits. They gain valuable work placement experience and obtain a role in one of Vodafone's digital teams once they graduate. We currently have 16 students on the programme, with a commitment to bring in more students in the future.




- 1 [ILO, 2019](#)
- 2 [OECD, 2018](#)
- 3 [Long-term effects of youth unemployment on mental health, Journal of Epidemiology and Community Health, 2017](#)
- 4 [EU Commission, 2018](#)
- 5 [The Digital Skills and Jobs Coalition, 2018](#)
- 6 [European Commission, 2018](#)
- 7 [New Skills Agenda for Europe, European Commission, 2016](#)
- 8 Starting from the 2019 financial year

Energy innovation

There is clear evidence that man-made greenhouse gases (GHGs) are having a direct impact on climate. We support the view that urgent action is needed to address climate change.

Within our business

In recognition of our need to contribute to international efforts to tackle climate change, we have two targets which focus on achieving a significant reduction in GHG emissions.

 See pages 30 to 32 to read how we are achieving our goals



Our 2025 goal

To reduce our GHG emissions by 50%.

Progress towards our goal

1%

reduction in our GHG emissions, against a 2017 baseline.



Our 2025 goal

To purchase 100% of the electricity we use from renewable sources.

Progress towards our goal

15%

of our purchased electricity was from renewable sources.



The global context

There is clear evidence that global temperatures are rising rapidly, with the last four years being the four hottest on record¹, and that man-made GHGs are having a direct impact on climate². We support the view that urgent action is needed to address climate change.

The [Paris Agreement](#) on climate change commits world leaders to act to limit global temperature rise to below 2°C above pre-industrial levels and calls for efforts to pursue a more challenging target of a maximum 1.5°C increase. Climate scientists now recommend keeping below 1.5°C to avoid some of the worst impacts, as highlighted in the recent International Panel on Climate Change [Special Report on Global Warming](#).

While good progress has been made in many countries, the pledges made to date are insufficient to achieve the goals of the Agreement. Current predictions imply temperature rises of 3°C by 2100, with warming continuing with potentially catastrophic consequences³. The repercussions of climate change will be felt everywhere but with particularly damaging effect in low and middle-income countries, which are least able to adapt.

Achieving the required reductions in GHG emissions will be particularly challenging in the context of continuous economic and population growth. Most analysts predict that global energy needs will be 25% higher than at present by 2040⁴. With over 80% of the world's current energy requirements met from carbon-intensive fuel sources⁵, there is a pressing need to phase out the use of fossil fuels and move to lower-carbon energy sources.

ICT and climate change

Providing communications services requires significant amounts of electricity. Every additional connected device and gigabyte of data transmitted or stored represents a potential increase in energy needs. The telecommunications and information and communications technology (ICT) industry faces a growing GHG emissions challenge as the sector's carbon and energy footprint increases: a recent study estimates that worldwide ICT energy consumption is increasing by around 9% per year⁶.

While the emissions from ICT companies are growing, the services that communications companies provide can make a significant contribution to the reduction of emissions arising from their customers' operations. Through the Internet of Things (IoT), products and processes in the workplace and in the home can become significantly more efficient and reliable. This has a positive impact on energy and GHG emissions, as well as other environmental issues.

Our alignment to the UN Sustainable Development Goals (SDGs)

Our commitments to reduce our GHG emissions, though our move to purchase renewable electricity and improve our energy efficiency, particularly support Goal 13, which is focused on climate action, and Goal 7, which includes a focus on clean energy.

Key SDGs and targets

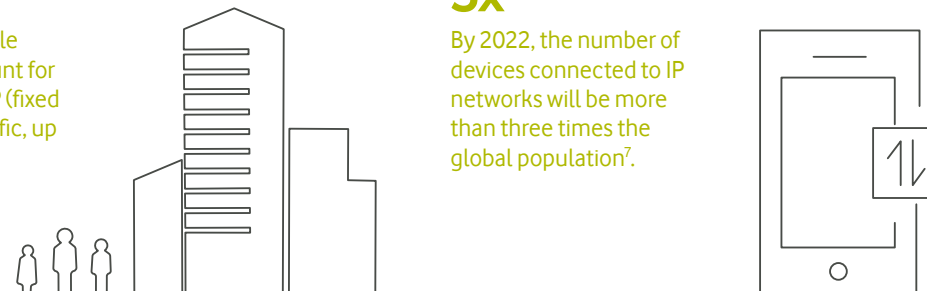
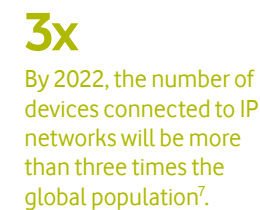
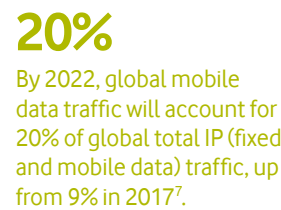
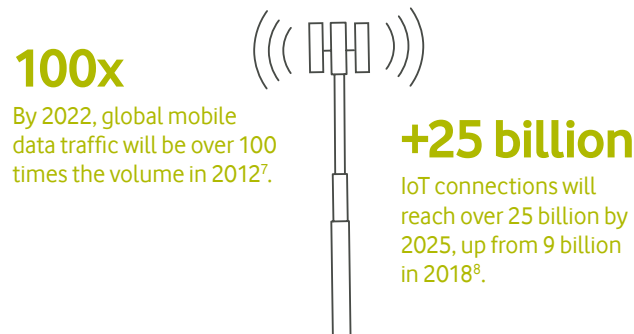


7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.



13.2 Integrate climate change measures into national policies, strategies and planning.

Data and mobile growth predictions



Vodafone, energy and climate change

We are focusing on increasing the energy efficiency of our network and services and are moving towards purchasing electricity from renewable sources.

This year, as part of Vodafone's purpose, we have committed to halve our environmental impact by 2025. In order to reflect this in our goals, we have increased our GHG emissions target to achieve a 50% reduction by 2025 (previously 40%), against a 2017 baseline. We will deliver against this target by improving the energy efficiency of our network and purchasing 100% of the electricity we use from renewable sources.

Across our networks we have more than: 164,000 mobile base station sites; 89,000 servers; and 3,200 buildings (including 400 technology centres).

We spend over €700 million a year on energy, and with a significant risk of energy cost inflation in the future, setting energy efficiency targets and switching to more sustainable energy sources makes business and environmental sense.

In August 2018, we established a [Green Bond Framework](#), under which Vodafone can issue green bonds to be able to finance or refinance projects to help us meet our environmental objectives. The framework defines which projects are eligible under the use of proceeds and how they are selected.

Climate-related financial reporting

As highlighted by the Bank of England Governor, Mark Carney, the 'tragedy of the horizon' is that by the time climate change becomes a defining issue for financial stability, it will very likely be too late to do anything about it. The Task Force on Climate-related Financial Disclosures (TCFD) was established in 2015 to address this misalignment and provide a voluntary reporting framework for companies to consistently report climate risk to investors.

We welcome the development of the TCFD recommendations and have updated our risk management process this year to strengthen our consideration of the potential business implications and impacts of climate change. In addition, we undertook an independent gap analysis of our reporting against the TCFD recommendations.

Although climate change is not currently seen as a principal risk for Vodafone, due to the nature of our business and the contingencies that are built into our networks, a number of potential risks have been identified from a physical (e.g. storms or higher average operating temperatures) and regulatory (e.g. carbon reduction commitments) perspective. These potential

risks continue to be monitored and measured as part of our ongoing risk management process to ensure that the appropriate management and mitigation actions are taken as we work towards full alignment with the TCFD recommendations.

The recent devastating Cyclone Idai, which struck Mozambique, is an example of the type of extreme weather events that are predicted to occur more frequently and at a higher intensity due to climate change. This cyclone had a widespread impact on our network, with damage caused to base stations, fibre cabling and retail stores. In response, Vodacom Mozambique deployed support for our staff as soon as was possible and engineers to repair and re-establish critical network connections and equipment. Pop-up shops and recharging points were established to allow people without access to power to charge their devices.

In addition, a number of employee volunteers were deployed by Vodafone Foundation to establish its *Instant Network* to the most severely affected areas, in order to provide emergency network communications, WiFi and charging capabilities, services that are critically important for initial international and local aid efforts.



Our greenhouse gas emissions

Our 2025 goal

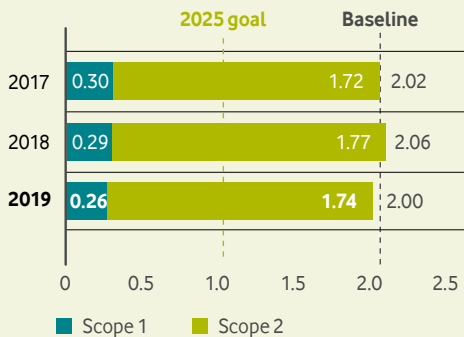
To reduce our greenhouse gas emissions by 50%.

Progress towards our goal

We have reduced our GHG emissions by 1%, against the 2017 baseline.

Our total GHG emissions decreased slightly from last year, predominantly due to a reduction in the carbon emissions associated with purchased electricity.

Vodafone GHG emissions (million tonnes CO₂e) (market-based method)



See page 73 for how we report our key performance indicators

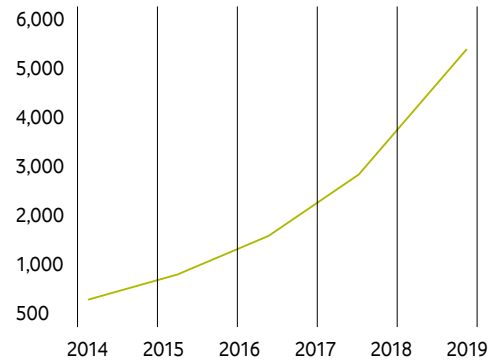
Our GHG emissions reduction target is to cut our emissions by 50% across our network and operations by 2025, against a baseline of our emissions for the 2017 financial year.

Meeting this absolute GHG emissions reduction target is challenging in the context of our business growth. The amount of data carried across our networks has grown exponentially over the last decade, and this growth in global digital communications is predicted to continue for the foreseeable future. With the continued demand for mobile data, we are increasingly focused on energy efficiency to mitigate the cost and environmental impact of this growth.

We have started work towards our GHG reduction target through increasing focus on a series of energy efficiency programmes across our networks and servers, particularly in power supply and cooling. We are also working with our local operating companies to plan the move to purchase 100% of our electricity from renewable sources by 2025.

Our total global Scope 1 and Scope 2 GHG emissions were 2.00 million tonnes CO₂e in 2019. Our Scope 1 emissions include those arising from fuel consumption, such as from diesel and gas and fugitive emissions of refrigerant gases, and our Scope 2 emissions include our indirect emissions from power consumption through purchased grid electricity.

Volume of Vodafone mobile data traffic (petabytes)



Our total GHG emissions have decreased by 3% from last year (2018) predominantly due to the purchasing of more electricity from renewable sources and the use of less carbon-intensive power sources.

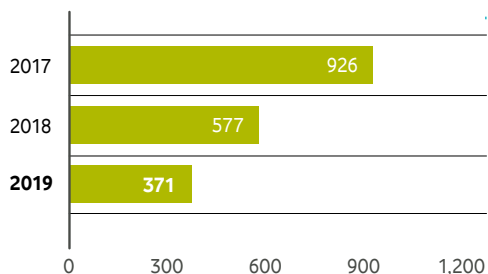
The numbers quoted in the chart on the left use the market-based method of calculating GHG emissions, which uses supplier emissions factors. Using the location-based method (using average emissions factors for the national grid), our Scope 2 emissions were 1.91 million tonnes CO₂e and total Scope 1 and 2 emissions were 2.17 million tonnes CO₂e. Further details of the methodology used and the relevant emissions factors applied are on page 74 of the Appendix.

1,000%

increase in Vodafone mobile data traffic over the last five years



GHG emissions (tonnes CO₂e) per petabyte of mobile data traffic on Vodafone's networks



Our key measure for GHG emissions intensity improved again this year, with a reduction in emissions per petabyte of mobile traffic data of 36%⁹. This was achieved due to continued mobile data traffic growth, while maintaining a relatively flat energy consumption through efficiency measures and a shift towards purchasing renewable electricity.

Emissions over which we do not have direct control (Scope 3) but which we may be able to influence are reported separately on page 33.

As a consequence of the merger of Vodafone India and Idea Cellular to become Vodafone Idea in August 2018, the GHG emissions for India in this financial year are now estimated as part of our Scope 3 emissions. In addition, in July 2018, Vodafone Greece acquired CYTA Hellas, a provider of fixed and mobile telecommunications services in Greece; the GHG emissions from CYTA Hellas will be incorporated into our 2020 reporting after its first full year of ownership.

Employee engagement on energy innovation

In order to meet our GHG emission reduction targets, we need to engage our employees to gain their support. As a result, we have established an employee engagement programme, *#RedLovesGreen*. This programme raises awareness of the individual actions that employees can take to reduce our energy use, both as a business and as individuals, and encourages changes in behaviour that collectively could have a significant impact.

The *#RedLovesGreen* programme regularly engages employees via an internal social media channel to catalyse their support and raise awareness of the ongoing energy efficiency programmes that will help us to meet our targets. The *#RedLovesGreen* channel also provides a central space to share success stories, news updates, tools and information. Since launching this global programme in June 2018, we have reached over 5,000 employees who engage regularly on this topic, and an energy awareness e-learning module has been completed by over 7,000 employees.

Recently, we created an 'energy guru' community to create energy efficiency advocates across the business to inspire other employees to take action. Energy gurus receive a quarterly communications pack to support them in their role. They also directly help to shape our programmes by sharing ideas across our different markets and submitting ideas to help us improve what we are doing.



Optimising our energy consumption

We are committed to improving the energy efficiency of our base station sites and in our technology (data and switching) centres, which together account for 94% of our total global energy consumption.

Unlike most ICT companies, which tend to have a small number of large data centres, Vodafone has a larger number of smaller technology and base station sites spread across different countries and locations. This means that much of the energy consumed across our businesses is split between multiple sites that consume relatively small amounts of energy. Consequently, optimising our energy consumption is a complex challenge.

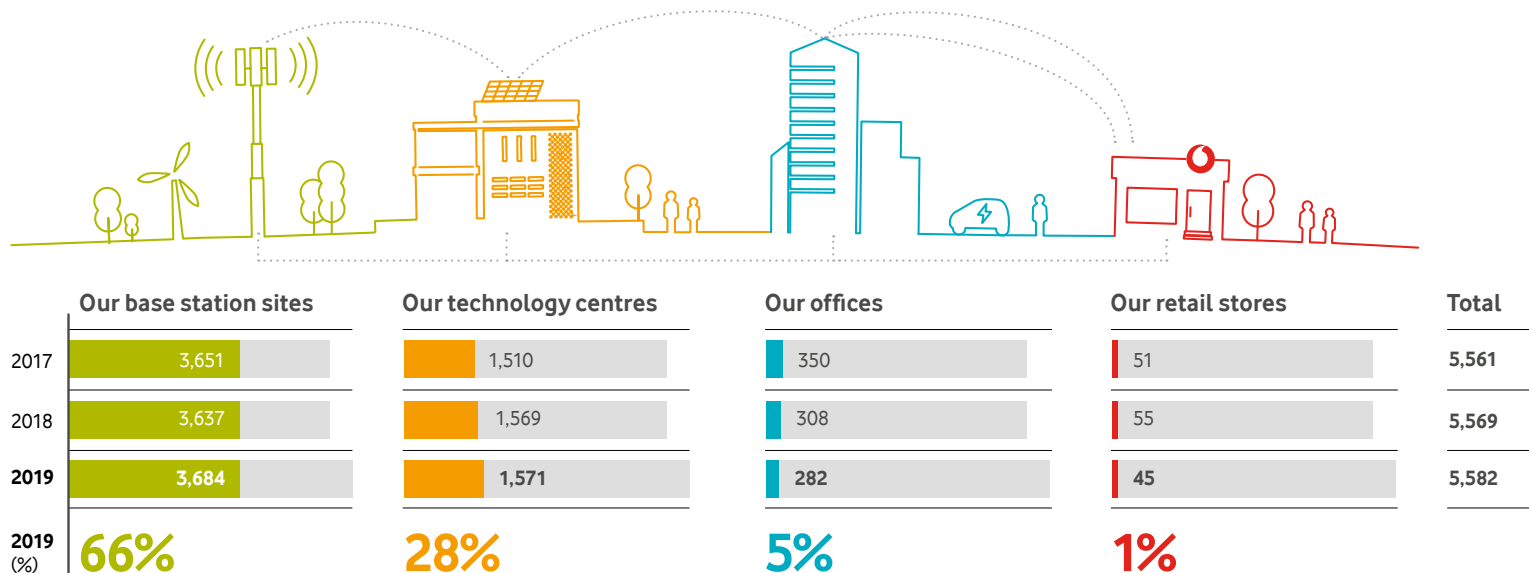
Our energy consumption has remained largely static this year despite the significant growth in customer numbers and data traffic across the network.

Improving energy efficiency across our network operations

In 2017, Vodafone started a specific programme to prioritise energy efficiency within the business's technology strategy and to invest in energy projects. We expect this three-year programme to deliver energy reductions and savings of approximately 10% of our energy cost. During 2019, we invested €57 million capital expenditure in energy efficiency projects across our business, which has led to annual energy savings of 164 GWh.

The amount of energy our business uses varies across our operations

Vodafone energy use (GWh)



We use large numbers of servers and other network equipment, which generate significant amounts of heat during their operation. Cooling technologies are therefore an essential part of our strategy, as too much heat can harm components and lead to network failure. This year we have met our forecast for energy savings for upgrading power and cooling systems across our networks. We delivered savings of 116 GWh, equating to 2% of our total energy consumption.

Our energy efficiency initiatives are focused on three key areas:

- sourcing and implementing more efficient network equipment;
- reducing energy demand by installing lower-energy power and cooling technologies; and
- cutting energy use by decommissioning and upgrading legacy equipment.

We have continued to improve the energy performance of our radio access network equipment by:

- installing energy-efficient single radio access network equipment, which enables a single item of radio hardware to run multiple technologies (e.g. 2G, 3G and 4G) and now makes up the majority of the deployed radio hardware in 98% (161,000) of our base station sites and is fully operational in 97% (159,000) of them;

- activating energy-saving software features that optimise radio resources and energy consumption to reflect actual voice and data traffic requirements in real time. To date, we have deployed energy-saving features across 2G, 3G and 4G technologies in all of our major markets; and
- deploying active antennas – a technology that boosts energy performance by integrating radio equipment inside the antenna to eliminate power attenuation over cable runs – as part of the introduction of Massive MIMO technology in all our planned 5G sites in Europe and also for 4G in more than 150 sites in Turkey and India.

Energy efficiency initiatives in our technology (data and switching) centres this year included:

- upgrading to more efficient power conversion equipment; for example, at our main technology centre in Germany we improved energy efficiency by 8% by upgrading to a state-of-the-art power supply system;
- continuing the installation of the dynamic thermal management control systems to reduce energy consumption from cooling. Using machine learning algorithms, the system ensures that servers receive the optimal amount of cooled air based on server load and external environmental conditions. Italy completed deployment to all its 29 main technology sites this year; and
- cutting energy use by decommissioning legacy assets, including data storage systems and servers.

The overall energy efficiency of technology centres is often assessed in terms of their power usage effectiveness (PUE) – an industry-standard metric that compares the amount of electricity used to operate computer equipment with the amount used for all other functions.

This year, we made further improvements to our centres' PUE, reaching an average of 1.60 (2018: 1.61).

In five local markets – Germany, Greece, Ireland, Turkey and the UK – we have also achieved ISO 50001 certification. The ISO 50001 standard provides a management framework with the aim of reducing energy consumption, costs and GHG emissions.

Energy efficiency in network procurement

We work with our equipment vendors to ensure that increased demand and business growth do not result in a similar percentage increase in electricity usage. This year we:

- made energy efficiency a mandatory requirement in the procurement process for all energy-intensive network and IT products;
- developed more sustainable network technology, including the introduction of machine learning algorithms to optimise the usage of radio resources with minimum energy consumption; and
- evaluated emerging technology, including development of an innovation hub (Green Island) to showcase different technologies that promote sustainability and energy efficiency in radio access sites.

We incorporate power optimisation in design specifications for new infrastructure to ensure that each successive generation of equipment is more energy efficient.

Improving energy efficiency and reducing carbon emissions in the UK

Vodafone UK operates networks and services relied upon by more than 17.8 million mobile and fixed broadband customers. However, providing these communications services requires a significant amount of energy.

To minimise these impacts Vodafone UK has implemented a GHG reduction strategy. Since 2013, this focus has resulted in a 35% GHG emission reduction, despite network growth and increased customer demand over the same period.

The strategy includes:

- implementing ISO 14001 and ISO 50001 certified management systems;
- investing in energy efficiency projects - £11.8m was invested in efficient technologies this year, such as new power and cooling systems, delivering

total savings of over 63 GWh. A facilities management Energy Performance Contract, delivered over 27 GWh of those savings and decommissioning legacy network switches saved around 15 GWh; and

- switching to renewable energy through exclusive power purchase agreements with two wind farms.

In addition, 150 environment ambassadors have been established across the business to promote energy efficiency and champion positive behaviours. Electric hybrid vans are being trialled and 20 vehicle charging points have been installed. In June 2018, all Vodafone UK employees were given a 'Keep Cup', which has already saved over 90,000 disposable coffee cups.



Increasing renewable energy

Our 2025 goal

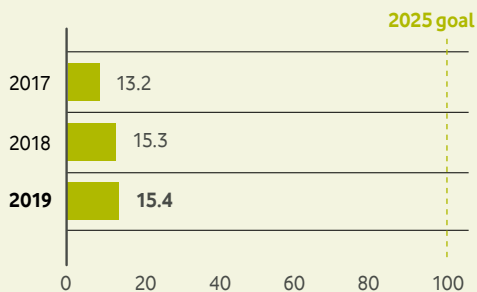
To purchase 100% of the electricity we use from renewable sources.

Progress towards our goal

We are working towards our target by increasing the procurement of energy from renewable power generation sources via national electricity grids, selecting tariffs with renewable attributes and purchasing renewable energy certificates (RECs).

This year, 15% of our purchased electricity was from renewable sources.

Grid renewable energy purchased
(% of total electricity use)



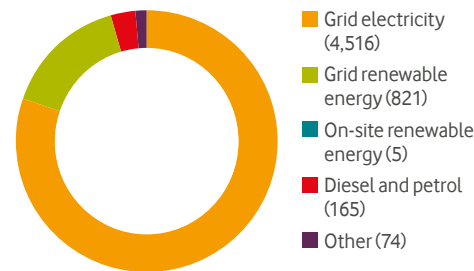
See page 73 for how we report our key performance indicators

Over 95% of the energy we consume to run our operations comes from grid electricity. To date, the proportion of our electricity from renewable sources has been low, accounting for just 15% of the electricity purchased. This is currently delivered through green electricity sourcing in the Czech Republic, Ireland and Italy, where we purchase renewable electricity contracts, and two wind farm power purchase agreements (PPAs) in the UK.

This year we conducted an assessment of the maturity of renewable electricity markets across our local operating companies to develop an appropriate phased approach. In some of our local markets there is no renewable supply, or the sources available are not certified through recognised schemes. We will therefore first look for opportunities to purchase renewable electricity in the countries where renewable electricity markets are well developed, followed by those in which the renewables market is currently developing and will be feasible in a few years and finally those markets that we expect to be available before 2025.

We are also a member of RE100 – a collaborative initiative led by The Climate Group in partnership with CDP that brings together major businesses committed to switching to 100% renewable power.

2019 Vodafone energy use by source
(GWh)



Expanding renewable electricity in our local markets

When selecting renewable electricity in our local markets we apply the following hierarchy:

- the signing of corporate PPAs with developers and suppliers of renewable energy assets to procure longer-term energy contracts. This can help stimulate new renewable electricity generation, as well as providing excellent traceability and avoiding the double-counting of renewable electricity; and
- the purchasing of renewable electricity backed by RECs – market-based instruments issued to power generators to track renewable electricity production and consumption.

This year we opened a tender for the construction and operation of utility-scale solar parks in Egypt. Minimising energy consumption

at Vodafone Egypt is a particular challenge due to the hot climate, which requires additional equipment cooling and the rapid roll-out of mobile networks to regions with poor or no electricity grid. The aim is for the solar arrays to come online before the start of 2025 and power a substantial proportion of Vodafone Egypt's electricity requirements.

In the UK, we have two operational wind farms, for which we receive the renewable energy guarantees of origin certificates; this has increased the overall proportion of renewable electricity in the UK operating company to over 12%, saving over 20,000 tCO₂e.

In South Africa, Vodacom successfully signed a PPA this year for renewable energy for one municipality and is in the process of exploring the feasibility of signing further PPAs for other municipalities.

On-site renewables

We develop on-site renewable sources when it is commercially and technically feasible to do so, primarily by installing solar photovoltaic (PV) systems at base station sites and technology centres. We have over 1,200 solar PV systems across our base station sites, technology centres and offices, contributing 4 GWh of renewable power. Our aim is to replace our use of diesel by increasing solar generation and deploying diesel-battery hybrids, although this can be limited at remote locations prone to vandalism or at sites with limited space or shading in urban areas.

Scope 3 emissions

Scope 3 emissions are indirect GHG emissions over which we have no direct control but may be able to influence.

This year our estimated Scope 3 emissions were 12.9 million tonnes CO₂e. We have worked with the Carbon Trust to analyse our Scope 3 emissions in order to identify where emissions are highest and prioritise where we have the greatest opportunity to influence third-party GHG emissions. This analysis considered all of the categories defined in the international guidance for Scope 3 emissions published by the GHG Protocol.

Of the Scope 3 emission categories, those most material to our business are:

- our joint ventures Vodafone Hutchinson in Australia, Vodafone Idea and Indus Towers in India, Vodafone Ziggo in the Netherlands and our associate company Safaricom in Kenya – with emissions estimated to be 6 million tonnes CO₂e;
- our suppliers' emissions in producing the goods and services that we procure from them, particularly in our networks, IT equipment, handsets and other devices estimated to be 4 million tonnes CO₂e; and
- customer use of our products and services, which includes emissions arising from the electricity used by network connection devices (such as routers) and when charging mobile device batteries – with our emissions for the devices we sold this year estimated to be 2 million tonnes CO₂e.

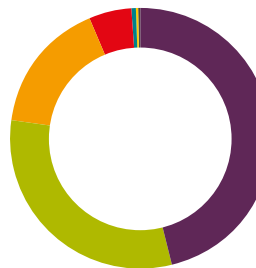
Some other categories included in our Scope 3 reporting are less significant in terms of volume but are reported because we have more control of them than for those deemed most material. These are:

- business travel (predominantly air but also train, bus and taxi travel) – estimated to have generated 0.06 million tonnes CO₂e this year of which air travel accounts for the majority;
- emissions that arise from the operation of base stations owned by third-party tower companies in Ghana and Tanzania where we lease space for our radio network equipment – which we estimate to be 0.05 million tonnes CO₂e; and
- treatment and disposal of waste from our operations, with emissions arising from the transportation, recycling and disposal of network and office waste estimated to be 0.001 million tonnes CO₂e.

We do not report on the other non-material Scope 3 categories.

Our supplier performance management programme covers environmental factors, and suppliers' GHG performance is one of the factors evaluated in our annual assessment process. We ask suppliers whether they have publicly reported their GHG emissions, have set targets to reduce emissions and have identified the risks and opportunities associated with managing their GHG emissions.

Scope 3 emissions sources (thousand tonnes CO₂e)



Most material	Other
■ Joint ventures and associates (6,000)	■ Fuel and energy-related activities (700)
■ Purchased goods and services (4,000)	■ Business travel (60)
■ Use of sold products (2,100)	■ Upstream leased assets (50)
	■ Waste generated in our operations (1)

Their answers form part of the overall performance score that we use to assess their performance. We also ask selected suppliers to provide details of their GHG emissions and management programmes through CDP (formerly the Carbon Disclosure Project). This year, 139 (or 90%) of those suppliers responded, with 81% reporting that they had set a target for GHG emissions, while 76% had implemented GHG emissions reduction programmes. This year we also noted an increase in the number of suppliers setting renewable energy targets.



Enabling customers to reduce emissions

Through our IoT mobile services, we are helping our customers to manage energy more efficiently and reduce their emissions. Over time, IoT technologies have the potential to transform industry, public services and many aspects of people's daily lives.

Our progress

This year we enabled our customers to avoid 2.9 tonnes of CO₂e for every one tonne generated from our operations.

Ratio of GHG emission savings for customers to our own GHG footprint

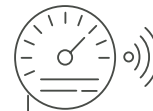


We estimate that over 31% of the more than 85 million IoT connections we operate directly enable customers to reduce their emissions, and we expect these connections to increase over time.

We calculate that in 2019, the total GHG emissions avoided as a consequence of our IoT technologies and services were 5.9 million tonnes CO₂e, which is nearly three times the emissions generated from our own operations. The greatest CO₂e savings enabled were in smart metering and improvements in logistics and fleet management.



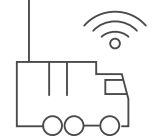
IoT applications that help our customers reduce emissions include:



Smart energy meters that enable businesses, municipal authorities and households to monitor, manage and reduce their energy use. Worldwide we have over 9 million smart meter connections using our IoT technology, saving an estimated 1.4 million tonnes CO₂e.



Smart cities – networked intelligently to improve the efficiency of energy-intensive services such as public transport, public road networks and street lighting. For example in the city of Guadalajara, Spain, 13,500 LED lights were connected to a central management system, reducing street lighting energy consumption by 68%.



Smart logistics – IoT technologies embedded in vehicles to optimise route management, vehicle maintenance and driver behaviour, delivering cuts in fuel consumption of up to 30%; saving an estimated 4.0 million tonnes CO₂e.

Increasing energy efficiency with Narrowband-IoT smart metering

With the evolution of new IoT technologies there is a need to develop low-power methods of connecting devices out in the field for applications such as smart meters, connected agriculture, smart cities or asset tracking. Narrowband-IoT (NB-IoT) is a new low-power method of long-range wireless data transmission between devices that can be deployed in rural areas where there is no reliable access to power or where devices are underground or within buildings. NB-IoT technology delivers many benefits, including great power efficiency, so that devices can run on batteries for 10 years or more without a charge.

Techem, a market leader in remote radio metering of energy consumption in homes and commercial buildings, is using NB-IoT from Vodafone to track energy consumption reliably and cost-effectively and help customers improve their energy efficiency.

“Having a better understanding of energy flows and consumption opens up new opportunities for improving energy efficiency in the field of smart buildings and smart homes.”

Dr Daniel Ghebru,
Innovation Management, Techem



Improving fleet efficiency using IoT

For all fleet operators, the cost of fuel is critical to the bottom line and any improvement in fuel efficiency, however small, can help reduce costs and consequently overall emissions.

We have been providing Dako, a company specialising in telematics, with the IoT connectivity it needs to support its networked logistics solutions for commercial fleets. One Dako customer, Schmalkalden Stadtreinigung GmbH (SSR), a waste management services company in Germany, has installed telematics devices into its collection vehicles. Using Vodafone IoT GPS tracking of the vehicles, connected to the Vodafone Managed IoT Connectivity Platform, the system is able to monitor, analyse and archive driving times, routes, driver activity and rest periods. This data is being used by SSR to optimise the vehicle rounds.

The next stage of the project will see the launch of a pilot to also monitor selected bins and recycling containers and alert SSR when they require emptying.

Monitoring air quality in Albania

Road traffic volumes have increased significantly in Albania since the early 1990s, which has caused environmental challenges from traffic congestion and air pollution in the capital city Tirana: the annual average concentrations of PM10 and PM2.5 for Tirana are above the limit values of the EU Air Quality Standard and the World Health Organization¹⁰.

Working in collaboration with the Municipality of Tirana, Vodafone Albania has implemented a system to monitor and

transmit air quality in the capital city to the public. Using our IoT technology, smart air quality monitoring devices have been installed in the city and integrated into a system to monitor real-time air quality through the 'Tirana Ime' application. By monitoring air pollution in this way the municipality is better able to understand traffic-related air pollution factors and identify appropriate measures for tackling such pollution.



1 [WMO Provisional Statement on the State of the Global Climate, 2018](#)

2 [Fifth Assessment Report, IPCC, 2014](#)

3 [Special Report: Global Warming of 1.5°C, IPCC, 2018](#)

4 [World Energy Outlook 2018, IEA](#)

5 [Global Energy and CO₂ Status Report, IEA, 2018](#)

6 [Lean ICT Report, The Shift Project, 2019](#)

7 [Cisco Visual Networking Index, 2019](#)

8 [The Mobile Economy, GSMA, 2019](#)

9 Please note this intensity metric takes into account our total CO₂e emissions but only our mobile data traffic (not our fixed-line data traffic).

10 [WHO air quality database, 2018](#)

Operating responsibly

We are committed to ensuring that our business operates ethically, lawfully and with integrity wherever we operate as this is critical to our long-term success.

This chapter contains sections relating to some of the key risks we face and details the controls we put in place to ensure our operating practices meet our and our stakeholders' expectations:

Supply chain integrity

We work to ensure integrity in our supply chains by managing many different legal, social, ethical and environmental risks. We also encourage those who work with us, directly or indirectly, to adopt sustainable business practices.

📖 37

Safety

Keeping the people who work for us safe is one of our most fundamental responsibilities. We promote our approach across our industry with leading safety standards by insisting on high safety practices from our employees, contractors and suppliers and by engaging with customers and peers.

📖 42

Human rights

Respect for human rights, including those that extend into the digital realm, is critical to the long-term success of our business.

📖 46

Anti-bribery and corruption and political engagement

Vodafone does not tolerate bribery or corruption in any form. We would rather walk away from a business opportunity than engage in actual or even perceived corruption. Interaction with governments, political parties and political commentators, civil servants, regulators and independent statutory bodies is an essential aspect of managing our businesses around the world.

📖 48

Privacy and cyber security

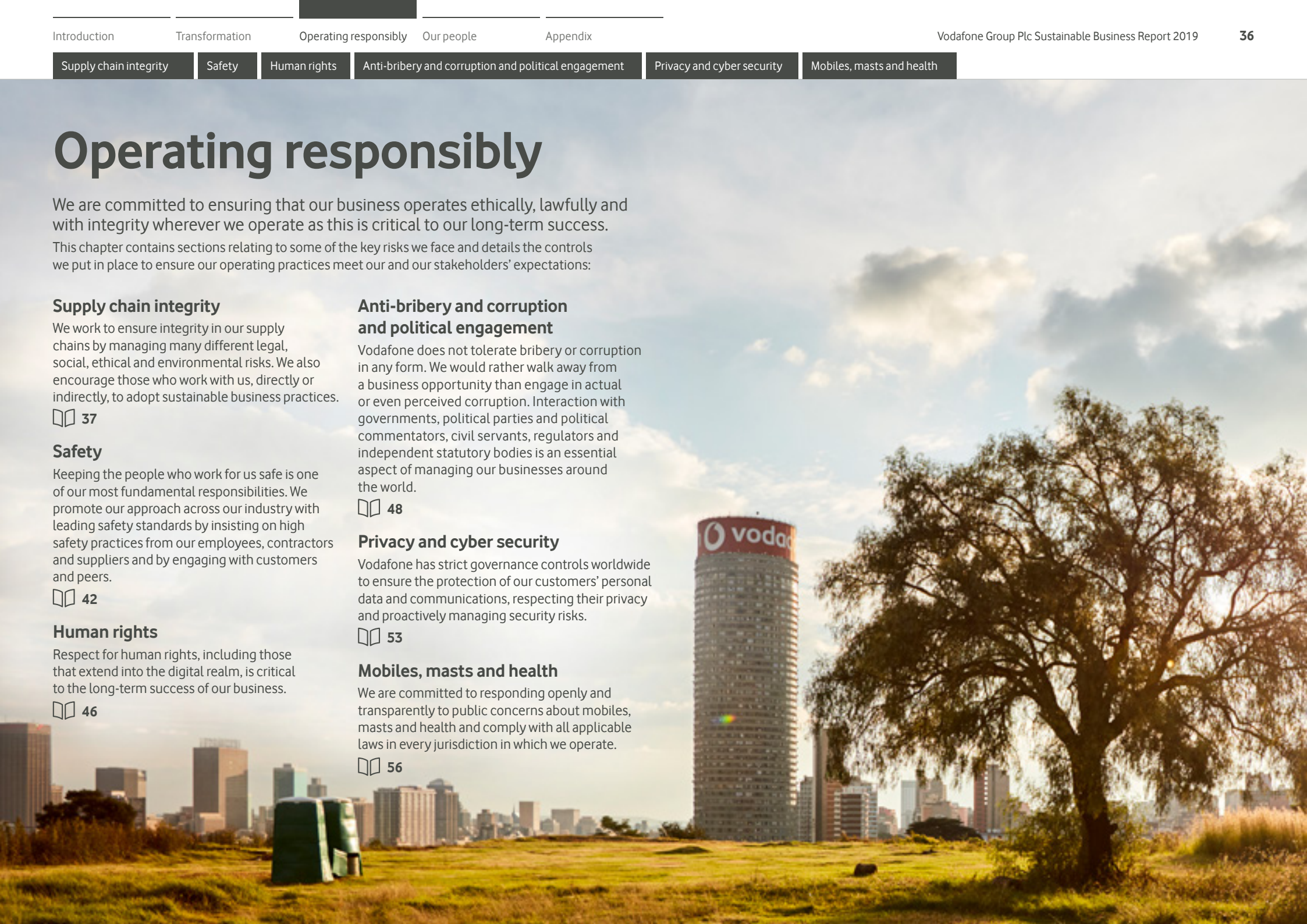
Vodafone has strict governance controls worldwide to ensure the protection of our customers' personal data and communications, respecting their privacy and proactively managing security risks.

📖 53

Mobiles, masts and health

We are committed to responding openly and transparently to public concerns about mobiles, masts and health and comply with all applicable laws in every jurisdiction in which we operate.

📖 56



Supply chain integrity

We spend approximately €22 billion a year with more than 10,800 direct suppliers around the world to meet our businesses' and customers' needs.

Our businesses rely on complex and multilayer global supply chains. For example, our direct suppliers often have many suppliers of their own, who in turn rely on a large number of suppliers, and this dependency continues through several tiers. Intermediaries such as distributors and wholesalers are also involved at various points in our chains.

We work to ensure integrity in our supply chains by managing many different legal, social, ethical and environmental risks. We also encourage those who work with us, directly or indirectly, to adopt sustainable business practices.

Safety in our supply chain is also critically important. Vodafone has comprehensive measures in place in our own businesses designed to make sure everyone who works for us goes home safely. We reinforce this across our supply chains.



Further information on the structure of our supply chain can be found online at www.vodafone.com/supplychain.

Supply chain risks

Some of the most material risks in the information and communications technology (ICT) supply chains include injury to people working in field operations, the harmful effects of working long hours in electronics factories, corruption and human rights abuses in the mining of cobalt or other metals and minerals.

Safety is a critical priority throughout our supply chain and in particular during the installation, management and maintenance of our mobile and fixed-line networks. There are grave risks for our employees and suppliers when carrying out this work, including those related to driving, working at height or dealing with high-voltage equipment.

We have developed robust systems to seek to ensure that our suppliers meet our mandatory ethical, labour and environmental standards. We expect all our suppliers to follow our [Code of Ethical Purchasing](#) and uphold the [Business Principles](#) in our Code of Conduct. We expect our suppliers to be accountable for managing risk in their operations and to understand that we expect them to hold their own suppliers accountable to the same high standards.

When choosing a new supplier, or choosing to continue to work with one, we assess the supplier's compliance with our rules on health, safety and responsible behaviour, just as we assess commercial factors such as quality, cost and the supplier's ability to deliver on time.

Levels of influence

The Vodafone Procurement Company (VPC) leads purchasing and supplier management. The VPC manages most of our spending with suppliers worldwide and supports the needs of our operating companies and group functions. This approach is designed to ensure objective and consistent supplier management across Vodafone's businesses and makes it easier to monitor and improve supplier performance.

We also have relationships with local suppliers that work on behalf of our local country businesses, particularly those involved in service-related procurement, such as merchandising or field operations. Our support for these local businesses has a positive impact on communities through providing employment in our local operating countries.

Monitoring our suppliers' compliance with our rules can be challenging because of the complexity of our supply chain, which includes many businesses in different locations and at different tiers or levels. Therefore, the level of influence we can exert over businesses in our supply chain varies significantly. The greatest level of influence usually exists with our Tier 1 suppliers where we have direct contractual agreements. Many of these are substantial brands and businesses with proven processes in place to ensure high standards and sustainable business practices. Where a supplier is dominant in the marketplace with a particular product or service, or where Vodafone is not a significant purchaser, we have less influence.

Our Code of Ethical Purchasing requires all our Tier 1 suppliers to ensure that their suppliers also have equivalent policies, processes and verification systems in place to manage risks and ensure compliance in their own supply chains. We collaborate with some of our Tier 1 suppliers to monitor their supplier bases directly and help them to improve standards. We also work with our peers and suppliers to share best practice and to strengthen compliance at the top tier of our supply chain.

We also have influence over the infrastructure suppliers who supply, install and maintain our networks, as well as over suppliers that provide branded products and services. We have less influence over Tier 2¹ and other sub-suppliers operating further down our supply chains, where the risks of non-compliance are higher. We work with our direct suppliers to monitor and manage the risks at this level.



Further information on the process to qualify as a Vodafone supplier and our policies can be found online at vodafone.com/supplychain.

Minerals in the supply chain

Vodafone does not directly own or operate factories or production plants, with the exception of a technology operation in Italy that is part of our Vodafone Automotive Internet of Things (IoT) business. We do not directly purchase raw minerals, ores or metals. The majority of the smartphones and tablets that we resell to customers are produced by major companies with internationally recognised brands that report on sustainability efforts in their own right. We also offer our customers a range of smartphones and tablets that carry the Vodafone logo. These devices are designed and manufactured on our behalf by suppliers known as original design manufacturers.

Electronic products contain numerous components that may contain one or more of the 3TG metals (tin, tantalum, tungsten and gold). For example, tin is used often as a soldering material for electronic components. Gold and tantalum are typically used in components such as connectors or capacitors. In addition, some electronic products contain cobalt within their lithium-ion batteries. Smelters and refiners mine and process cobalt. It is then supplied to component manufacturers, assemblers and sellers.

These minerals come from many different smelters and refiners in a complex and often opaque supply chain. Both the smelters and refiners, and the mines from which minerals are sourced, are many steps away from Vodafone in the supply chain. If we can influence the design or manufacture of products, we try to ensure that they do not contain metals or minerals that fund conflict in the Democratic Republic of Congo.

We are members of, and involved in, industry initiatives such as the Responsible Minerals Initiative to improve transparency in supply

chains. Vodafone also investigates the potential human rights risks relating to both cobalt and 3TG metals mining in our supply chain. We have focused on identifying products likely to contain these minerals and the locations of suppliers who manufacture or are employed as contractors to manufacture those products.

We provide further details of our approach to this issue in our statutory [Conflict Minerals Report](#) and [Artisanal Cobalt Statement](#).

Monitoring compliance

We expect our suppliers to continuously monitor their compliance with the standards set out in our Code of Ethical Purchasing. Any failures must be immediately addressed. We also require them to report serious breaches to Vodafone immediately so we may ensure that they take corrective action.

The Vodafone approach to monitoring compliance with the Code of Ethical Purchasing is determined by the nature of the risks and the kind of activity involved. High-risk suppliers, including those operating in industries, sectors or countries with a history of poor standards, are required to undergo a detailed evaluation process. Suppliers who work in lower-risk areas may be required to complete self-assessment questionnaires.

Supplier questionnaires

Through our *Supplier Performance Management Programme* Vodafone monitors our key suppliers' health and safety and sustainable business performance standards, as well as their commercial, product and service performance. We define key suppliers in terms of the nature of their contribution to our business and the significance of our expenditure with them.

We require suppliers to complete an ethical, labour and environmental risk questionnaire and

to provide evidence to validate their responses. Suppliers can use the questionnaire to highlight ways in which they have shared best practice in their own business or their supply chains. This year we evaluated 43 key suppliers through this approach. Our supply chain team then validates and uses the information provided to assign each supplier an overall sustainability score and grade. These scores are also used to grant two Vodafone Supplier Awards, one for health and safety and the other for sustainability.



Detecting and tackling modern slavery

During 2017, we asked more than 8,000 supplier businesses to cascade our modern slavery e-learning training through their supply chains. The training, which is available in English, Hindi and Mandarin Chinese, is designed to increase workers' and line managers' awareness and understanding of modern slavery risk. It also promotes Vodafone's *Speak Up* process as a way for workers to raise issues directly with Vodafone.

As a direct result of this training, during the year, we had one report of a modern slavery-related issue through *Speak Up*, from a worker at a supplier site in one of our African markets. The individual raised a concern that they did not have an employment contract and had yet to be paid.

Working with an independent auditor, Vodafone observers visited the site to review the supplier's contracting and payment procedures. This included document checks, confidential employee interviews and taking a sample of the supplier's workers' contracts, in job roles likely to be at risk of modern slavery practices.

After a thorough investigation, using an independent audit firm specialising in detecting modern slavery to carry out an on-site audit, no wrongdoing was found. However, we identified some areas for improvement to avoid any similar concerns occurring in the future. The supplier has since implemented the recommendations that resulted from the audit with respect to communicating pay in advance of remuneration and ensuring that employment contracts are both kept on file and shared with employees. The confidentiality of the individual was maintained through the process.

On-site audits

We regularly undertake intensive on-site supplier audits, which include an examination of written policies and procedures, site inspections and discussions with managers and employees. This provides us with a detailed insight into how suppliers' policies translate into action.

Vodafone is one of 17 telecoms operators who belong to the Joint Audit Cooperation (JAC) initiative, where we share our on-site assessments, given that our industry peers share the same suppliers and supply chain risks. Through the JAC process, each supplier undergoes a single audit. The results of these audits are shared between JAC members and one member leads any required follow-up with the supplier.

Between January and December 2018, there were 79 JAC audits, of which 87% were within Vodafone's supply chain. Of the audits in Vodafone's supply chain, 24 were Tier 1 direct suppliers, 39 were Tier 2 suppliers, five were Tier 3² suppliers and one was a Tier 4³ supplier.

In parallel, we conduct our own on-site assessments for specific Tier 1 and Tier 2 suppliers that we have identified as high risk but that are not covered by the JAC initiative assessments. This year, we conducted six on-site assessments: four Tier 1 suppliers and two Tier 2 suppliers.

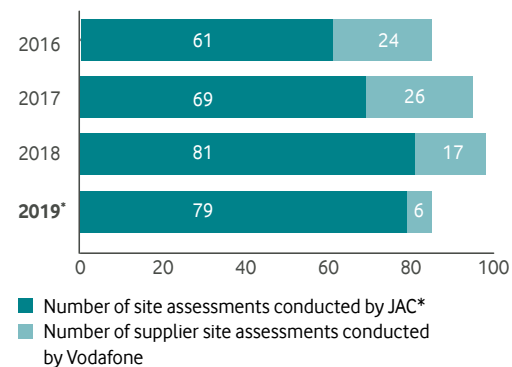
Direct employee feedback

While the assessment of the working hours and working conditions of our suppliers is important, it can be difficult because supervisors and managers may attempt to falsify timesheets and other workplace records. This year, we continued to obtain direct feedback from our suppliers' employees in order to identify modern slavery risks and areas for improvement.

We use an independent third-party company to gather confidential and unbiased feedback directly from our suppliers' employees. Anonymous and simple mobile phone-based worker surveys enable employees to reply to pre-recorded questions in their local language at any time and from any location. We require participating suppliers to allow their employees to respond to questions freely and privately. The responses provide us with important insights into our suppliers' employees' working hours and conditions so we can work with suppliers to put in place appropriate remedial measures if required.

During 2019, our approach to using worker surveys was adopted by JAC member companies. This year JAC members collectively surveyed common factories employing 16,800 workers across 12 factories in China and India. Where Vodafone also conducted on-site audits and verification of supplier factories in China and India with the same workforce population, 10% responded to our anonymous survey.

Number of assessments conducted



* JAC assessments are reported on a calendar-year basis.

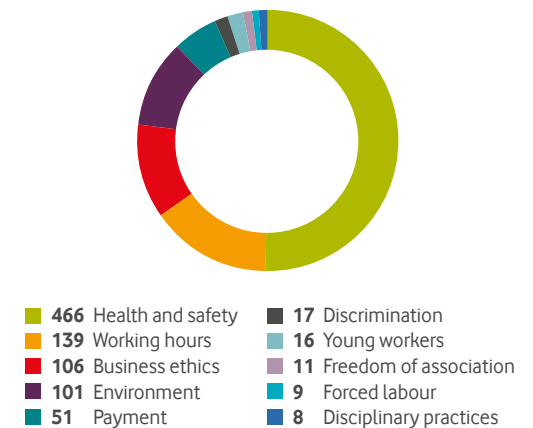
** 12 sites were assessed both on-site and via mobile surveys.

Improving performance and building capability

Engaging directly with suppliers through follow-up discussions and briefings using our monitoring processes is one of the most effective ways of improving performance in our supply chain. If there is evidence of non-compliance through JAC audits, our own on-site assessments or worker surveys, we work with suppliers to develop corrective actions, to improve their policies and/or strengthen the processes they use to manage key risks.

This year, most of the recommendations made following Vodafone or JAC audits related to health and safety, excessive working hours and business ethics. Regarding health and safety, there was an increase in recommendations related to fire evacuation signage, evacuation lighting and fire exits. There was also an increase in environmental recommendations, mainly regarding unsatisfactory management systems or emissions monitoring. We work directly and through the JAC governance process to ensure all recommendations are implemented.

Recommendations for improvement from combined JAC audits* and Vodafone audits in 2019 (Number of cases)



* JAC audits are reported on a calendar-year basis.

The key factors underlying recommendations (ranked by frequency)

Health and safety

- Emergency preparedness (e.g. missing building safety plans or missing equipment).
- Lack of safety management policies and processes.
- Inadequate safeguards to prevent exposure to hazardous substances.

Working hours

- Poor resource planning and forecasting, which leads to excessive working hours by supplier employees.

Business ethics

- Lack of effective ethics policies.
- Lack of ethics requirements towards their suppliers.
- Lack of whistle-blowing mechanism.

Environment

- Lack of environmental performance targets.
- Missing environmental permits to conduct certain activities.
- Poor control on disposal of hazardous substances.

Payment

- Improper or unclear overtime payments.
- Failure to comply with minimum wage requirements.
- Failure to keep accurate records on social insurance payments.

Discrimination

- Inadequate policies to ensure equality.

Young workers

- Instances of young workers aged 16–18 found to be doing dangerous or night work.
- Inadequate records kept on verifying worker age.

Freedom of association

- Workers denied the opportunity to join representative bodies.
- Worker representatives not elected freely.

Forced labour

- Excessive use of agency or temporary labour.
- Employees not receiving copies of their employment contract.

Disciplinary practices

- Wage deductions used as a disciplinary measure.

30 out of the 60 critical performance issues identified from JAC on-site audits were resolved and signed off. The remaining 30 issues, which relate to working hours and emergency preparedness, require additional time and investment to monitor the effectiveness of actions before they can be signed off as completed. Vodafone will terminate a contract if any supplier persistently fails to resolve compliance failures or if issues of gross misconduct occur.

Supporting LGBT+ communities in our supply chain

This year we began to measure the progress our suppliers are making towards support for diverse groups such as LGBT+. Approximately half our suppliers declared that they have LGBT+ supportive practices, such as support networks, or LGBT+ inclusive policies and practices in place.

In March 2019, Vodafone hosted 'Partners with Pride' at our Group Headquarters in Paddington. This event brought together leaders from more than 25 of our global suppliers to explore how to make a positive difference in the treatment of LGBT+ people worldwide. Through our ecosystem of suppliers and partners, many of which

are technology companies, we shared approaches on our collective successes and challenges in LGBT+. We also explored how we could collaborate to advance greater levels of belonging and inclusion across the three key areas of youth, community and cultural change.

Participants at the event included Vodafone's LGBT+ Global Executive Sponsor (who is also the Group Supply Chain Director and CEO of the VPC), the Group Chief Technology Officer and a former UN Head of Human Rights and Anti-discrimination.



Providing our suppliers with direct support and building capability

As part of the JAC initiative, Vodafone worked with three other operators this year to launch a Supplier Academy to build supplier capability. The Academy focuses on developing training to help suppliers assess and improve the social, ethical and environmental performance issues that may arise within their own supply chains.

Following a week of classroom training delivered by an internationally recognised

audit and verification company, five participating suppliers were on-boarded into the Academy. They were then given an opportunity to gain practical experience of performing an audit under the supervision of an independent third-party auditor. Once completed, suppliers were then able to complete 25 audits of their own, or of their suppliers', facilities and shared the results with Vodafone.



Our payment practices

Our payment terms take into consideration the size of the supplier in question, the contract, the nature of service or type of goods provided and the supplier's relationship with the wider Vodafone Group, along with any other relevant commercial factors. As a global organisation, many of our suppliers are large multinational companies, which may provide network equipment or devices for customers. Vodafone also has many suppliers that are small and medium-sized enterprises.

As a general principle, our supplier payment terms are a maximum of 60 days from the date of receipt of invoice. To help suppliers improve their cash flow, we offer our suppliers supply chain financing facilities and free e-invoicing tools. As of 31 March, over 3,500 suppliers had taken up early invoice payments on a completely voluntary basis, where payment can be taken in advance under agreed terms at much lower rates than they are likely to receive under traditional factoring or borrowing arrangements.

We recognise that small, innovative technology start-ups are particularly sensitive to cash flow, and to support them we introduced an 'Innovation Fast Lane' scheme, which has simplified contracting and enables lower payment terms, capped at a maximum of 21 days from date of receipt of invoice. We also ensure that our invoices are paid on time (2019: 99%) and we cap maximum payment terms.

In order to ensure that our policies and practices are appropriate for smaller suppliers, we work to improve our understanding of our supplier base and to introduce a range of initiatives designed to benefit those smaller suppliers. This year in the UK, we committed to pay all our small suppliers (as defined by the Companies Act) within 30 days of receipt of their invoice. We asked our suppliers to confirm whether they fall into the category of smaller suppliers. We have also amended our systems to enable this information to be captured on an ongoing basis.



Read Vodafone's latest UK payment practices report.

In South Africa, last year Vodacom increased the value paid under preferential payment terms to qualifying small, medium and micro-sized enterprises by 55%. In addition, the business offers preferential payment terms to businesses which are over 51% Black-owned, assisting them with their cash flows and to reduce financial constraints.

Safety

We take safety extremely seriously in our operations. Keeping the people who work for us safe is one of our most fundamental responsibilities. We promote our approach across our industry with leading safety standards by insisting on high safety practices from our employees, contractors and suppliers and by engaging with customers and peers.

Our commitment to safety does not differentiate between our own employees, our contractors and our suppliers' employees and contractors.

We want everyone working with Vodafone to return home safely every day. Any injury or any loss of life related to our operations is unacceptable. It is therefore with great regret that we report two recordable fatalities⁴ this year. We provide the context for those deaths in this section on page 45.

Policy

Our Code of Conduct makes it clear that everyone working for or on behalf of Vodafone must behave in a safe and responsible manner at all times. Our Group Health, Safety and Wellbeing Policy expands on the Code of Conduct, setting out our commitment to establish a robust and durable health, safety and wellbeing culture. Detailed standards with this policy establish the specific steps that must be taken to manage our greatest risks.

Work Safe Home Safe

We continue to develop our health and safety messaging around *Work Safe Home Safe*, which promotes the importance of adhering to the Vodafone Absolute Rules as good practice in our employees' personal lives and workplace. The intention is to encourage commitment to safe practice rather than merely compliance with the Vodafone safety requirements.

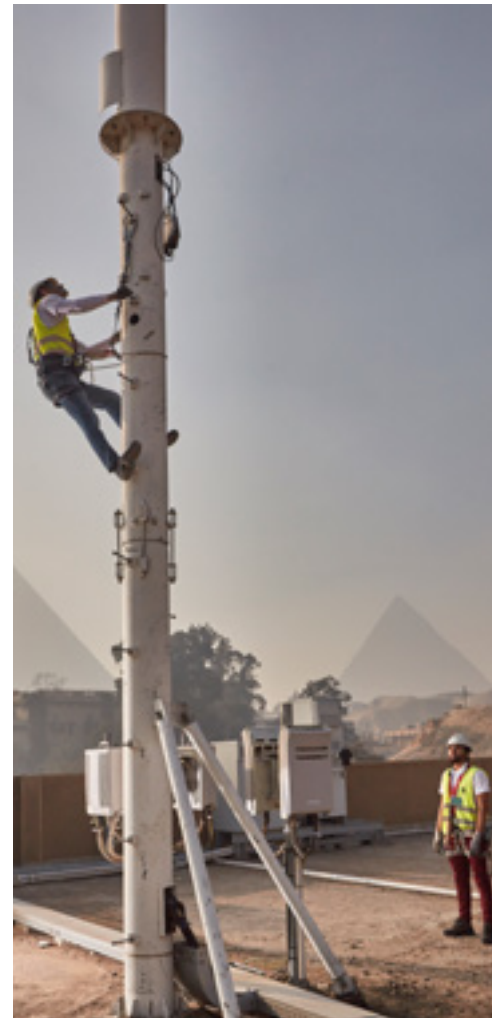
Over the next year, we will introduce our *Vodafone Safety Values*, which encourage employees to consider the benefits of safe practice, not only for themselves but also for the safety of others. For example, the *Values* include a commitment to intervene wherever someone's safety may be at risk. They also encourage the reporting of incidents and hazards to prevent a reoccurrence.

Our global Code of Conduct training, completed by 90%⁵ of active employees, includes a mandatory e-learning safety module designed to ensure that employees know how to keep themselves and others safe at work. It also includes details of our *Speak Up* programme, which enables anyone to report safety concerns anonymously if they prefer.

In addition to the Absolute Rules, our Supplier Group Policy on Health, Safety and Wellbeing sets out additional safety requirements at an operating level, particularly for high-risk activities. The policy emphasises the need for suppliers to monitor compliance on a continuous basis, report about their safety performance to us and have in place robust mechanisms to manage safety in their own supply chain. It also requires suppliers to put in place a safety plan before they undertake a number of specified high-risk activities.



Further information on how we ensure compliance with our policy, including how it is governed, can be found online at www.vodafone.com/safety.



Our Absolute Rules on safety

The Vodafone Absolute Rules on safety focus on risks that present the greatest potential for harm for anyone working for or on behalf of Vodafone. The Absolute Rules are clear and underpinned by a zero-tolerance approach to unsafe behaviours in all of our businesses.

Vodafone employees and contractors, and our suppliers' employees and contractors, must:

- always wear seatbelts when travelling in or operating vehicles;
- always use suitable personal protective equipment, a safety harness and fall protection when working at height;
- never carry out electrical work on electrical equipment, circuits and gear if they are not qualified;
- never work under the influence of substances (alcohol or drugs) that are illegal or in excess of legal levels or where this impairs the individual's ability to perform tasks;
- never exceed speed limits or travel at speeds that are dangerous for the type of vehicle or conditions;
- never use a hand-held phone while driving and only make calls by pulling over or using hands-free devices, when it is safe to do so; and
- never undertake any street or underground work activities unless competent to do so.

Managing key safety risks

Our safety strategy focuses on the most significant risks for people working in operational roles in our businesses. These risks are:

- road risk when driving for work;
- working with electricity;
- working at height;
- laying cables in the ground; and
- management and control of suppliers.

Historically, these risks have accounted for the majority of serious incidents and fatalities that have occurred in Vodafone and in our supply chain. This reflects the general trend across the global telecommunications industry. Traffic-related incidents remain the greatest threat of harm on a daily basis, particularly in emerging markets.

We consider the management and control of suppliers to be a significant risk because much of the work relating to the risks identified is undertaken by our Tier 1 suppliers or Tier 2 sub-suppliers.

Road safety

Road safety remains our primary safety concern and continues to be the primary cause of serious injuries and fatalities associated with Vodafone activities. This echoes the growing awareness and focus on improving road safety across the globe, including UN Sustainable Development Goal target 3.6 on road safety, which aims to halve the number of road traffic deaths and injuries by 2020.

Safe driving techniques training is mandatory for anyone who drives a road vehicle while working on our behalf. However, mitigating road risk remains challenging because we have no direct ability to control external factors such as unsafe driving conditions, the lack of a safety-first culture or the actions of third parties on public roads.

We have historically experienced challenges with employee data privacy when using telematics in company vehicles. However, with improved technology we are starting to introduce devices with improved functionality that enables the driver to identify the difference between using their vehicle for business and private use. This ensures privacy around their personal driving behaviour. These privacy improvements have seen the introduction of telematics in a number of markets, most notably Hungary and Ireland.

This year in Egypt, Vodafone Egypt created an app that uses telematics data to identify adherence to road speed limits, driver fatigue and journey management violations and then send instant notifications in cases of non-compliance. This proactive approach has the potential to help reduce the number of future incidents.

Working with electricity

Our Absolute Rules stipulate that anyone working with electrical equipment must be qualified and authorised to do so. Our training module on working with electricity provides guidance to employees on how to recognise risks and implement appropriate safety controls.

There was one fatal electrocution and one major incident involving electricity this year. The fatal electrocution occurred in Vodacom Mozambique when a contractor installing fibre on an electrical distribution line suffered an electric shock when using an aluminium ladder to free a cable caught in a tree. In addition, a major incident occurred in our joint venture Vodafone Hutchinson Australia where two employees from a sub-contractor working on a distribution panel suffered severe burns. We continue to ensure that electrical risk is a focus for all suppliers. We took the following actions to strengthen controls:

- distributed a Group-wide safety alert;
- emphasised electrical risk at our global supplier forum;
- conducted monitoring checks during market visits; and
- revised our electrical safety standard.

In addition, we have continued to work with suppliers to ensure that:

- they have a documented risk management process for working with electricity;
- those working with electricity are certified, competent and medically fit;
- electrical equipment is fit for its intended purpose;
- appropriate safety controls such as 'lockout-tagout' are in place; and
- work on live electrical systems is prohibited (with the exception of extra-low-voltage systems, where additional controls are specified).

Working at height

Mobile communications services rely on connectivity provided by antennas placed on towers, masts and rooftops. We work to ensure the training of Vodafone employees and contractors and our suppliers' employees and contractors who work at height so that they understand the risks and take steps to control them.

Our network site design principles stipulate the need for safe access for people working at height and include guidance on the control measures required to manage the risks involved effectively. Fall-arrest equipment is inspected regularly as part of each of our local businesses' preventative maintenance programmes.

There were eight working-at-height major incidents during the year, six of which involved engineers falling from ladders while installing fibre cables. To mitigate the risks of working at height and safe site access we have:

- maintained investment in fall-arrest equipment and strengthened maintenance and recertification activities in all markets;
- assessed suppliers who provide training on working at height in India, Egypt, Turkey, Greece, Albania, Romania, the Czech Republic and Hungary;
- reviewed our key global suppliers and their compliance to our working-at-height and safe site access procedures; and
- strengthened safe site access controls with the introduction of a new standard and guidelines.

During the year, we have also continued to work with third-party suppliers to ensure effective controls are implemented and monitored, with a specific focus on ladder work.

Laying cables in the ground

Expanding our fixed-line business has increased the amount of work undertaken to lay or maintain cables at street level or underground. At street level, this work is hazardous, with the risk of injury or death posed by penetrating electricity or gas lines, trenches collapsing during excavation and nearby road traffic.

Fibre-to-the-premises and cable broadband installations require employees and contractors to work on private residential and business property as well as in the street. Doing so also poses risks such as not knowing the location of buried utilities. We are working with our local businesses to ensure that they have the necessary safety plans and controls in place to mitigate these risks.

Control of suppliers

Suppliers' employees and contractors working on masts, towers and other equipment undertake most of the highest-risk activities related to the deployment and maintenance of our networks. In addition to our policies and Absolute Rules, we operate a consequence management system. This means we will terminate contracts if our suppliers or their sub-suppliers persistently fail to meet our standards.

Effective risk management starts at the top of any organisation, so we are clear about our safety expectations to the chief executives and senior leadership teams of our supplier businesses. We expect them to focus on the operational challenges our safety experts identify.

Four times a year, we host a supplier safety forum, first established in 2016, for our major network suppliers, focusing on best practice and critical risks.

High-risk supplier reviews

The majority of fatalities continue to involve our suppliers, where unsafe behaviour is a contributing factor. This year we completed a review of high-risk suppliers across our Africa, Middle East and Asia-Pacific markets, focusing on Tier 1 and Tier 2 suppliers. This review helped us better understand how local markets monitor suppliers' adherence to our requirements.

The review confirmed strong engagement with suppliers through local market supplier forums. However, it also found that further action was required to address under-reporting by suppliers. Markets were subsequently instructed to reiterate expectations to all suppliers on the requirements when reporting incidents. These include reporting timescales and the definition of what should be reported.

Equipping commercial vendors with safety training

Vodafone celebrated 10 years in Ghana in June 2018. Over that time, the health and safety agenda has seen a significant improvement, from a 'no safety' regime in 2008 to the point where health, safety and wellbeing has been embraced as part of the core values and culture in the organisation.

To date, the main safety emphasis has been on installing technology, due to the high-risk nature of these projects. However, this had meant there was less of a focus on our non-technology suppliers meeting our health and safety standards. In response, the business organised working-at-height training this year for its two main Tier 1 commercial suppliers and their sub-contractors. This comprised both theory and practical courses, which included working at height to assemble advertising banners, fall arrest and rescue, secure rope lifeline use, radio frequency awareness and safe ladder use.

This training and associated certification will help our suppliers to work safely as Vodafone Ghana introduces 4G LTE services, which will require vendors to advertise our 4G network countrywide.

We continue to influence global suppliers at Group level and will continue to include high-risk supplier reviews as part of quarterly reporting. In addition, we plan to further investigate how to improve the speed and ease of supplier reporting using technology.

Performance

Monitoring and reporting on our safety performance is essential to ensure the safety of everyone working with us – our employees, contractors and suppliers and those suppliers' own employees and contractors. It also helps us to focus on and address the risks that are inherent to our industry.

We want our own teams, our suppliers, our stakeholders and others in our industry to learn from the performance data we share. In the case of fatalities, we set a wide boundary for our in-scope reporting. In contrast with many businesses, which only report employee fatalities on their own premises, we report fatalities involving any of our suppliers'

employees and contractors (across all tiers) and members of the public, regardless of whether these fatalities occur on Vodafone premises or at other locations such as on public roads. We investigate and report openly on our findings in the case of fatalities within our reporting boundary (see page 70), including instances where we conclude that our safety controls did not function as intended or that they could have been enhanced.



Fatalities

It is with deep regret that we report two fatalities during the past year. Both occurred under circumstances in which, after investigation, we concluded that our supplier controls were breached or were not operating effectively. Specifically:

- A contractor died in a vehicle-related incident in Egypt. His vehicle was in a collision with a heavy goods vehicle. The contractor was speeding at the time.
- A contractor died while trying to free a trapped fibre cable during a fibre-laying operation in Mozambique. The fibre was being run up electricity poles when it became caught in a tree. The contractor used a metal ladder to try to free the cable and was electrocuted.

We thoroughly investigated the causes of each fatal incident and defined actions to help prevent a recurrence of a similar incident. These investigations are overseen by the respective local market Chief Executive, who is responsible for ensuring that the causes of the incident are widely understood and that any necessary corrective actions are implemented. We also share the lessons learned from each fatality across the relevant Group functions. These discussions take place at the most senior levels and at Group-wide safety conferences, held six times a year.

High-potential incidents (HPIs)

We track and investigate HPIs – incidents that do not necessarily result in injury but have the potential to do significant harm. We investigate each HPI as an indicator of the potential for a more serious accident. We seek to identify the

root cause and take suitable corrective action, where necessary. An investigation is undertaken into an HPI at a scale proportionate to the indicative level of risk.

During the year we recorded 999 HPIs, of which 146 involved employees, 174 involved suppliers' employees or contractors, 13 involved members of the public and 666 were infrastructure related.

Lost-time incidents (LTIs)

LTI is the term we use when a Vodafone employee is injured while carrying out a work-related task and is consequently unable to perform his or her regular duties for a complete shift or period of time after the incident. We do not track LTIs for our suppliers' employees and contractors.

In recent years, we have stepped up our efforts to capture and analyse all incidents

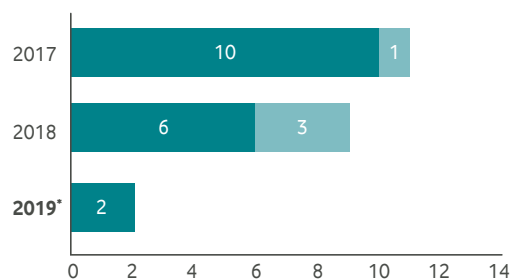
of potential or actual harm to our employees. Greater compliance with mandatory rules on LTI reporting enables us to identify emerging trends in operating risks, increasing our scope to intervene and put the necessary controls in place. This year, our overall reported LTI rate remained at 0.62 per 1,000 employees.

Lost-time incidents (employees only)

	2017	2018	2019*
Number of lost-time incidents	86	64	64
Lost-time incident rate per 1,000 employees	0.81	0.62	0.62

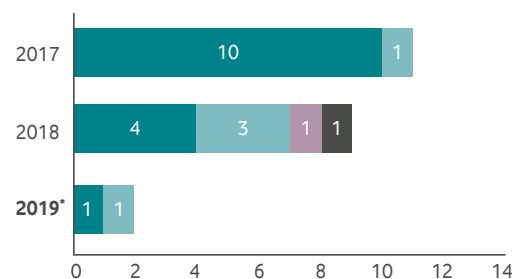
* Data includes LTIs from India up until 1 September 2018.

Total recordable fatalities



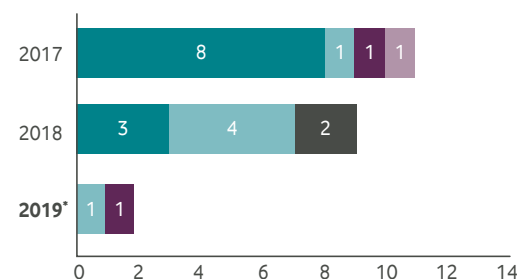
■ Suppliers' employees/contractors
■ Members of the public

Recordable fatalities by cause



■ Vehicle accident
■ Electrocution
■ Falling object
■ Criminal activity

Recordable fatalities by country



■ India
■ Vodacom**
■ Egypt
■ Turkey
■ Ghana

* There are three fatal incidents which include a number of fatalities that are still under investigation and cannot be included in our figures until the investigations are complete; a fatal incident in Italy from FY 2017/18 that happened on 29 March 2018 is still under investigation by national authorities; a fatal incident in Turkey on 18 April 2018 is currently under investigation by national authorities; and a fatal incident in Turkey on 5 October 2018 is currently under investigation by national authorities. Data includes fatalities from India up until 1 September 2018.

** Vodacom markets include South Africa, the Democratic Republic of Congo, Lesotho, Mozambique and Tanzania.

Human rights

Respect for human rights, together with established processes to reduce the risk of human rights abuses, is critical to our long-term success. Vodafone's Code of Conduct is very clear about our expectations and responsibilities regarding human rights.

We recognise our responsibility to respect the rights and freedoms of every individual who works for us, either as an employee or through our supply chain, and of the communities close to our operations. We adhere to our responsibility to respect human rights as set out in the International Bill of Human Rights and the eight International Labour Organization fundamental conventions on which the United Nations Guiding Principles on Business and Human Rights are based.

Our approach to managing human rights issues

We have identified the most salient human rights risks that matter the most for Vodafone's operations and supply chains. We have established policies, governance and due diligence processes to avoid, reduce and mitigate these risks. These processes and policies, along with details on our governance model on human rights issues, are summarised on our website.



Further details on our human rights due diligence process and overall approach can be found online at www.vodafone.com/humanrights

Our most salient human rights risks

Privacy and freedom of expression

Our most salient human rights risks relate to the individual's right to privacy and freedom of expression. Our *Digital Rights and Freedoms Reporting Centre* contains information related to the protection of our customers' private communications and our views, policies and approach regarding:

- Law Enforcement Disclosure;
- Customer Privacy;
- Respecting the Digital Rights of the Child;
- Freedom of Expression and Network Censorship; and
- our Legal Annexe, which gives an overview of the relevant legal powers in place in our markets of operation.

In 2017, we joined the Global Network Initiative (GNI) as a Board member. The GNI is a multi-stakeholder forum created to address the complex challenge of protecting digital rights globally. Joining the GNI strengthened and broadened our commitment to digital rights and followed our founding role in the Telecommunications Industry Dialogue on Freedom of Expression and Privacy.

The GNI brings together information and communications technology companies, civil society groups (including human rights and media freedom groups), academics and investors with a shared commitment to promote and advance freedom of expression and privacy worldwide.

The Ranking Digital Rights Corporate Accountability Index ranks Vodafone annually on its public disclosure on its policies and its

practice on freedom of expression and privacy. In 2018, Vodafone Group received the top score in the telecommunications sector.

We are also actively engaged in the dialogue on emerging technologies and their potential impact on human rights. As artificial intelligence (AI) grows in usage and impact across geographies and industries, Vodafone has a responsibility to consider how our use of this technology affects our customers, our employees and wider society. We will shortly publish our Vodafone AI Framework, which outlines our approach to protecting consumers from discrimination and taking an ethical approach to artificial intelligence. We will indicate when customers are interacting directly with artificial intelligence. Our framework also includes how we extend our standards to third parties developing AI systems in collaboration and on behalf of Vodafone.

GNI assessment

As part of our membership of the GNI, we must commit to implement the GNI Principles, putting concrete measures in place to protect and advance freedom of expression and the right to privacy. All GNI companies undergo an independent assessment of their implementation of the Principles every two years, to demonstrate their efforts in practice.

We started preparations for our first independent assessment in August 2018 by setting up a team of senior level experts from across the business and across our operating markets to participate in the required interviews, evidence collection and report

writing. We continued this work until the March 2019 Board review meeting, working together with our independent assessor, who reviewed our processes, policies and the governance model that we use to safeguard our user's rights to freedom of expression and right to privacy, to ensure all relevant areas were covered.

Vodafone completed its first formal GNI assessment in March 2019, during which the Board reviewed a detailed report on Vodafone and determined that we are making good faith efforts to implement the GNI Principles with improvement over time.

We will issue a public report on any related recommendations in early 2020, following the release of the formal GNI report on the 2019 assessments.




For more information on the GNI company assessments visit www.globalnetworkinitiative.org/company-assessments.

Human rights risks in our supply chain

Vodafone has developed and implemented policies and processes to extend our human rights commitments into our supply chain, as specified in our [Code of Ethical Purchasing](#). The Code sets out the standards we expect our suppliers to meet on health and safety, labour (including child or forced labour) rights, ethics and environmental protection.

Highlights in our supply chain activities to mitigate human rights risks during the year:

- we launched a common industry supplier academy to build capability;
- we joined new multi-stakeholder coalition Tech Against Trafficking (TAT), which is focused on modern slavery issues; and
- we conducted an investigation into a modern slavery grievance.

 Read more on our approach to supply chain integrity on page 37.

Working with others to tackle modern slavery

Forced, bonded or compulsory labour, human trafficking and other kinds of slavery and servitude represent some of the gravest forms of human rights abuse in any society. We remain committed to taking appropriate steps to ensure that everyone who works for Vodafone – in any capacity, anywhere in the world – benefits from a working environment in which their fundamental rights and freedoms are respected. The following provides some examples of how we have engaged on this issue during the year.

i. Business Against Slavery Forum: UK Home Office

During the year, Vodafone's Human Rights team engaged with other companies on the issue of modern slavery through its participation in the Home Office's Business Against Slavery Forum working group. This group was established as a partnership between government and business to accelerate progress in the fight against modern slavery and to create and facilitate the sharing of best practice. Vodafone continues to be actively involved in this working group in 2019.

In October 2018, Vodafone provided input into the independent review of the Modern Slavery Act 2015, chaired by Baroness Young. The roundtable discussion gathered the views and expertise of the private sector on the operation and effectiveness of, and potential improvements to, provisions in the Modern Slavery Act. Vodafone is also a member of the Transparency in Supply Chains Advisory Group, which supports the Government's modern slavery agenda and is one of six groups that feed into the Home Office's Modern Slavery Strategy and Implementation Group. Vodafone UK's CEO, Nick Jeffery, is also a member of the UK Home Office's Business Against Slavery CEO Forum, which facilitates senior-level private sector engagement on the implementation of the Modern Slavery Act in large FTSE companies.


ii. Tech Against Trafficking (TAT)

This year, Vodafone became a member of the [Tech Against Trafficking \(TAT\)](#) initiative. Hosted by Business for Social Responsibility (BSR), TAT is a coalition of technology companies collaborating with global experts to help eradicate human trafficking using technology.

TAT's goal is to work with civil society, law enforcement, academia and survivors to identify and create technology solutions that disrupt and reduce human trafficking, prevent and identify crimes, and provide remedy mechanisms for victims and support survivors through innovation, collaboration, guidance and shared resources.

iii. Joint Money Laundering Intelligence Taskforce (JMLIT)

The JMLIT has been developed in partnership with the UK government, law enforcement agencies and more than 40 major UK and international banks under the leadership of the [Financial Sector Forum](#). Vodafone shared its approach to modern slavery and the company's e-learning training module at the JMLIT Expert Working Group on Human Trafficking and Organised Crime.

 Further details on our approach and policies relating to modern slavery can be found in our [Slavery and Human Trafficking Statement](#).

Employee reporting

Everyone who works for or on behalf of Vodafone must report any behaviour at work that may be unlawful or criminal or could amount to an abuse of our policies, systems or processes and therefore a breach of our Code of Conduct. Employees are encouraged to use our *Speak Up* process to report a wide range of unlawful and unethical activities, including bribery, fraud, price-fixing, suspected abuses of human rights, privacy breaches, safety risks, bullying, harassment, conflicts of interest and the potential for serious harm to the environment.

Employees can report suspected breaches in three ways:

- via their line manager;
- via the local human resources team; or
- via a confidential external hotline in their own language, by phone or online.

Our Group Risk and Compliance Committee reviews reports about the effectiveness of the *Speak Up* process and benchmarks it against those used by other multinationals. You can read more about *Speak Up* on page 50.



Anti-bribery and corruption

Our anti-bribery policy

Vodafone does not tolerate bribery or corruption in any form. Our policy is summarised in our [Code of Conduct](#). It states that employees or others working on our behalf must never offer or accept any kind of bribe. Our anti-bribery policy is consistent with the UK Bribery Act and the US Foreign Corrupt Practices Act and any breaches can lead to dismissal or termination of contract.

The policy provides guidance about what constitutes a bribe and prohibits the giving or receiving of any excessive or improper gifts and hospitality. It also makes clear that where our policy differs in degree from an equivalent local law, we must follow the more stringent of the two.

Governance and risk assessment

Our Group Chief Executive and Group Executive Committee (ExCo) oversee Vodafone's work to prevent bribery and corruption. They are supported by local market Chief Executives, who are responsible for ensuring that our anti-bribery programme is implemented effectively in their local market. Local specialists and a dedicated Group team that is solely focused on anti-bribery policy and compliance support them in turn.

As part of our anti-bribery programme, every Vodafone business must adhere to minimum global standards, which include:

- ensuring there is a due diligence process for suppliers and business partners at the start of the business relationship;
- completion of the global e-learning training for all employees, as well as tailored classroom training for higher-risk teams; and

- using Vodafone's global online gift and hospitality registration platform, as well as ensuring there is a process for approving local sponsorships and charitable contributions.

In addition, facilitation payments are strictly prohibited by our policy. Employees are provided with practical guidance on how to respond to demands for facilitation payments. The only exception is when an employee's personal safety is at risk. In such circumstances, when a payment is made under duress, the incident must be reported to the local compliance team as soon as possible afterwards.

Local markets regularly monitor implementation of the anti-bribery policy as part of the annual Group Policy Compliance Review assurance process, which reviews key anti-bribery controls. In addition, rotating reviews in local markets enable us to assess the implementation of the anti-bribery programme on the ground in more detail. This year, reviews were conducted in Turkey and Hungary. The Group Policy Compliance Review also included a desktop review in all local markets. The overall findings demonstrated good implementation of key controls and processes. Areas for improvement related to supplier management and monitoring, and these are being addressed.

Vodafone's Risk and Compliance Committee assists the Group ExCo to fulfil its accountabilities with regard to risk management and policy compliance. The anti-bribery programme was one of the compliance programmes reviewed by the Risk and Compliance Committee during the year. The output of the Risk and Compliance Committee meeting is reported to the Group ExCo. The key actions are documented for the

programme for the coming year in the bribery risk 'line of sight' report, which is updated regularly by our General Counsel.

The table overleaf summarises the principal risk categories and the mitigation measures we take for each.

Vodafone does not tolerate bribery or corruption in any form.



Risk**Response****High-risk markets**

We operate in a number of countries where there is a heightened risk of bribery and corruption.

We undertake biennial risk assessments in each of our local operating companies and at Group level so we can understand and limit our exposure to risk. The principal risk categories are included below.

Business acquisition and integration

When we acquire or merge with another entity, we risk inheriting its potential bribery and corruption risks. These may persist if we do not identify and promptly address them.

Our due diligence process before any decisions to acquire, or merge with, another entity takes into account its current and past anti-bribery and corruption processes and performance. Red flags identified during the due diligence are reviewed and assessed. Following any acquisition, we implement our anti-bribery programme.

Spectrum licensing

Communications operators require access to sufficient radio spectrum to deliver mobile and some fixed-line services. Spectrum is a limited sovereign resource and therefore valuable. Whenever governments allocate spectrum to operators there is a risk of bribery.

We encourage governments and regulators to release spectrum to the market through competitive, transparent and well-managed auctions. A specialist policy team oversees our participation in all negotiations and auctions to reduce the risk of attempted bribery. We provide appropriate training and guidance for employees who interact with government officials on spectrum matters. We have also published our '[Spectrum policy in emerging markets](#)' report, which provides further support for employees in these markets.

Building and upgrading networks

Communications networks are infrastructure intensive. They require access to, and leasehold arrangements on, both public and private land. We currently have more than 164,000 mobile base-station sites across multiple countries, and ensuring we can maintain and upgrade them requires constant engagement with landowners, community leaders and municipal authorities. This engagement must be undertaken in compliance with our anti-bribery policy.

Our anti-bribery policy makes it clear that we never offer any form of inducement to secure a permit, lease or access to a site. We regularly remind all employees and contractors in network roles of this prohibition, through tailored training sessions and communications.

Working with third parties

Our supply chain is complex, involving more than 10,800 vendors, contractors and sub-contractors. As a result, there is a risk of improper conduct when third-party services are procured and delivered, particularly in countries where corruption is endemic.

Everyone who works for or on behalf of Vodafone, including suppliers and other relevant third parties, must comply with the business principles set out in our [Code of Conduct](#) and [Code of Ethical Purchasing](#). Select high-risk third parties are trained to ensure awareness of our zero-tolerance policy. We screen our potential suppliers for anti-bribery compliance and ensure they understand our anti-bribery policy. We regularly remind current suppliers of our policy requirements and complete detailed compliance assessments across a sample of higher-value and higher-risk suppliers.

Winning and retaining business

Vodafone Business accounts for around 30% of our global revenues. We serve some of the world's largest companies and public sector organisations. Competitive tenders are how Vodafone Business contracts are appointed and there is a risk that improper inducements may be sought or offered by either party. Vodafone also partners with local operators across the world, with alliances with 28 partners in over 41 countries.

In addition to the mandatory anti-bribery and corruption training completed by all Vodafone employees, we provide mandatory targeted training for our Vodafone Business and Partner Markets sales teams and other employees in higher-risk roles. In addition, we also maintain and monitor a global register of gifts and hospitality to ensure that inappropriate offers are neither accepted nor extended by our employees.

Engaging employees to raise awareness of bribery risk

Every Vodafone employee has an obligation to help us address the risk of bribery and corruption. To ensure our employees understand how they can each play a part, we run a high-profile communications programme, *Doing What's Right*. This uses a range of materials to highlight some of the most common compliance challenges facing employees, including handling personal data, accepting gifts and conflicts of interests. The global campaign makes use of multiple communication channels to engage with employees and raise awareness and understanding of the policy, including digital news articles, games and quizzes.

The *Doing What's Right* programme also features e-learning training, which includes a specific anti-bribery module and uses gamification to enhance the learning experience. To date, over 90% of active employees around the world have completed the e-learning training¹. In addition, for higher-risk employees, such as those working in procurement, network operations, Vodafone Business sales and government relations, tailored face-to-face training programmes are used to cover relevant scenarios.

Training in our Code of Conduct is incorporated into our standard induction processes for new recruits and all employees complete refresher training every two to three years.

Speak Up

All Vodafone employees are encouraged to report any suspected breaches of our Code of Conduct as soon as possible. We call our process for this *Speak Up*, and we make it as easy to use as we can for any kind of employee concern.

In most instances, employees feel comfortable about raising concerns with a line manager or human resources colleague. However, they can also use a confidential third-party hotline, accessible in their local language online or by telephone. *Speak Up* operates under a non-retaliatory policy, meaning that everyone who raises a concern in good faith is treated fairly, with no negative consequences for their employment with Vodafone, regardless of the outcome of any subsequent investigation.

Senior executives review every *Speak Up* report and the Group Risk and Compliance Committee reviews the whole programme. This year, 738 separate concerns were reported using *Speak Up* on a wide range of issues (though only a very small fraction were related to bribery and corruption). In our latest Global People Survey, 84% of respondents said they would use *Speak Up* to report unethical behaviour of any kind.

Engaging suppliers and third parties

Through their contracts with us, our suppliers, partners and other third parties make a commitment to implement and maintain proportionate and effective anti-bribery compliance measures. Every year, we review the anti-bribery controls put in place by a sample of suppliers. We do this in collaboration with them to ensure they understand what we expect, and to enable us to share best practice with them. This also gives us the opportunity to learn from our suppliers' experiences in this area.

If our review highlights inadequacies, and assuming there is no immediate risk of improper conduct, we support the supplier involved to improve their practices and to ensure that these inadequacies are corrected appropriately.

Engaging civil society

We want to play our part in tackling bribery and corruption along with other stakeholders who share our concerns and standards. We play an active role in the [Transparency International Business Integrity Forum](#) and the [Institute of Business Ethics](#).

Supporting a compliance culture in Lesotho

In October 2018, Vodacom Lesotho held its first Annual Compliance Forum, with the objective to create a platform for sharing experiences on compliance issues such as anti-bribery, anti-corruption, anti-money laundering and ethical leadership. Attendees at the Forum included representatives from the government (including the Minister of Communications), other businesses, the Central Bank of

Lesotho, non-governmental organisations and local media.

To demonstrate the importance of the topic for Vodacom Lesotho, members of our local executive committee participated in a number of different panel discussions during the day including sharing our approach to mitigate risks associated with bribery, privacy and money laundering.



Our approach to political engagement

At Vodafone, everyone who works for and with us must follow rules designed to reduce the risk of improper behaviour and the perception of such behaviour (even when this has not actually occurred) in dealings with politicians, civil servants, regulators, advisors and others involved regarding policy or government operations.

Vodafone's [Code of Conduct](#) has specific rules regarding gifts, hospitality and sponsorship involving politicians and government officials and states that no political donations can be made. It also clearly states that Vodafone may not intervene in party political matters. We review relationships with government officials in our supplier on-boarding due diligence processes. We also provide specific anti-bribery and corruption training to employees whose roles involve interacting with policymakers and advisors.

Everyone must also abide by the rules governing political activity conducted in a personal capacity, as articulated in our Code of Conduct. Employees cannot use any Vodafone resources – from communications services and meeting rooms to their own working time – to provide support for any political campaign, political party, political candidate or any affiliated organisation.

Why and how we engage politically

Interactions with ministers, opposition politicians, elected representatives, civil servants and independent statutory bodies, such as regulators and political or sector specialist advisors, are an essential part of managing our businesses around the world. Our discussions may include:

- the operating challenges that arise from obligations specified under the telecommunications licences awarded by governments, which we must operate lawfully;
- proposed legislation or new or amended regulations that would affect how we operate or would have an effect on our customers' experience;
- spectrum matters;
- provision of communications services by Vodafone as a major supplier to government bodies and other public sector customers;
- security matters, particularly those focused on Vodafone's role as an operator of critical national infrastructure;
- privacy and data protection matters (discussed in detail in our [Digital Rights and Freedoms Reporting Centre](#));
- online child protection and the digital rights of the child (referred to in detail in our [Digital Rights and Freedoms Reporting Centre](#));
- financial inclusion and mobile money services such as the M-Pesa service; and
- industrial policy and the growth of the IoT, including the development of intelligent networking across a wide variety of devices, services and processes in the home and workplace.

While we do use external political consultancies for internal advisory support and back-office activity such as monitoring of parliamentary debates, wherever possible, our strong preference is to ensure that Vodafone is represented in public policy and political

meetings by senior individuals from within our businesses.

When our interests are represented by a third party in a public policy or political meeting with no Vodafone executive present, the third party must comply with internal political engagement processes and approval mechanisms. We also maintain an internal register of any external parties who engage in policy discussions on our behalf.

Offers of hospitality for government representatives

When appropriate, we may invite government representatives to business meals or a hospitality event. We apply internal governance rules to invitations of this kind and those rules in our global Code of Conduct are strictly enforced.

Where a regulatory decision relating specifically to our business is under consideration or imminent, we expressly prohibit gifts and hospitality of any kind to any parties involved in making that decision. We also stipulate that every gift or offer of hospitality for a government representative, or sponsorship with government over the value of €100, must be approved (prior to acceptance) by our Group External Affairs Director, who is a member of the Vodafone Group ExCo.

Engaging with the EU institutional stakeholders

We actively engage with all EU institutions on the future of the digital economy in Europe, including the Digital Single Market. As a company with significant businesses in 12 EU Member States, we believe we have the expertise and experience to comment on policy initiatives intended to drive economic growth

and create better-quality services for customers across Europe.

This year Vodafone engaged with EU institutions on the main issues relating to the Digital Single Market, in particular when it comes to infrastructure regulation, platform regulation, cyber security and privacy. Examples include the following legislative proposals:

- the European Electronic Communications Code, finalised in summer 2018, which provides the regulatory framework for all electronic communications networks and services across the EU;
- the ePrivacy Regulation, which is still under negotiation and covers confidentiality of communications;
- the Platform-to-Business Regulation, concluded in early 2019, which strengthens the fairness and transparency obligations of platforms; and
- the Cybersecurity Act, which creates a new EU-wide cyber security certification framework.

The Brexit negotiations were also a topic of engagement for Vodafone in Brussels. We disclose these political activities and related expenditure, as mandated, through the [EU Transparency Register](#).

Political engagement in Africa, Middle East and Asia-Pacific (AMAP)

During the year, in Vodafone's AMAP region, Vodafone engaged with governments and regulators on a number of topics, including national ICT strategies, communications legislation consultations, spectrum policy, data, security, net neutrality, payments, SIM registration and consumer issues. This was mainly done through policy, legislative and regulatory consultation and decision-making processes conducted by such authorities in accordance with the applicable law. Examples of engagement during the year included:

- supporting regulatory approvals for the merger between Vodafone India and Idea Cellular in August 2018, and Vodafone Idea rights issue in April 2019;
- the new National Digital Communications Policy issued by the Indian government in September 2018;
- the Electronic Communications Amendment Act Bill and ministerial policy directions on the wholesale open access network and high-demand spectrum assignment in South Africa;
- a priority markets review and data pricing inquiry by South Africa's communications and competition regulators respectively;
- radio spectrum auctions in Tanzania (July 2018) and Mozambique (October 2018);
- Mozambique 2G and 3G service licence renewals in July 2018;
- the Communications Bill and 4G licence application in the Democratic Republic of Congo;

- a parliamentary inquiry on telecoms and draft national broadband strategy in Kenya;
- the Vision 2030 ICT strategy in Egypt;
- a regulatory application for the merger of Vodafone Hutchinson and TPG, and a 5G auction in Australia; and
- new communications legislation in New Zealand.

Hiring former public servants

Vodafone recognises that potential (or perceived potential) conflicts of interest can arise when Vodafone or its subsidiaries hire people whose most recent prior employment was in a government or other public sector role. The potential for a perceived or actual conflict of interest is particularly acute if the individual is employed subsequently by Vodafone to work on projects that are directly relevant to their previous role.

We believe that every individual should be free to apply their skills – and choose who they work for – as they see fit. However, we also believe it is important to have rules in place to ensure that former government or other public sector employees do not have undue influence over, or inappropriate levels of access to, their former colleagues on relevant issues.

Our [Revolving Doors Statement](#) provides a mandatory global approach that prohibits former government or other public sector employees from working on projects for Vodafone that are relevant to their former role, from engaging directly with any former colleagues, or from interacting directly with departments or other bodies with which they worked in their previous role. This formal 'cooling-off' period lasts a minimum of six months or for the duration of any local market government or public sector 'purdah' rules, whichever is the longer, and applies to all employees at all levels.



¹ This rate excludes employees in Germany due to local works councils restrictions.

Privacy and cyber security

Vodafone has strict governance processes and controls in place to protect our customers' personal data, respect their privacy and proactively manage the cyber security risks that face businesses today.

Our commitment to privacy and security is a vital part of our responsibility to our customers and is central to our [Code of Conduct](#) that everyone who works for us and on our behalf must follow.

This chapter contains information on our privacy and cyber security programmes and the policies that govern how we collect, use, manage and protect our customers' personal data.

Privacy

We believe that everyone has a right to privacy, wherever they live in the world. That is why Vodafone applies a global approach to managing privacy.

We know that respecting our customers' privacy is essential to maintaining their trust in our business. Managing privacy risks effectively – and putting customers in control of their data – is core to our approach. Our privacy programme governs how we collect, use and manage our customers' personal data to make sure we respect the confidentiality of their communications and any choices that they have made regarding the use of their data.

Privacy policies

Two privacy policies underpin Vodafone's programme and approach and help to make sure we address specific areas of high privacy risk. The Group ExCo oversees the implementation of these policies.

1. Privacy Management Policy

This policy sets out the resources and privacy risk control processes that must be in place in each of our local markets to ensure compliance with applicable local data protection and privacy laws and with Vodafone's privacy programme.

2. Law Enforcement Assistance Policy

This policy addresses the balance between our customers' right to privacy and freedom of expression and the statutory requirements

to provide law enforcement assistance to government agencies and authorities, through either lawful interception or retention of communications data.

Our [Digital Rights and Freedoms Reporting Centre](#) contains additional information related to the protection of our customers' privacy, in our privacy disclosure, and the actions of government agencies and authorities to ensure public safety, in our law enforcement disclosures.

A globally consistent approach to privacy

Vodafone's privacy programme applies a global, high standard to managing privacy challenges irrespective of whether there are local data protection or privacy laws.

Managed across Vodafone markets both inside and outside the European Economic Area, Vodafone's privacy management policy is based on the European Union General Data Protection Regulation.

Vodafone's privacy management policy sets a framework within which local data protection and privacy laws are respected, and sets a baseline for those markets where there are no such specific legal requirements.

Our privacy programme is underpinned by 10 privacy 'commandments' that go beyond legal compliance and drive how we develop and operate our products and services in a way that respects our customers' privacy and the trust they place in us:



Design for privacy

Incorporate privacy and security into the design of products and services, and manage risks.



Manage data carefully

Maintain data quality, delete unnecessary or outdated data and do not take unnecessary copies.



Collect relevant data

Only collect and process data that is necessary and relevant for the purposes for which it was collected.



Respect individual rights

Design products to allow individuals to exercise their right to access, request deletion and portability.



Protect confidentiality

Protect confidentiality of communications and sensitive personal information.



No unauthorised disclosures

Do not disclose personal data to unauthorised bodies and make sure suppliers comply with Vodafone's privacy and security requirements.



Provide a privacy notice

Provide a clear, transparent and understandable privacy notice.



Secure data

Apply technical and organisational controls against unauthorised access, use, disclosure or loss.



Provide choices

Obtain and manage necessary permissions when using the content of communications, traffic data, location data and marketing and analytics.



Protect children's privacy

Protect children's data and, where necessary, acquire parental consents.



Outlining our approach to privacy:

Our privacy approach is governed by an unwavering respect for an individual's right to privacy. From ownership and oversight by senior management to robust assurance, elements include:

Accountability

A member of the Group ExCo oversees Vodafone's privacy programme. A global privacy officer, ultimately reporting to ExCo, manages the programme at Group level. At a local level, accountability for the implementation of the privacy programme sits with the local operating company. Each market has a local ExCo-level owner and a privacy officer tasked with implementing the programme locally, with a dotted line to the global privacy officer.

Group and local operating companies each have a privacy steering committee that brings together privacy and security teams, and a senior person from each of the relevant business departments (e.g. commercial, technology, HR and finance). Detailed key performance indicators are reported regularly to senior management.

Assurance

Each Vodafone entity has numerous systems for processing personal data and all high-risk processes are subject to regular testing. New products, services and operations undergo privacy by design and assurance processes to make sure that possible privacy risks are

identified and mitigated. Detailed personal data processing registers and data-retention practices are maintained and updated continuously. Our supplier compliance processes mean we only appoint suppliers that meet our privacy standards.

Transparency

Our privacy notices provide straightforward, easy to understand and relevant information to our employees and customers. Our permission management platforms enable our customers to control how Vodafone uses their data. We also publish extensive information about our approach to managing governments requests for access to customer data.

Human-centred decision making

Big data analytics use cases are subject to privacy and ethics reviews to identify and mitigate possible privacy or data ethics challenges. Data scientists sign up to our Code of Ethics for Analysts before they are given access to our analytics platform. When we are required to balance the right to privacy against other obligations in support of a free and secure society, we work to minimise privacy impacts.

Engagement

We actively engage with stakeholders, including civil society, academic institutions, industry and government, in order to share our expertise and best practices with others, to contribute to the discussions that shape public policy and to learn from others.

Cyber security

Using a combination of fixed, mobile and cloud and hosting services, we provide high-quality, reliable and secure networks that are relied on by our customers around the world. Our approach to cyber and information security makes sure our processes, procedures, programmes and people safeguard the security and privacy of our customers' information across Vodafone. Our security controls are layered and integrated by design.

Risk management is central to our approach and is fundamental to maintaining the security of our services across every aspect of our business. To help us identify and manage emerging risks, we assess our business strategy, new technologies, government policies and regulation and cyber threats. We conduct regular reviews of the most significant security risks affecting our business and develop strategies to detect, prevent and respond to them.

Building on best practise from a range of expert organisations and initiatives from around the world, our cyber security policies and programmes are applied across our entire telecoms network and IT systems. Against these policies and programmes the principles of the ISO 27001 standard are applied, to which our core data centres and networks are certified.

Our security systems and processes are continually updated and monitored to prevent, detect, deter and respond to cyber threats. We invest in our technologies and embed security into all of our products and services from the outset. We test our mobile network security controls with an independent third party to make sure they are effective.

We also run global awareness campaigns. In 2019, we launched the Vodafone Cyber Code (see page 55), which has been designed to simplify and explain the basic security controls to all employees. Embedded in our [Code of Conduct](#), the Cyber Code is the cornerstone of how we expect all employees to behave when it comes to best practice in cyber security.

Our vision is a secure digital future for our customers, which is why we employ people with specialised cyber security expertise around the world. This vision drives a focus on protecting our services, products, systems and data via a single and integrated cyber security programme, in order to maintain the security of our customers' privacy and personal information.

Cyber security policies

Vodafone's approach to cyber security is underpinned by a portfolio of policy principles that include the following.

- **Doing what is right** when using Vodafone information and equipment in order to protect ourselves, our company and, most importantly, our customers.
- Making sure that we, and anyone we manage, **only have access to the information and assets we require** in order to perform our roles.
- **Securing our information and systems** at least as strongly in the cloud as we do on-premise.
- **Reporting any suspected malicious or unauthorised activity** through local or Group security teams so this can be managed and remediated.

- **Considering the content of all information** we handle, labelling the information with the correct classification and applying protection according to the classification level.
- Making sure that **anyone physically accessing our property is authorised** to do so.
- **Considering and integrating security into all new/updated projects**, processes or technology with which we are involved.
- **Being aware of** any risks to the information and systems we use, and working in a way that minimises this risk.
- **Holding our suppliers to the same policies** for protecting Vodafone information as the ones to which we hold ourselves. Making sure we work with technology and security teams to identify the requirements that apply to each supplier.
- Implementing strong general security practices to:
 - **capture and monitor activity logs** to identify malicious or unauthorised behaviour;
 - **apply patches** to remediate vulnerabilities and keep software up to date;
 - **configure systems** in a way that reduces security risks, e.g. by carrying out hardening or installing anti-malware tools; and
 - **secure the connections** between systems, both internally and externally, to protect communications from unauthorised access or modification.

Elements of our cyber security approach:

Our cyber security approach focuses on minimising the risk of cyber incidents that affect our networks and services. We take a multi-layered approach to security to keep our employee and customer information safe. We implement controls that prevent attackers from gaining access through our perimeter, and also protect our internal network, applications and data with specific measures including encryption and restricting access. Our approach includes:

Defence

No organisation will ever be immune to cyber attacks. A key part of a strong cyber security programme is the ability to prevent the majority of attacks and quickly detect and respond to attacker activity. Vodafone faces threats similar to any large company that holds customer data. However, there are also specific threats that relate to the telecommunications industry and different geographic locations. We build our networks to defend against attack so our customers can trust that our networks are secure, fast and high quality. We also make sure we build diversity into our networks and services to avoid reliance on any one supplier.

Workforce user controls

We apply user controls to our whole workforce. This includes data loss prevention, anti-malware, endpoint protection and detection, building security and phishing protection. Our Cyber Code helps to drive the appropriate employee culture and highlights the behaviours they need to display in order to support our cyber security programme.

Network

Our focus has been to secure our existing 2G, 3G and 4G network and systems, and we independently test the security of our networks every year. With the launch of 5G taking place in Europe this year, we are working to deploy 5G securely by building on our 4G experience. With greater security by design features, 5G will offer a similar or better level of protection than equivalent features in 4G when it comes to protecting customers from interception, impersonation and location tracking.

Security by design

We apply our security policy, including technical and procedural standards, wherever we build and deploy new solutions (security by design). For secure IoT solutions, Vodafone has helped establish the [GSMA IoT Security Guidelines](#), and the accompanying [self-assessment scheme](#). Where we work with partners or third parties to build and deploy IoT solutions, we advocate the approach taken and co-developed between Vodafone and Consumers International, as seen in their publication of the [Consumer IoT Trust by Design Guidelines](#).

Engagement

We actively engage with stakeholders, including civil society, academic institutions, industry and government, in order to protect Vodafone, respond to cyber threats and work together to share best practice. Given our expertise and extensive experience, we also engage with a wide range of organisations to help improve the understanding of cyber security thinking and practice, and contribute to public policy, defence operations, technical standards, information sharing and analysis, risk assessment and governance.

Vodafone Cyber Code



Always use multi-factor authentication for remote systems that hold sensitive information.



Never allow unsupported end-of-life systems in Vodafone infrastructure, or release insecure products or services.



Always apply the latest security patches, close critical and high vulnerabilities and configure systems securely.



Never click on links or download without knowing who it is from. Report suspicious behaviour.



Always remove access when staff change roles or leave Vodafone. Secure privileged access and only use it for privileged tasks.



Never share or reuse your passwords. Longer is stronger.



Always classify, label and protect information you work with.

Mobiles, masts and health

The health and safety of our customers, the wider public, our employees and our contractors is an absolute priority for Vodafone.

Mobile devices use radio waves to send and receive calls and data from a network of base stations. These radio waves are a type of electromagnetic field (EMF). They occur naturally or are produced from man-made sources and are around us all the time. They are produced by any electrical appliance connecting to the mains power supply and switched on. Most experts agree that there is no evidence that mobile phones or base stations adversely affect human health when operated within international [science-based guideline compliance limits](#)¹.

Our vision

Vodafone's vision is to lead within the industry in responding to public concerns about mobile phones, masts and health, by demonstrating leading-edge practices and encouraging others to follow. Through our Group-wide risk management and compliance assessment and our local community engagement, together with coordinated regular best practice sharing through the year, we ensure that we deliver on our commitments.

International science-based guidelines

Our base stations and the mobile devices we supply to our customers operate according to the guidelines set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP), an independent advisory body that works in collaboration with the World

Health Organization (WHO). These guidelines are science based and include substantial safety margins. They are regularly reviewed and reflect decades of research.

In 2018, ICNIRP concluded a review of the EMF-related science published since its last exposure guidelines were produced (in 1998). In its draft, published for public consultation in July 2018, it makes recommendations to account for new types of exposure scenarios and improved scientific assessment accuracy. Based on the conclusions of many independent expert reviews, it remains the case that no health risk has been established for mobile devices or base stations that comply with ICNIRP guidelines. The review covers all the frequencies allocated to the delivery of new 5G services. The publication of the final ICNIRP guidelines following the public consultation is expected in 2019.

Vodafone complies with national regulations in all markets and will continue to do so across the range of new devices for 5G, new radio masts and small cells. Despite the current scientific consensus, we recognise that some people are concerned about mobiles, masts and health. We always endeavour to address their concerns openly and transparently through regular local community engagement and sharing the latest research on our website.

5G and EMF

With the development of 5G technology and its commercial launch during 2019, we have been working across the industry to ensure that new technology continues to be compliant with national regulations and international (ICNIRP) guidelines for EMF.

It is important to note that the frequencies proposed for 5G are covered by existing international and national RF-EMF exposure guidelines. These international guidelines are based on extensive reviews of published scientific research. They apply to 5G just as they do to existing 2G, 3G and 4G technologies and other radio frequencies such as radio and TV transmissions.

A number of national government health advisory bodies (in [Germany](#), [Finland](#), [Norway](#) and the [UK](#)) have reviewed the science relating to 5G and published statements. These state:

- ICNIRP guidelines apply up to 300 GHz, well beyond the maximum frequencies under discussion for 5G;
- electromagnetic fields from base stations will not rise significantly with the introduction of 5G. Overall exposure is expected to remain low in relation to the guidelines and so there are no consequences for public health; and
- as long as the levels set by ICNIRP are adhered to, the overall research shows that electromagnetic fields from mobile technology are not hazardous to human health.

One health authority, the [German Federal Office for Radiation Protection](#), has recommended that more research is needed into millimetre wave range.



Monitoring scientific research

We have a science-monitoring process and regularly review research conducted into mobiles, base stations and health. On our website and in our reports, we focus on research that is designed, carried out and reported independently by experts on behalf of a national or international health agency where all published results and conclusions are subjected to peer review. We publish links to many of those scientific research publications on the mobiles, masts and health section of our [Group website](#).

National, regional and international research programmes respond to the priorities set by the WHO, which does not undertake research itself. Ensuring that objective, well-funded research programmes are completed is essential to fully understand the potential risks. Consequently, we contribute funds indirectly, through national government research programmes, to some of these independent studies. This is to make sure that the methodology, outcomes, analysis and publications are objective.


Studies continue in this area including those prioritised by the WHO that monitor the health effects on children of their mobile use and any health effects from long-term use of mobiles.

Governance and compliance

Our Group EMF Leadership Team, chaired by the Group Director for Health, Safety and Wellbeing, determines our strategy on mobiles, masts and health and oversees compliance in our local markets. The team meets regularly and reported twice this year to the Vodafone Group Plc Board about developments in science, policy and compliance.

Every year, our Group EMF Manager conducts in-depth on-site compliance assessments in two local markets. This year, the visits were to Germany and Hungary. In Germany, the assessments showed that all our controls were implemented correctly. The visit demonstrated a well-established programme delivered across the relevant functions of Vodafone Germany and well supported at a senior level. In Hungary, the assessment showed that managers are generally risk conscious, routinely monitor key business areas and implement mitigation plans on a timely basis with effective oversight. There was one remedial action, which was to improve the procedures ensuring that only people who have been EMF trained are permitted to work on site.

This year, we developed and rolled out an e-learning course about mobiles, masts and health. It included a simple introduction to how mobiles work and provided information and tips for our people to use when talking with friends and family about mobiles, masts and health. This e-learning module is available via the Vodafone University platform to all employees and has been translated for use in Vodacom DRC, Vodacom Mozambique, Vodafone Portugal, Vodafone Greece and Vodafone Spain. Since launch, the training has been completed by over 500 employees and is also available to partner markets, joint ventures and tower company partners.

 **Our website provides in-depth information about mobiles, masts and health, including links to independent scientific research.**



1 International [guidelines](#) set by ICNIRP were incorporated into the [Council Recommendation](#) of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz).

Our people

We employ around 92,000 people and work with over 10,000 contractors globally. Our business performance and our customers' experience depend on our ability to attract, develop and retain talented individuals at all levels.

Our people are fundamental to every aspect of our Vodafone strategy and are committed to delivering a superior network performance and providing exceptional customer experience.

This chapter outlines our approach to supporting our employees through developing skills and capability, building a diverse and inclusive business, supporting wellbeing and managing change.

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Our people

We strive to create an open, diverse and inclusive environment in which all employees feel equally valued and understand that ethical conduct is critical to our business success.

We are very clear about the behaviours we expect from everyone who works for Vodafone. These are defined by our global policies and set out in our Business Principles and [Code of Conduct](#). They are also reinforced in *The Digital Vodafone Way*, the guidance we provide to all our employees on how they should behave in order to ensure Vodafone is admired and respected by our customers and by society as a whole. Speed, simplicity and trust remain our three core principles.

Employee statistics*

	2017	2018	2019
Average number of employees	92,200	91,980	92,005
Part-time employees	8,310	7,979	7,560
Total number of voluntary leavers	12,378	11,644	12,339
Total number of involuntary leavers	4,225	3,912	3,680
Newly hired employees	16,380	14,837	17,276
Average turnover rate (%)	18%	17%	17%

* 2017 and 2018 data has been restated to exclude employees from our joint ventures in the Netherlands and India, and Vodafone Qatar which was sold in March 2018.

Employee engagement

Every year, we run our online Global People Survey across our entire workforce to help us to assess our employees' concerns and aspirations. It is anonymous, confidential and conducted by a third-party provider. Our senior leadership team uses it to identify shortcomings highlighted by employees and to plan remedial action. Managers and their teams also discuss and implement changes based on the findings.

This year, 87% of our employees responded: a two percentage point decrease on the previous year. The 2019 survey demonstrated that 85% of employees who responded are proud to work for Vodafone. The overall Engagement Index score – demonstrating employees' desire to continue working with Vodafone and their inclination to recommend us as an employer – increased by one percentage point this year, to 80%.

Respondents were also asked for their views of their individual line managers. The resulting Manager Index score also remained high, at 82%, and 88% of employees said they felt they are treated with respect as an individual.

Vodafone's Global People Survey results (%)

	2018	2019*
Overall response rate	85	↑ 87
Employee Engagement Index	79	↑ 80
Manager Index	80	↑ 82
Engagement and values		
I am proud to work for Vodafone	83	↑ 85
Vodafone is socially responsible	83	↑ 85
Training		
I have opportunities to learn the skills and knowledge I need to do my job well	77	↑ 80
Diversity and inclusion		
People in my team are treated fairly regardless of their age, gender, disability, sexual orientation, cultural background or beliefs	85	↑ 90
People have an equal opportunity to succeed at Vodafone, regardless of their age, gender, disability, sexual orientation, cultural background or beliefs	78	↑ 82
I am treated with respect as an individual	85	↑ 88
I feel able to be myself at work	83	↑ 87
I am comfortable expressing my views and opinions at work	80	↑ 83
Health, safety and wellbeing		
The Absolute Rules for Health and safety are taken seriously at Vodafone	88	↑ 89
My manager takes genuine interest in the wellbeing of his/her employees	83	↑ 84

* The survey was conducted in October 2018.



Developing skills and capability

Our industry is evolving at great speed. New platforms and technologies are driving demand in artificial intelligence machine learning, cloud computing and data analytics. This means we need to look continuously at what critical skills our people need to have to ensure we have the organisational capability to succeed now, and that we are investing in developing the skills we will need in the future.

Last year, we launched a strategy to increase our information technology capabilities and rolled out programmes to ensure people adopt agile ways of working so we can respond much more quickly to the needs of our customers. Over the last year, 8,500 of our employees have completed training on the agile mindset and scrum methodology. There has also been an increased focus on building capabilities in data analytics (the ability to analyse and interpret large volumes of data), application program interfaces, coding, robotics and automation.

With our network being a core part of our strategy, we are also reviewing our capabilities in this area. For example, to support the rollout of 5G, we are reskilling our engineers in data, automation and coding to help Vodafone create the best platform to deliver 5G services.

Equipping our people with the right skills

Building our employees' skills through continuous development programmes is an essential component of driving business performance, and this year we invested more than €60 million in learning and development. Our programmes take many forms, from structured learning and formal training, to personal coaching and mentoring. During the year, we provided an average of 20 training hours for every employee, with 97,300 of our people over the year completing at least one course on Vodafone University, our global learning platform that allows our employees to access local and global learning content from any device.

Our employees welcome these programmes; in the 2019 Global People Survey, 80% of employees surveyed said that they benefited from opportunities to learn the skills they needed to do their jobs well.

Throughout this year, a core focus was developing digital skills across the organisation and leadership and management skills needed for agile and digital working. We also evolved our Vodafone University to enable recommendations for relevant courses based on identified skills and launched a programme with LinkedIn Learning, a content platform with over 10,000 pieces of new content.

Developing digital leaders

Clear, effective and flexible leadership is critical to our business success. All of our leaders, from the supervisor early in their career to the most senior global executive, are expected to serve as positive role models for their teams.

This year we identified the key shifts that leaders need to make in order to lead effectively in a digital environment. With this information, we refreshed our global leadership development programmes.

Our new *Digital Leadership Essentials* programme was completed by 83% of all new managers within their first 120 days. This programme enables new leaders to build their self-awareness and practise key techniques to build high-performing individuals and teams. Also this year, we launched an online programme in partnership with LinkedIn Learning to provide all our colleagues with access to leadership development. The programme emphasises the importance of influencing others, leading and working in teams, simplifying internal processes and ensuring that decisions and actions are taken with the customer in mind.

We invest in leaders of the future, and this year over 60 participants engaged in our refreshed *Inspire* programme. Participants from across the

world came together in locations throughout the Vodafone footprint, listening to industry experts and Vodafone leaders and working together to fine-tune their capabilities to become the senior leaders that Vodafone needs for the future.

Engaging our employees on our policies

Everyone who works with us makes a formal commitment to follow our Code of Conduct at all times. Our *Doing What's Right* training and communication programme is key to embedding in our daily work a shared understanding of the Code of Conduct across Vodafone. Throughout the year, *Doing What's Right* communications promoted different areas of our Code, from *Speak Up*, anti-bribery and privacy to competition law, security, and health and safety. *Doing What's Right* training is included in our standard induction processes for new employees, and current employees complete refresher training every two to three years.



Read more on our approach to increase the number of digital opportunities provided by Vodafone to young people on page 25.


Building a diverse and inclusive business

It is fundamental that our employees feel they belong. In our 2019 annual Global People Survey, 87% of our employees felt they were able to be themselves at work. Our employees should never be subject to discrimination and 90% of our employees said they felt treated fairly, regardless of age, gender, disability, sexual orientation, gender identity, cultural background or beliefs.

We expect those who work with us to conduct themselves with dignity and respect in their dealings with customers, co-workers, partners, suppliers, local communities and any other stakeholders affected by, or with an interest

in, Vodafone's activities. This expectation, mandated in our Code of Conduct, applies across all of our businesses, to our employees' interactions with all individuals regardless of gender, sexual orientation, gender identity, disability, race, age or any other factor.

In our aspiration to become the world's best employer for women by 2025, increasing the proportion of women in management and senior leadership roles is a core focus of our global diversity and inclusion programmes.

 **Read more about our goals and programmes to achieve our aspiration in the Women's empowerment section of this report.**

 **Also see our Gender Pay Gap Report online, produced for our UK businesses.**

Vodafone is committed to supporting LGBT+ people at work with:

LGBT+* inclusive messaging on job adverts and career channels

A global 'buddying' programme for LGBT+ graduates

A refreshed Code of Conduct which will support LGBT+ inclusivity

Graduate, induction and leadership training programmes to support, retain and help attract LGBT+ employees

Toolkit for managers to create an LGBT+ inclusive workplace

An interactive learning programme for all accreditation

Focusing on LGBT+ inclusion

We focus on creating an inclusive working environment for employees who identify as lesbian, gay, bisexual, transgender or other sexual orientation and gender identity categories (LGBT+). Our global executive sponsor for LGBT+, who is a member of our senior leadership team, provides leadership on LGBT+ inclusion and raises the profile of LGBT+ topics. A further 20 executive sponsors from the senior leadership team in local markets and at Group level support their area of business.

For the second year, Stonewall recognised Vodafone as a Top Global Employer. We also received additional recognition in the form of a Global Senior Champion Award in 2018. In the UK, Vodafone jumped 10 places from our previous year's ranking to reach position 32 in the Stonewall Top 100 Employers list this year, with the LGBT+ Friends Network also being highly commended.

Understanding our LGBT+ population

This year, for the first time, colleagues across Europe, New Zealand and South Africa had the option to provide their sexual orientation and gender identity as part of the annual Global People Survey. 1.3% of the population identified as lesbian or gay, 1.1% as bisexual and over 4% indicated that they would 'prefer not to say'. In addition, less than 1% of the population identified as transgender. We believe there is an opportunity for more work to be done so that our LGBT+ employees feel comfortable to identify themselves.

LGBT+ youth

This year we increased our focus on supporting the LGBT+ youth community. Vodafone commissioned research to survey more than 3,000 LGBT+ young people across 15 countries and multiple industries. The research found that more than half (58%) of young LGBT+ people are not open about their sexual orientation or gender identity at work because they worry they will face discrimination from managers and colleagues. It also found that one in three (31%) LGBT+ people admitted that they went 'back into the closet' when they started their first job. This figure rises to 41% among 18 to 25-year-olds.

To help create a culture where employees can be open about their sexual orientation and gender identity, Vodafone has launched a number of initiatives.

Vodafone has also shared the research it conducted with a number of FTSE 100 companies and our suppliers, and hosted roundtable discussions to encourage other employers to also take up these initiatives.

Our established global LGBT+ employee network, LGBT+ Friends, supports managers and employees and connects them with active networks in 14 countries.

During the year, we supported Pride events in 15 of our local markets. Our Group Chief Executive also hosted a global webinar and was joined by chief executives from 11 different markets. In addition, we participated in Spirit Day (which highlights challenges such as bullying for young LGBT+ people), holding events in nine countries.

*Lesbian, gay, bisexual, transgender and other identities

Increasing cultural understanding and awareness across countries

Vodafone is a multicultural company. We employ people from 131 different nationalities across 21 local markets, with members of our global senior leader team drawn from more than 28 different nationalities.

We encourage our managers to broaden their understanding of other cultures and believe they benefit professionally from assignments outside their home nation. 45% of our senior leaders have completed an international assignment at some point during their career with Vodafone.

Understanding our ethnically diverse population in the UK

This year we worked to understand more about the experiences of our colleagues from ethnic minorities, particularly in the UK. With the support of EMPower, Black and Asian colleagues participated in focus groups to build an understanding of their experiences and what further support is needed.

In addition, this year the annual Vodafone Global People Survey included ethnicity as a demographic, asking people to declare this on a voluntary basis. The survey found that of the 13,470 respondents from the UK (representing over 80% of the UK employee population), 11% were from Black or Asian ethnic groups, and a further 4% indicated they were from mixed or other ethnic demographics.

Multicultural network launch

In response to feedback from our ethnic minority community, this year we launched our Multicultural Inclusion Network at Vodafone UK and Group functions based in the UK to create an internal support group for managers and employees. Baroness McGregor Smith attended the launch event on 3 October 2018, and the network currently has over 450 members. An executive sponsor and a network chair have been appointed, along with leads for different locations across the UK.

Creating awareness about our disabled population

In order to improve the inclusivity of our approach, this year we created a digital 'disABILITY' site for all our employees, which provides guidelines, videos and toolkits to create awareness around this topic, increase the knowledge of our colleagues and give guidance on what they can do to create a more inclusive culture. We also conducted a review of our websites to increase the accessibility for our colleagues. Every year Vodafone features internal and external best practices on what markets are doing for colleagues, customers, communities or co-partners during a global webinar. Over 2,800 colleagues viewed last year's webinar, which featured personal stories from colleagues and showcased products that Vodafone has developed to support customers with disabilities.



Employee wellbeing

Helping our employees to stay safe, fit and healthy is a priority for us. It contributes to productivity, reduces absenteeism and creates an attractive working environment for all employees.

In 2016, we launched our wellbeing framework. The framework focuses on six key aspects of wellbeing and is designed to support the development and implementation of employee wellbeing activities in all of our markets.

The framework is a guideline to help us to achieve optimal wellbeing for all of our people, respecting cultures, available resources and

requirements. Market wellbeing teams develop initiatives tailored to local needs and share information and best practice through our Health, Safety and Wellbeing Network. Our global Health, Safety and Wellbeing objectives measure employee wellbeing. Year on year, our annual Global People Survey question 'My manager takes genuine interest in the wellbeing of his/her employees' achieves consistently high scores (84% in the most recent survey).

Our wellbeing framework



Supporting employees to thrive

In October 2018, we launched a new digital web and mobile wellbeing platform, *thrive*, for employees who work for Vodafone UK and UK-based Group employees. The UK launch was the first stage in the forthcoming rollout of the platform to all Vodafone markets. The mobile platform provides access to a number of health and wellness tools, along with information and resources for people working in more remote locations.

thrive is also available to our employees' family and friends, encouraging employees to engage more broadly to help motivate and support others to maintain a healthy lifestyle. *thrive* offers a wellbeing self-assessment to help people identify strengths and opportunities for improvement. People can then set goals and participate in challenges to help drive their progress.



Managing change and reorganisations

The pace of change in technology means that our industry is always evolving. Vodafone must continue to respond to the changing world to remain sustainable and take advantage of new opportunities and challenges.

Over the last year, there have been a number of organisational changes in both the global offices and local markets. Demand for services continues to grow exponentially, but this is not the case with prices, which means that Vodafone has had to respond to continue to compete in all segments within our markets. In addition, our customers demand an agile, simple and instant relationship with us, which means that we need a simpler organisational model that strengthens coordination and synergies between teams. We will continue to invest in strengthening our business model to protect our capacity to invest and design a more competitive organisation.

When we need to reorganise part of our business, we engage with employees directly to discuss the implications of the planned reorganisation and the options available to those individuals potentially affected by it. Proposed changes are communicated clearly in team briefings and (when appropriate) one-to-one meetings led by line managers and human resources teams. Our managers and human resources partners work closely with teams to support them through the change and answer any questions employees might have.

Where proposed changes result in redundancies, we aim to help affected employees find new jobs, either by identifying other opportunities within Vodafone that suit their skill set, where appropriate, or through outplacement services

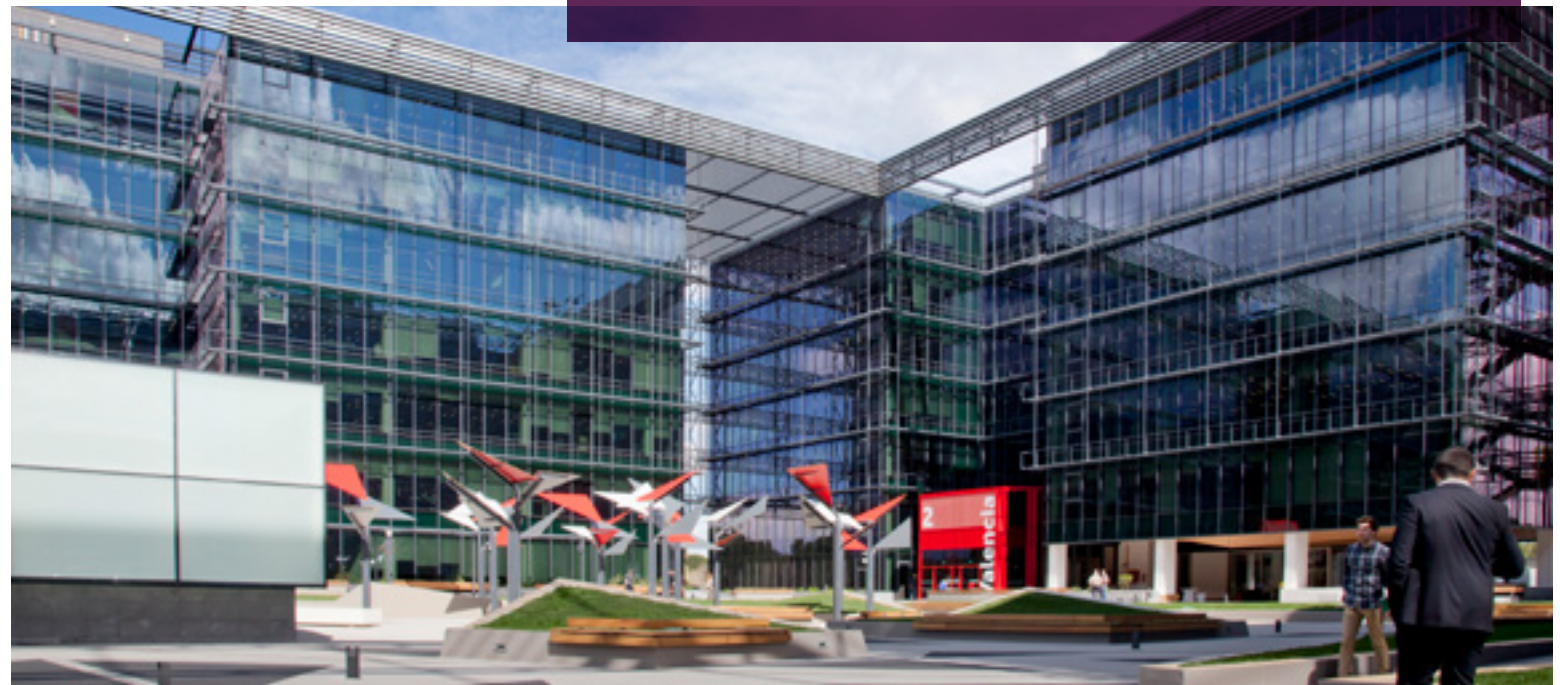
and recruitment events. We also offer training to improve interview techniques and CV-writing skills. Any reorganisation is conducted in compliance with local legislation and in consultation with employee representatives, works councils and local unions.

Employee consultation

We recognise the rights of employees to join trade unions. In Europe, we also consult with our employees through the Vodafone European Employee Consultative Council, which meets twice a year and gives employee representatives an opportunity to raise any concerns with our executive management team.

Supporting employees through change in Spain

Vodafone Spain is one of our markets where we have made a number of organisational changes during the year to support our new strategy and operating model. As part of the restructuring process, we reached an agreement with all eligible works council representatives and, in addition to enhanced severance packages, the collective agreement included a nine-month outplacement programme and the provision of specific training for employees seeking to become entrepreneurs in the future. Both of these provisions aimed at helping employees remain in the workforce once they have left Vodafone.



Appendix

Find out more about our governance process, the scope of our reporting, environmental management, materiality and read Grant Thornton's Assurance Statement.

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Managing and reporting on sustainable business

Vodafone's sustainable business management and reporting systems focus on activities and risks that are both potentially material to our business and are of greatest interest to our many and diverse stakeholders. In this appendix to the Report, we provide an overview of the governance processes that underpin our approach and summarise the methodology used to identify the most important business and socio-economic themes that are now at the centre of our sustainable business strategy.

We report on progress against our sustainable business strategy annually, in parallel with the Vodafone Group Plc Annual Report, which contains key highlights and progress on our sustainable business strategy. During the year, we also publish separate transparency reports on two areas of significant public debate: Tax and our total economic contribution to public finances and on law enforcement and freedom of expression matters within our Digital Rights and Freedoms Reporting Centre. Additionally, we provide detailed information regarding electromagnetic frequency emissions from mobile devices and base stations in a dedicated area of our website.

We publish an annual statutory Conflict Minerals Report (in line with US regulatory requirements) and an annual Slavery and Human Trafficking statutory statement (in line with the requirements of the UK Modern Slavery Act 2015). This year, we also published Vodafone's second UK Gender Pay Gap Report as required under the Equality Act 2010 (Gender Pay Gap Information) Regulations 2017. These statutory documents are available on the Sustainable Business section of our website.

In this appendix, we provide an overview of our governance and our environmental management approach, a summary of the scope of our sustainable business reporting, a list of our key performance indicators and an Assurance Statement from Grant Thornton. In addition, our Index of Conformance with the Global Reporting Initiative (GRI) Standards can be found on our website here.



GRI Standards Index

Our 2019 Sustainable Business Report has been prepared in reference to the GRI's Sustainability Standards 2016. The GRI Standards allow companies to report their material impacts for a range of economic, environmental and social issues.

 [Read our 2019 GRI Standards Index](#)

Governance

Our sustainable business strategy has been designed to ensure close alignment between our business goals and the maximum possible socio-economic benefit achievable as a consequence of these goals. Realising that ambition requires strong corporate governance at multiple levels of our businesses. Leadership vision is critically important – so too is ensuring a commitment to effective operational implementation.

The Group Sustainable Business team defines and leads Vodafone's activity in this area. The strategy summarised in the Report was created with input and advice from a wide range of stakeholders – as we explain below – and was formally approved by the Group Executive Committee in November 2015.

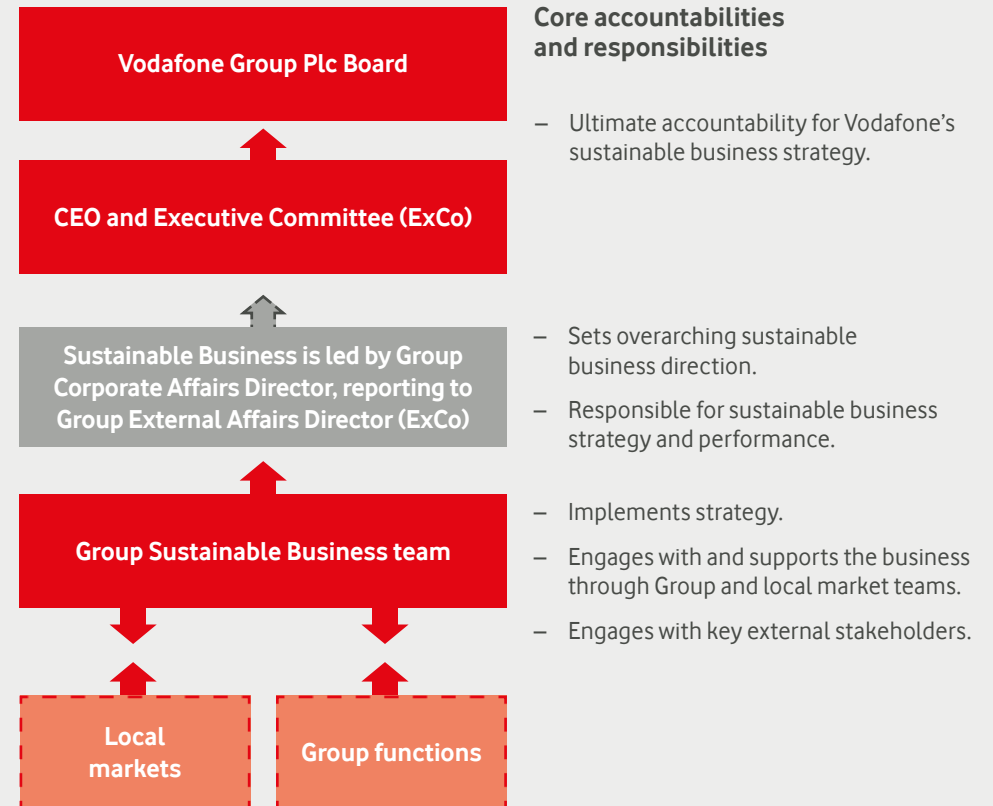
The Vodafone Group Sustainable Business team works with Vodafone's local market and professional function teams to advance the various programmes, projects and initiatives discussed in this Report. Implementation of the sustainable business strategy relies on leadership within the relevant business areas together with a strong partnership with the Vodafone Group Sustainable Business team. The team provides expert advice and guidance to

core business owners within the Group's global senior leadership team while supporting the operational delivery of Vodafone's sustainable business agenda in conjunction with sustainable business specialists in each of our local markets.

The Group Executive Committee (ExCo) – chaired by the Group Chief Executive – has overall accountability to the Vodafone Group Plc Board for Vodafone's sustainable business performance. The Group Director of Corporate Affairs defines and leads Vodafone's sustainable business strategy worldwide and is responsible for the activities of the Group Sustainable Business team. The Group Director of Corporate Affairs reports to the Group External Affairs Director who is a member of the ExCo.

The ExCo regularly reviews the progress of the sustainable business strategy. All external publications – including this Report – are reviewed by the Vodafone Group Disclosure Committee. The Committee is responsible for ensuring the accuracy and timeliness of Group disclosures and approves, on behalf of the Group Chief Executive, the controls and procedures related to the release of financial and non-financial information. The Vodafone Group Plc Board receives an update on the progress of the Group sustainable business strategy once a year.

Sustainable business governance structure



Materiality

During 2016, we conducted a materiality assessment of our ten priorities, using the GRI Principle of Materiality, to identify the most important social, economic, environmental and ethical factors of greatest relevance to our businesses and to society as a whole. That assessment was informed by the views of a wide range of stakeholders and, in turn, led to the creation of our sustainable business strategy.

Understanding stakeholder views

Many people and organisations have an interest in what we do and how we work. Our stakeholders include:

- consumer and enterprise customers;
- shareholders and investors;
- employees;
- suppliers and partners;
- governments and regulators;
- local communities;
- non-governmental organisations (NGOs) and civil society activists; and
- industry peers.

In designing our sustainable business strategy, we took into account factors including:

- insights from our engagement with peers, NGOs and civil society activists and sustainable business specialists;
- a review of existing and emerging issues that are the focus of ongoing public debate in multiple countries;
- global socio-economic trends, such as climate change and youth unemployment;
- a review of the issues covered in the GRI Standards;
- the priorities identified in the United Nations Sustainable Development Goals (SDGs); and
- an evaluation of how the Principles of the [Blueprint Framework for Better Business](#) would apply to Vodafone.

We used the Global e-Sustainability Initiative's materiality tool (specifically designed for use within the communications industry) to analyse these factors and then rank them in a materiality matrix. That analysis resulted in the identification of 24 issues that we considered to be the most material, both for Vodafone and for society as a whole. We then mapped those 24 issues against the five Principles of the Blueprint Framework for Better Business to identify ten overarching priorities of equal impact and importance.

Our ten priorities

Digital rights including privacy, data protection and security



Socio-economic benefits arising from our products and services



Management of supply chain risks



Health and safety



Business conduct and ethics



Corporate taxation and total economic contribution



Public concerns regarding electromagnetic frequency emissions



Employee equality and diversity



Energy consumption and greenhouse gas emissions



Customer relationships



Environmental management

All of our local markets operate environmental management systems that encompass factors such as energy consumption, waste management and water usage. These systems are certified to international standard ISO 14001 in the Czech Republic, Greece, Portugal, Romania, South Africa, Spain and the UK.

We have a number of initiatives in place to reduce the energy used in our office buildings and administrative systems, and to help our employees reduce their own carbon impact. Several of our offices are LEED (Leadership in Energy and Environmental Design) certified and rated on the basis of their design, construction, operation and maintenance. The following Vodafone buildings have been awarded certification under the Commercial Interiors category:

- Vodafone Spain headquarters, Germany headquarters, office and call centre in Turkey headquarters – platinum standard;
- Vodafone Czech Republic headquarters – gold standard; and
- Vodafone Italy – gold standard for its offices in Padua and silver standard for its headquarters in Milan.

Compliance with environmental regulations

Our environmental management systems are designed to ensure compliance with relevant legislation in each local market as well as with European regulations, including:

- the EU's Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Directive;

- the Waste Electrical and Electronic Equipment Directive in EU countries;
- the EU's Registration, Evaluation, Authorisation and Restriction of Chemicals Directive; and
- the EU's Energy Efficiency Directive.

Managing waste

We implement resource efficiency and waste management programmes in all our local markets in order to minimise emissions from the end-of-life treatment of network waste, IT equipment and other office waste. Our Group policy on waste management prioritises the reuse or recycling of unwanted equipment, safely and responsibly, to help keep resources in use for as long as possible, extracting the maximum value from equipment while in use and then recovering and re-using materials before recycling them responsibly.

Our electronic-waste (e-waste) impact includes network waste such as base station equipment, air conditioning units, cables, waste from handsets, routers, transmission equipment and device waste such as mobile phones, accessories and tablets. In developed markets, we use specialist e-waste contractors that comply with international regulations, but in emerging markets managing waste can be more challenging. Access to appropriate waste facilities is often limited and there may be few legal safeguards in place to ensure that potentially hazardous substances are handled responsibly. All our local markets are required to keep records of their e-waste equipment and to use recycling suppliers that are regulated, licensed or have been assessed and approved through our supplier qualification processes.



This year, we have established a new goal to aim for 100% reuse and recycling of our network waste. We have also investigated ways to improve the reuse and repair of devices across our local markets by assessing existing schemes across our local markets which include: trade-in and device buy-back schemes, drop-off boxes in retail stores, freepost return envelopes and repair services to encourage customers to repair or return their old devices and routers.

In our own operations, we generated an estimated 8.5 million kg of waste and we recovered and recycled 93.9%. Globally, 99.5% of our network waste was sent for reuse and recycling.

Managing water

Compared with businesses in other industries, we do not use water intensively. This year, we used 0.94 million m³, a decrease of 4.5% on last year.

In South Africa, where water scarcity is a significant issue, Vodacom has invested in a number of water efficiency initiatives to reduce water consumption. These have included planting water-wise, indigenous plants and installing rainwater harvesting at Vodacom's head office in Johannesburg.

Scope of reporting

Performance data included in the scope of this Report:

- our operating companies in 21 countries where we have operational control: Albania, Czech Republic, Egypt, Germany, Ghana, Greece, Hungary, Ireland, Italy, Malta, New Zealand, Portugal, Romania, Spain, Turkey, the UK, Vodacom in South Africa and Vodacom Group's subsidiaries in the Democratic Republic of Congo (DRC), Lesotho, Mozambique and Tanzania; and
- operations under Vodafone Global Enterprise and Vodafone Group Services.

Performance data excluded from the scope of this Report:

- joint ventures where Vodafone does not have operational control: VodafoneZiggo in the Netherlands, Vodafone Hutchinson Australia, Vodafone Idea and Indus Towers in India and our associate Safaricom in Kenya;
- Partner Market networks in which Vodafone neither has any equity interests nor holds an operating licence, including those Partner Markets that operate under the Vodafone brand;

- countries in which we are required to hold an operating licence in order to provide local customer support to multinational enterprise customers but where we neither own nor operate any licensed telecommunications network infrastructure; and
- retail stores that are Vodafone-branded by way of franchise and exclusive dealer arrangements but are not owned or operated by Vodafone.

Exceptions:

- our M-Pesa customer numbers and our 50 million women emerging market target, which both include our associate Safaricom in Kenya and Vodafone customers in India (data from Vodafone India is taken from August 2018, prior to the merger of this business with Idea to create Vodafone Idea. We are working on appropriate methodology to account for the change in the business going forward);
- our safety performance numbers include data from India up until 1 September 2018.

Any additional exclusions are noted in the text.

On 31 August 2018, Vodafone announced the completion of the merger between Vodafone India and Idea to create Vodafone Idea. Vodafone Idea is a joint venture controlled by Vodafone and the Aditya Birla Group. Vodafone no longer has operational control of this business, and therefore, Vodafone Idea is no longer included into the Group performance data, apart from the exceptions highlighted above.

Vodafone Foundation

Within this Report, we highlight some of the activities of Vodafone Foundation as these complement much of the Group's sustainable business strategy. However, Vodafone Foundation's activities overall are not within the scope of this Report. Vodafone Foundation supports projects around the world that are run in partnership with charitable organisations and NGOs. Vodafone Foundation is a UK registered charity (1089625) and receives annual contributions from Vodafone Group Plc. Through its Connecting for Good programme, Vodafone Foundation leverages the technology and expertise within Vodafone to maximise its charitable impact. Vodafone Foundation's independence is key to its ability to work globally with a wide range of partners to meet its charitable objectives. Vodafone Foundation also sits at the centre of a network of 27 local social investment programmes, referred to as the local foundations. Vodafone Foundation has a funding partnership with these local foundations to provide public benefit by investing in programmes that support communities in Vodafone's operating countries.

Setting revised baselines after acquisitions, disposals and changes in operational control

The inclusion or exclusion of data from business units that have been acquired or sold, or where there is change in operational control (for example, through a merger), is determined by the date that the transaction in question is formally concluded with all approvals received.

Our policy on environmental data reporting is to include performance data from newly acquired businesses at the end of their first full year of new ownership. In terms of setting a revised baseline to reflect acquisitions, disposals or a change of control, our policy is that:

- acquisitions are built into the baseline using either actual or estimated data at the end of their first full year as a controlled subsidiary;
- disposals are removed from the baseline in the year of disposal; and
- any identified errors >1% of the Group total are re-baselined wherever possible.

Trade mark notice

Vodafone, the Vodafone Speech Mark, The future is exciting. Ready?, Vodacom and M-PESA are trade marks of Vodafone. Other product and company names mentioned in this document may be the trade marks of their respective owners.

How we report our key performance indicators

This section of the Report outlines the basis of preparation of the key performance indicators (KPIs) reported in the Women's empowerment, Energy innovation, Youth skills and jobs, and Supply chain integrity and safety sections of the Sustainable Business Report.

We publish our reporting definitions and methodology so that readers can understand the basis upon which the disclosures have been prepared and be in a position to make comparisons across different reports.

1. Women's empowerment

Diversity performance: % of female employees

We report the percentage of female employees across our four global employment bands:

- senior leadership (our top approximately 200 employees) including ExCo members;
- senior management (1,100–1,600 employees);
- middle management (6,000–7,500 employees); and
- the non-management employees who make up the rest of the population.

Each of these categories is defined through a consistent global role-banding process overseen by the Vodafone HR function.

Calculation of progress against our target of 30% women in management and leadership roles includes the diversity figures for all management bands.

We also report on the percentage of female management and leadership employees in our Technology function. This is calculated using data sources from two KPIs:

- the percentage of management and leadership females in the Technology function (comprised of employees from local operating companies and Vodafone Group); and
- the percentage of management and leadership females supporting the Technology function within Vodafone Shared Services.

The diversity figures are based on the number of employees (full-time/part-time) as at 31 March.

These numbers are not pro-rated. An employee is defined as a person with an employee (as opposed to consultant or contractor) relationship with Vodafone (or its operating companies), who is paid by Vodafone (or its operating companies) through the payroll. This includes graduates and people on international assignments as well as people on work experience who are on the payroll or have been at Vodafone (or an operating company) for longer than six months. The numbers exclude pensioners and non-employees.

Progress against the goal of bringing the benefits of mobile to an additional 50 million women in emerging markets by 2025

For the purposes of this goal, the definition of a connected woman is a SIM connection that is estimated to belong to a female primary user.

This goal is calculated as the number of additional connected women at the end of the ten-year target period against the initial 31 March 2016 baseline. Progress towards the ten-year target is reported at the end of each financial year.

The 50 million women target applies across nine emerging markets where we have an operating presence and where we believe we have the greatest scope to make a difference. These are Egypt, Ghana, India (Vodafone customers only) and Turkey plus through our sub-Saharan subsidiary Vodacom Group, DRC, Mozambique, South Africa, Tanzania and Kenya through our associate Safaricom.

The process used to estimate the number of women connected is as follows:

- the total number of connections (for both male and female customers) is calculated based on the closing number of active customers at the end of each financial year; and
- the percentage of female mobile customers is calculated using information from two surveys over a selection of customers in each market:

- the Net Promoter Score conducted across the Vodafone customer base in each local market; and

- the Vodafone brand tracking survey conducted in each local market.

The number of women connected is then estimated by calculating the percentage of female customers as a proportion of the total number of Vodafone connections in each local market, aggregated across the nine countries listed above.

Given the nature of the target demographic – typically, women on very low incomes in poor communities – it is assumed that the very large majority will not have a mobile phone in their own right and, therefore, will not be customers of competitor mobile networks. However, it is not possible to distinguish between women who are new to mobile and women who already have a mobile and are switching networks.

The calculation via customer survey of the proportion of women reached is subject to the risks inherent to this kind of sampling and does not distinguish between existing and new customers. Assumptions are therefore made based on the entire customer population in a market.

2. Youth skills and jobs

Number of young people supported to access digital skills, learning and employment opportunities

Our goal is to support 10 million young people to access digital skills, learning and employment opportunities by 2022. This goal incorporates our internal target, which is to provide 100,000 opportunities for young people to receive a digital learning experience at Vodafone. It also incorporates additional initiatives, such as the number of people who have completed our *Future Jobs Finder* tool (read more about the tool on page 21).

The number of completions of the *Future Jobs Finder* tool is defined as the number of unique users who complete the first quiz in the tool, which focuses on the user's interests and affinities and matches the results to a set

of five digital job types that best suit. This data is collated via the use of Google analytics. The *Future Jobs Finder* tool is a global online platform and as such could be completed by anyone, and we do not actively track the age of the users who are completing the tool. As the tool is heavily targeted towards young people (e.g. through targeted social media campaigns), we report the total number of unique users who complete this step of the tool, rather than segmenting the age of users.

Number of opportunities for young people to receive a digital learning experience at Vodafone

We report on the number of opportunities we offer to young people to receive a digital learning experience at Vodafone. This number is broken down into five categories, each of which is defined through consistent global guidelines (see table on the right).

Opportunity	Sub-category	Definition
Direct hires	N/A	Any individual hired into full or part-time employment who is aged 26 or below at the point of joining Vodafone.
Workplace experience and training	Work experience	Offered to individuals between 14 and 19 years of age. This is an opportunity to join Vodafone for up to one month unpaid to gain experience of the working world.
	Digital learning workshops	Opportunities to gain a direct digital learning experience, facilitated by Vodafone. An example includes Vodafone Turkey Foundation's <i>Coding Tomorrow</i> programme (see page 23).
	#Codelikeagirl	Inviting girls aged 14–18 to learn how to code through a four-day workshop
Apprenticeship	N/A	Open to individuals aged 16+ who will join Vodafone to study for a professional qualification and work at the same time.
Internship	N/A	Open to individuals aged 18+, offering short-term assignments from between one and 12 months.
Graduate recruitment	N/A	Our <i>Discover</i> programme offers graduates a two-year placement with Vodafone, where they will rotate across business divisions.

3. Energy innovation

Overview

We report energy and greenhouse gas (GHG) emissions data for the following indicators:

- energy consumption by fuel source (in GWh);
- energy consumption by type (in GWh);
- renewable electricity consumption (as a percentage of total grid electricity);
- Scope 1 GHG emissions (in carbon dioxide equivalent (CO₂e));
- Scope 2 GHG emissions (in CO₂e) using both the location and market-based methods of calculation;
- Scope 3 GHG emissions (in CO₂e);
- total GHG emissions Scope 1 and 2 (in CO₂e); and
- total GHG emissions per unit of mobile data (in tonnes CO₂e/petabyte data).

Standards and guidance

Our methodology for the reporting of GHG emissions has been developed using the following guidance and standards:

- GHG Protocol standards and guidance, including the [Corporate Standard](#), [Scope 2 Guidance](#) and [Scope 3 Calculation Guidance](#);
- CDP guidance including the [2018 Climate Change Responders Pack](#) and the [Technical Note on Accounting of Scope 2 Emissions](#); and
- the Climate Disclosure Standards Board [Climate Change Reporting Framework](#).

Data gathering process and methods

We use an electronic data collection process to gather our data. In the majority of the countries where we operate, energy usage data is based on invoices from our energy suppliers. In some countries, those bills are based on the supplier's estimated readings.

Where data does not match our reporting period exactly – for example, where we only have 11 months of data – we forecast this information by extrapolation. For sites where energy invoices are unavailable, we estimate this information based on typical site consumption.

Increasingly, we measure our energy consumption through smart metering, a technology that uses mobile communications to collect real-time consumption data from energy meters.

Renewable electricity definition

Our figures for renewable electricity include all renewable electricity from third-party renewable suppliers which is traceable to Vodafone through a signed contract or provision of surrendered renewable energy certificates (RECs). The figures exclude any renewables for which RECs have been passed on and retired by a third party.

Scope 1

These are emissions within our direct control and include those from:

- diesel, petrol and other fuel used by cars and commercial vehicles owned by Vodafone or leased for six months or more;
- natural gas and other heating fuels used for space heating and hot water in our premises;
- diesel and petrol used for generators in off-grid areas, or where back-up capacity is required; and
- fugitive releases of refrigerants or fire suppressants used for air-conditioning or fire control systems in network buildings and offices.

[Conversion factors from the UK government's Department for Business, Energy and Industrial Strategy](#) have been used to calculate GHG emissions from other fuel sources such as diesel, petrol, natural gas and fuel oil as well as those from vehicles. A conversion efficiency of 30% has been used for diesel generators.

Scope 2

These are emissions from electricity (and heat/steam) purchased to power our networks, technology centres, offices and retail stores.

We report two different Scope 2 emission values: one using a 'location-based' method and one using a 'market-based' method. The location-based method involves using an average emissions factor that relates to the grid on which energy consumption occurs. This usually relates to a country-level electricity emissions factor. The market-based method applies if the company has operations in any markets where energy certificates or supplier-specific information are available. The method involves using an emissions factor that is specific to the electricity purchased. We have reported Scope 2 figures using both the location-based and market-based methodologies.

The following external factors have been used to calculate our market-based emissions.

Local market	Source	Conversion factor (kg CO ₂ e/kWh)
Albania	International Energy Agency (IEA)	
Czech Republic	Supplier factor and residual mix	Zero and 0.614
DRC	IEA	
Egypt	IEA	
Germany	Supplier factors	Various
Ghana	IEA	
Greece	IEA and residual mix	0.625
Hungary	IEA and residual mix	0.413
Ireland	Supplier factors	Zero and 0.641
Italy	Supplier factor and residual mix	Zero and 0.308
Lesotho	IEA	Zero and 0.465
Malta	Supplier factor and residual mix	0.443 and 0.661
Mozambique	IEA	
New Zealand	Supplier factor	0.013
Portugal	Supplier factor and residual mix	0.411 and 0.383
Romania	Supplier factors	Various
South Africa	IEA	
Spain	Supplier factor and residual mix	0.270 and 0.446
Tanzania	IEA	1.010 and IEA
Turkey	IEA	0.1500 and 0.3995
UK	Supplier factors and residual mix	0.210, 0.281 and 0.367

Location-based emissions

Emissions are calculated using a kWh to CO₂e conversion factor provided by the IEA for the calendar year 2017, which was the latest dataset available at the time of publication.

Market-based emissions

Emissions are calculated using a kWh to CO₂e conversion factor based on one of the following sources (in order of priority):

- supplier conversion factors specific to our contract; these include some markets where supplies are 100% renewable, and where this is the case, we have sought evidence of singularity of supply;
- residual mix figures for 2017 – where the conversion factor reflects the removal of certificates, contracts and supplier-specific factors claimed by other organisations; and
- location-based conversion factors as described above.

Scope 3

With the Carbon Trust, we have conducted an in-depth analysis of our Scope 3 emissions. These are indirect emissions that we do not directly control but that we may be able to influence. They include emissions from our suppliers in providing us with goods and services; emissions from our joint ventures where we do not have full operational control; and emissions associated with the use of our products and services by our customers.

The [GHG Protocol Scope 3 Standard](#) defines 15 categories of emissions as detailed in the table below. We have undertaken a qualitative assessment of the extent to which we can influence and reduce emissions in the most material categories. Further details of the methodology and results for each relevant category are also shown.

The estimation of Scope 3 emissions is a very approximate process. The values given in the table are not precise and are not intended to be read as absolute figures. Rather, they provide an indication of where the most significant emissions in our value chain arise and help us to target our action.

GHG Protocol category	What does this mean for Vodafone?	Emissions (million tCO ₂ e)	Methodology for assessment	Ability to influence
Purchased goods and services; capital goods and services	Emissions from the extraction, production and transportation of goods and services purchased by Vodafone (includes capitalised goods and services).	4.0	Calculated using an environmentally extended economic input-output approach – this uses macro-economic modelling to determine the GDP value of different sectors of the economy, and to associate that with the GHG emissions incurred by those sectors. At its simplest, the total GHG emissions of the sector are divided by the total GDP value generated by the sector to produce an emission factor of x kgCO ₂ e/€ value. By multiplying these emission factors by the amount we spend on goods and services in each sector, we can obtain a rough estimate of our emissions for purchased goods and services.	High for some suppliers, more limited for others
Fuel and energy-related activities	Emissions from the extraction, production and transportation of fuels and energy purchased by Vodafone and not already included in Scopes 1 and 2. It includes emissions from electricity transmission and distribution.	0.7	Upstream fuel and energy emissions are calculated by applying emission factors produced by the UK Department for Environment, Food and Rural Affairs (DEFRA) to Vodafone fuel and energy consumption data.	Moderate
Upstream transportation and distribution	Not calculated as this category is not material.			
Waste generated in operations	Disposal and treatment of waste generated by our activities.	0.0008	Calculated by applying emission factors from DEFRA to data for waste generated by Vodafone ready for treatment and disposal.	High
Business travel	Transportation of employees for business-related activities.	0.06	Calculated by applying emissions factors from DEFRA to distances travelled for business by different modes (air, rail and personal car).	High
Employee commuting	Not calculated as this category is not material.			
Upstream leased assets	Operation of assets leased by Vodafone, including third-party network sites. This includes the relevant sites leased from tower companies in Greece (Victus), Tanzania, Ghana and the UK (CITL).	0.05	Emissions have been estimated either by dividing the cost of electricity and diesel for these sites by unit price/kWh, or by extrapolating based on the number of leased sites and an average emission value per site obtained from Vodafone-owned sites.	Moderate
Downstream transportation and distribution	Not calculated as this category is not material.			
Processing of sold products	Not relevant to Vodafone as we do not produce products for further processing.			
Use of sold products	Emissions from the use of goods and services sold by Vodafone, principally from the energy used by network equipment, such as routers, and the energy required to charge mobile devices.	2.1	Calculated by multiplying the number of products sold by the energy usage for that product and electricity emission factors on a country basis. The total is the sum of all values.	Low
End-of-life treatment of sold products	Not calculated as this category is not material.			
Downstream leased assets	Not relevant to Vodafone as we do not have equipment or assets that we own and lease to third parties.			
Downstream leased assets	Not relevant to Vodafone as we do not have equipment or assets that we own and lease to third parties.			
Franchises	Not calculated as this category is not material.			
Investments	Operation of investments not included in Scope 1 or 2 – our joint ventures in Australia, Kenya, India and the Netherlands.	6.0	For joint ventures in Australia, Kenya, India and the Netherlands, Scope 1 and 2 emissions are based on actuals and Scope 3 emissions are extrapolated from Vodafone's emissions. A percentage of emissions are reported based on our equity share.	High

GHG savings for customers enabled by our products and services

Our Internet of Things (IoT) products and services help our customers to reduce electricity, gas and the consumption of other fuels through applications such as smart meters, road navigation systems, fleet management and mobile health. In each of these applications, our IoT services are providing connectivity, enabling our customers to reduce their GHG emissions. More examples are provided in the Energy innovation section of the Report.

To quantify the GHG savings for our customers enabled by our products and services, we have calculated – in conjunction with the Carbon Trust – the total quantity of emissions that we have helped our customers to avoid. The concept of the enabling effect of information and communications technology was introduced in the SMART 2020 report, and the methodology has since been developed by the Global e-Sustainability Initiative (GeSI) and others. The GeSI Mobile Carbon Impact Report has been used as guidance for many of our calculations, according to the Carbon Trust methodology.

The starting point for the calculation is a list of our products and services that help customers avoid using energy or fuel. The full list is provided in the following table. For each product or service, a GHG-saving mechanism has been identified and quantified based on an external study, an internal Vodafone study or documented expert assumptions. For example, we know that smart electricity meters can typically reduce a domestic customer's electricity usage by 3% per year – so the GHG

abatement from one of our IoT smart meter connections is 3% of annual GHG emissions from a domestic home.

For each product and service, a unit of sale has been identified – for example, the number of smart electricity meter connections that we have sold. This unit of measurement is then multiplied by the GHG abatement savings for each type of application to provide the total saving for that application. The value for each product and service category is then added together to give the total GHG emissions abated by our technology.

It should be noted that a number of suppliers will contribute to providing an IoT application that enables a customer to avoid or reduce GHG emissions. We have not attempted to apportion emissions savings between ourselves and other suppliers in the value chain. We are careful in our reporting not to claim the avoided emissions as our own. Instead, we are clear that we are one of a number of parties who have helped our customers reduce their GHG emissions. Further details of products and services, the mechanism for abating emissions and the abatement factors used are provided in the table overleaf.

Reporting the ratio of the GHG emissions we help our customers reduce for every tonne of GHG we generate from our own operations

We report the quantity of GHG emissions that we are enabling our customers to avoid – as calculated by the methodology laid out above – as a ratio against that of our total Scope 1 and 2 GHG emissions.



IoT application	Description	GHG abatement mechanism	GHG abatement factor
Smart metering (domestic)	IoT-enabled meters, which regularly record utility consumption (gas, electricity or water) and communicate the information back to the energy or utility company to allow remote reporting.	Smart meters are seen as an important tool to reduce domestic utility consumption and manage utility networks more efficiently. Many studies have demonstrated that the installation of smart meters and associated initiatives have resulted in energy consumption reductions.	Average electricity and gas usage reduction assumed is 3% per annum ¹ .
Smart metering (commercial)	As per above but for commercial properties, which often have multiple smart meters to isolate different areas of consumption.	Smart meters in commercial property provide visibility to building managers as to where and when an organisation is consuming energy or water. Smart meters have been shown to lead to energy savings, as consumption can be optimised remotely.	Average electricity and gas usage reduction assumed is 16.8% per annum ² .
Smart logistics and fleet management (bus)	Connected telematics system that consist of an in-vehicle unit (IVU) connected to a central server. This feeds back real-time information on the GPS location of the vehicle, and may include other performance metrics such as fuel consumption and driver performance.	Connected buses can communicate with traffic light systems to prioritise bus routes, improving fuel efficiency. GPS location services can also be used to inform passengers of bus arrival times. Both features can help to increase bus patronage and improve emissions per passenger.	Fuel saving assumed is 6%. This is applied to average annual emissions for a bus.
Smart logistics and fleet management (cars)	Connected telematics system that consist of an IVU connected to a central server. Within a car fleet this is primarily used for satellite navigation and feedback on driver behaviour. Information may also be used for usage-based insurance.	Fleet management systems may be used for optimised routing and avoiding congested areas, which directly reduces fuel consumption. Telematics systems can offer real-time feedback to drivers on their driving performance and behaviour. This technology is an enabler; the efficiency gains can only be realised if the driver acts in response to the feedback.	Fuel saving assumed is 6%. This is applied to average annual emissions for a car ^{3,4} .
Smart logistics and fleet management (light and heavy goods vehicles (LGVs/HGVs))	As per above but for LGVs and HGVs. Commercial vehicle applications include optimised delivery and dispatch routing, tracking of fuel consumption and monitoring of driver performance.	Optimised delivery and dispatch routing for goods vehicles ensures that unnecessary journeys are minimised, resulting in improved fuel efficiency. Telematics systems can offer real-time feedback to drivers on their driving performance and behaviour. This technology is an enabler; the efficiency gains can only be realised if the driver acts in response to the feedback.	Fuel saving assumed is between 2% and 10%, dependant on classification and application. This is applied to average annual emissions for an LGV or HGV.
Smart logistics and fleet management (Taxis)	Connected telematics system that consists of an IVU connected to a central server. This is usually connected to passenger mobile applications to locate and summon nearby taxis. Multiple users may be connected to pool journeys.	Carbon savings are achieved by taxis having fewer miles travelled without a customer, based on optimised central control and dispatch of the taxis.	Fuel saving assumed is 5%. This is applied to average annual emissions for a taxi.
Smart logistics and fleet management (smart bin)	IoT-enabled units within smart bins communicate with waste collection services to notify when they are full and prevent unnecessary journeys being made by waste collection vehicles.	The primary enablement mechanism is reduced journeys by waste collection vehicles, resulting in fuel savings.	Abatement factor of 5kgCO ₂ e per smart bin was used ⁵ .
Street lighting	IoT-enabled street lighting allows variable levels of lighting, depending upon the time of day and extent to which people are nearby.	The carbon saving is achieved by avoiding the use of street lighting when it is not necessary. Lower levels of lighting may also be used in less busy areas.	Reduction in energy consumption of street lights assumed is 20% ⁶ .
Electric vehicle (EV) charging	IoT-enabled EV charging points interact with electric vehicles or driver mobile apps to direct drivers to the most appropriate EV charging point, giving drivers the confidence to carry out more journeys in EVs.	The use of an EV over a traditional fuel vehicle has significant carbon savings. It is assumed each EV journey provided by the charging point replaces a traditional fuel journey.	Annual distance driven was calculated from the charge provided by a charging point. The saving is the difference in emissions for that distance between an average petrol vehicle and an EV ⁷ .
Healthcare	Connected devices allow chronic or high-risk patients to be monitored within their own home. This prevents excess journeys to and from the hospital by both patients and healthcare professionals, and frees up hospital beds.	The emissions associated with one hospital stay are avoided by allowing the patient to remain at home. There are also the avoided emissions from not having to make the car journey to and from the hospital.	Assumed 42% reduction in hospital admissions ⁸ .

4. Supply chain integrity performance

Selection process for assessment

Any supplier that provides a product or service to Vodafone is screened for potential social, ethical and environmental risks, as defined by the Code of Ethical Purchasing. Existing or new suppliers are then selected for assessment depending on a number of different risks, including the supplier's scale, the countries in which the activity takes place and the nature of the activity.

Suppliers to Vodafone who also supply two or more other members of the Joint Audit Cooperation (JAC) initiative (an association of telecom operators aiming to verify, assess and develop supply chain practices in the industry) are audited through JAC assessments. Vodafone audits are typically focused on suppliers of network infrastructure products and services, Vodafone-branded consumer equipment (such as mobile phones or set-top boxes) and Vodafone Automotive IoT products. We also use anonymous mobile phone-based surveys of workers to complement an on-site audit or as a standalone assessment.

Joint Audit Cooperation (JAC) assessments

JAC audits are reported on a calendar-year basis while Vodafone audits are reported on a financial year basis. The majority of JAC audits focus on suppliers in Vodafone's supply chain.

The JAC audits are conducted by independent auditors paid for by the JAC member companies. Reports are issued in a standard format focused on verifying social, environmental and ethical factors. Audits that are funded and conducted by Vodafone on behalf of the JAC initiative are not reported under the total number of Vodafone audits to avoid double-counting.

The JAC companies hold quarterly steering committee meetings to review progress in remediating shortcomings identified in JAC audits.

Vodafone audits

Vodafone audits are conducted by either Vodafone's internal auditors or by independent auditors on site at the supplier's operation or factory using the JAC methodology and checklists. Follow-up audits are counted as individual audits.

Anonymous mobile phone-based surveys

Anonymous and confidential mobile phone-based surveys of supplier employees and contractors are carried out by an independent survey service provider, Elevate, using pre-recorded questions and an interactive voice response (IVR) system. The independent provider is present on site distributing calling cards directly to groups of workers in factories and other work sites. The mobile phone-based survey figures represent the number of unique mobile phone callers registering a survey response. The IVR questions are provided in audio form in the workers' local language, and their responses are captured using touch-tone keypads. The service works on all mobile phones, including very low-cost basic devices.

Tier

In the context of the Sustainable Business Report, a 'Tier' is defined as the level of contractual separation between Vodafone and its suppliers downstream in the supply chain. Tier 1 is defined as a direct supplier to Vodafone with whom a contract or purchasing terms are established. Tier 2 is defined as an entity with whom a Tier 1 supplier has a contract or relationship. Tier 3 is defined as an entity that has a contract or relationship with a Tier 2 supplier, and so on for Tiers downstream in the supply chain. 'Tier' in this context does not signify strategic importance or segmentation.

5. Safety performance data

Safety data is collected by the local markets and then shared with the Group Health, Safety and Wellbeing team. The local market must report, record and investigate all incidents. An incident management system is used for the reporting, recording, investigation and action tracking of incidents.

Recordable fatalities

We report all fatal incidents related to our operations when – after investigation and review – we conclude that our controls were not operating as effectively as required. We also consider circumstances where it is reasonable to assume that if our controls could have been enhanced, the outcome may have been different, including potentially preventing the incident from occurring at all. We therefore report accidents both on our owned sites and also in areas that are outside our full control – for example, on public roads. We report every life lost within the control definition stated above, irrespective of the individual's status – whether an employee, contractor, suppliers' employee or contractor (of any Tier) or a member of the public.

Where a fatal incident is under investigation by national authorities, we are typically unable to gain access to the authorities' findings, and therefore, unable to conclude our internal investigation or include in our reporting until any investigations are complete. We note any fatal incidents in our reporting that are still under investigation.

Lost-time incidents

Lost-time incident (LTI) is the term used when a Vodafone employee is injured while carrying out a work-related task and is unable to perform his or her regular duties for a complete shift or period of time after the incident.

The lost-time injury rate is calculated as the percentage of LTIs compared to the average number of employees over the reporting year.

- | | |
|--|---|
| 1 Energy Demand Report, Ofgem | 4 Abatement factor derived from Smart Bin case study |
| 2 Average figure used from a selection of case studies varying from 7.5% to 25% see BBP Better Metering Toolkit and ASB Bank and Vodafone M2M smart metering | 5 Abatement factor derived from Smart Bin case study |
| 3 Various published and unpublished studies indicate savings from 5–15%, dependant on level of intervention. Examples of some published sources: A guide to Telematics , Energy Saving Trust , Telematics Explained , FIAG ; and Mix Telematics Furl Savings | 6 Telensa city data and smart lighting |
| | 7 Transport for London electric charging vehicle factsheet, 2014 |
| | 8 Telehealth interventions reduce hospitalisation by 55% and reduce A&E admissions by 29%. An average figure of 42% was used. |

Independent Limited Assurance Report to Vodafone Group Plc

Grant Thornton UK LLP ('Grant Thornton' or 'we') were engaged by Vodafone Group Services Limited to provide limited assurance to Vodafone Group Plc ('Vodafone') over the Subject Matter Information described below for the year ended 31 March 2019.

Limited assurance conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Subject Matter Information has not been collated, in all material respects, in accordance with the Reporting Criteria.

This conclusion is to be read in the context of what we say in the remainder of this report.

Subject Matter Information

The scope of our work was limited to assurance over the information included within Vodafone's Sustainable Business Report ('the Report') for the year ended 31 March 2019 as set out in Appendix 1 to our report ('the Subject Matter Information').

Our assurance does not extend to any other information that may be included in the Report or displayed on Vodafone's website for the current year or for previous periods unless otherwise indicated.

Reporting Criteria

The Reporting Criteria used for the measurement or evaluation of the Subject Matter Information and to form our judgements are Vodafone's Basis of Preparation as set out in the 'Scope

of reporting' and 'How we report our key performance indicators' sections (together 'the Reporting Criteria') of the Appendix of the Report. The Subject Matter Information needs to be read and understood together with the Reporting Criteria.

Inherent limitations

Our procedures were designed to consider the collation of the Subject Matter Information and were not designed to test the underlying market level data. Our procedures were conducted at the Vodafone Group Head Office and remotely at Grant Thornton offices. Physical visits to other Vodafone locations did not take place.

The absence of a significant body of established practice on which to draw to measure or evaluate the Subject Matter Information allows for different, but acceptable, measurement or evaluation techniques and can affect comparability between entities and over time. In particular we draw attention to the methodological and assumption-based limitations Vodafone have disclosed in the Reporting Criteria.

Directors' responsibilities

The Directors of Vodafone are responsible for:

- the design, implementation and maintenance of internal control relevant to the preparation and presentation of Subject Matter Information that is free from material misstatement, whether due to fraud or error;
- selecting and/or establishing suitable Reporting Criteria;

- measuring or evaluating and presenting the Subject Matter Information in accordance with the Reporting Criteria; and
- the preparation of the Report and the Reporting Criteria and their contents.

Our responsibilities

We are responsible for:

- planning and performing the engagement to obtain limited assurance about whether the Subject Matter Information has been collated in accordance with the Reporting Criteria;
- forming an independent limited assurance conclusion, based on the work we have performed and the evidence we have obtained; and
- reporting our limited assurance conclusion to Vodafone.

Our independence, professional standards and quality control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

We apply International Standard on Quality Control (UK) 1, 'Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements' and accordingly we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Assurance standards and level of assurance

We performed a limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' (ISAE 3000) and, in respect of the greenhouse gas emissions information included within the Subject Matter Information, in accordance with International Standard on Assurance Engagements 3410 - 'Assurance Engagements on Greenhouse Gas Statements' (ISAE 3410), issued by the International Auditing and Assurance Standards Board. These standards require that we plan and perform this engagement to obtain limited assurance about whether the Subject Matter Information is free from material misstatement.

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risk which vary in nature from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Accordingly, we do not report a reasonable assurance conclusion.

Work performed

Considering the circumstances of the engagement our work included, but was not restricted to:

- assessing the suitability of the Reporting Criteria as the basis of preparation for the Subject Matter Information;
- assessing the risk of material misstatement of the Subject Matter Information, whether due to fraud or error, and responding to the assessed risk as necessary in the circumstances;
- conducting interviews with relevant Vodafone management and examining selected documents to obtain an understanding of the processes, systems and controls in use for collating and reporting the Subject Matter Information;

- performing selected limited substantive testing including agreeing a selection of the collated Subject Matter Information to a selection of the Vodafone market level data submissions submitted by Vodafone markets to the Vodafone Group Head Office;
- considering the appropriateness of a selection of selected carbon conversion factor calculations, and other calculations used by Vodafone to collate the Subject Matter Information including by reference to widely recognised and established conversion factors;
- re-performing a selection of selected calculations used by Vodafone to collate the Subject Matter Information;
- agreeing a selection of the relevant prior period and baseline data to previously reported data where these were used in the calculation of the Subject Matter Information, including re-performing a selection of the calculations;
- performing analytical review procedures over the collated Subject Matter Information, including a comparison to the prior period's amounts having due regard to changes in the business;
- evaluating the overall presentation of the Subject Matter Information; and

- reading the Report and narrative accompanying the Subject Matter Information in the Report with regard to the Reporting Criteria, and for consistency with our findings.

Intended use of this report

This limited assurance report, including our conclusion, is made solely to Vodafone in accordance with the terms of our engagement letter dated 18 March 2019. That agreement permits disclosure to other parties, solely for the purpose of Vodafone showing that it has obtained an independent limited assurance report in connection with the Subject Matter Information. Our work has been undertaken so that we might state to Vodafone those matters we are required to state to them in an independent limited assurance report and for no other purpose.

We have not considered the interest of any other party in the Subject Matter Information.

To the fullest extent permitted by law, we do not accept or assume responsibility and deny any liability to any party other than Vodafone for our work or this limited assurance report, including our conclusion.

Grant Thornton UK LLP

Grant Thornton UK LLP

Chartered Accountants

Reading

31 May 2019



Grant Thornton

The maintenance and integrity of Vodafone's website is the responsibility of the Directors of Vodafone; the work carried out by us does not involve consideration of these matters and, accordingly, we accept no responsibility for any changes that may have occurred to the reported Subject Matter Information, the Report or the Reporting Criteria presented on Vodafone's website since the date of our limited assurance report.

Subject Matter Information (Appendix 1)

The Underlying Subject Matter and Subject Matter Information are listed here. The information in this Appendix needs to be read together with the attached limited assurance report and the Reporting Criteria.

Underlying Subject Matter	Subject Matter Information
Women's empowerment	
Progress towards our 50 million women goal: number of estimated additional female customers (million) (cumulative progress to date)	19.4
Women in senior leadership team (including ExCo members) (%)	28
Women in senior management (%)	28
Women in middle management (%)	31
Women (all non-management employees) (%)	40
Women in management and leadership roles (%)	31
Women in technology management and leadership roles (%)	21
Energy innovation	
Vodafone energy use: Total (GWh)	5,582
Vodafone GHG emissions: Scope 1 (million tonnes CO ₂ e)	0.26
Vodafone GHG emissions: Scope 2 (market-based method) (million tonnes CO ₂ e)	1.74
Vodafone GHG emissions: Total Scope 1 and 2 (market-based method) (million tonnes CO ₂ e)	2.00
Vodafone GHG emissions: Scope 3 (air travel only) (million tonnes CO ₂ e)	0.06
Vodafone GHG emissions: Scope 2 (location-based method) (million tonnes CO ₂ e)	1.91
Vodafone GHG emissions: Total Scope 1 and 2 (location-based method) (million tonnes CO ₂ e)	2.17
Energy and GHG emissions: Electricity purchased from renewable sources (%)	15.4
GHG emissions per petabyte of mobile traffic on Vodafone's mobile networks (tonnes CO ₂ e/petabyte)	371
Number of total emissions avoided as a consequence of IoT technologies and services (million tonnes CO ₂ e)	5.9
Ratio of GHG emission savings for customers to own GHG footprint (ratio)	2.9
Youth skills and jobs	
Number of young people gaining experience of Vodafone's digital workplace through apprenticeships	518
Number of young people gaining experience of Vodafone's digital workplace through internships	974
Number of young people gaining experience of Vodafone's digital workplace through the graduate programme	677
Number of young people gaining experience of Vodafone's digital workplace through the work experience programme	46,833
Number of young people (under 26) directly hired by Vodafone	5,710
Progress towards our goal of providing 100,000 opportunities for young people to receive a digital learning experience at Vodafone (cumulative progress to date)	54,712
Number of <i>Future Jobs Finder</i> completions (cumulative completions to date)	478,986
Progress towards our goal of supporting 10 million young people to access digital skills, learning and employment opportunities (cumulative progress to date)	533,698

Underlying Subject Matter	Subject Matter Information
Supply chain integrity and safety	
Number of supplier site assessments conducted by the JAC	79
Number of supplier site assessments conducted by Vodafone	6
Number of sites assessed using a mobile survey of workers	12
Number of factory workers surveyed using mobile survey	1,693
Total recordable fatalities	2
Recordable fatalities – members of the public	0
Recordable fatalities – number of suppliers' contractors/employees	2
Recordable fatalities – number of employees	0

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