MTN Group Limited

Annual sustainability report for the year ended
31 December 2017

Contents

About this report

Scope and boundaries

The MTN Group sustainability report covers operations in Afghanistan, Benin, Cameroon, Congo-Brazzaville, Cyprus, Guinea-Bissau, Guinea-Conakry, Ghana, Iran, Ivory Coast, Liberia, Nigeria, Rwanda, South Africa, Sudan, South Sudan, Swaziland, Syria, Uganda, Yemen and Zambia, as well as MTN Enterprise operations in Kenya and Namibia.

The following scope exclusions are noted:
- Mascom Botswana is excluded from sustainability and Carbon Disclosure Project (CDP) reporting on the basis of indirect ownership holding.
- For CDP reporting, MTN Yemen and MTN Syria have been excluded due to energy and greenhouse gas data collection challenges associated with network management in the context of the broader macro-political situation. Some MTN Group head office services are undertaken in United Arab Emirates, Dubai in leased office premises, and are deemed immaterial for CDP reporting.

Integrated reporting

This report provides more information to our stakeholders regarding some of the environmental, social and socio-economic material risks, opportunities and performance set out in the MTN Group Limited integrated report (31 December 2017). It is aligned to our business strategy, which seeks to address the experiences of our customers with MTN, and the optimisation of processes, assets and human resources. This report forms part of the group's consolidated integrated reports, which are available at www.mtn.com

Historical reports, policy positions and case studies

Please refer to the document library on www.mtn.com for the group's policy positions regarding material responsible business aspects. Previous years' sustainability reports and case studies on the group's environmental and socio-economic activities may also be viewed in the document library.

Exchange rate

All financial expenditures are reported in South African rand (ZAR), using the average exchange rate across January to December 2017 of ZAR13,35:USD1 (2016: ZAR14,63:USD1).

Reporting changes since 2016

- Reporting methodology: Scope 3 greenhouse gas (GHG) emissions from network sites managed by IHS Holdings in Cameroon, Ivory Coast, Nigeria, Rwanda and Zambia were previously calculated based on actual monthly diesel and electricity consumption data. Following the group's changes to its investment stake in the IHS Group in 2017, IHS is no longer able to supply actual data. In line with the GHG Protocol's principles of completeness of reporting, we have therefore developed an estimation methodology, based on the Protocol's average data approach, to account for these emissions. The method makes use of the average historical monthly energy consumption data and the historical average number of network sites per month to help MTN approximate the average energy consumption value per network site per month. This value is then multiplied by the number of network sites each month, to estimate the total monthly energy consumption for all network sites. This method ensures comparability of reported results in previous years, as recommended by the GHG Protocol. Going forward, this methodology will be reviewed and refined where possible as MTN works with our tower management partners and suppliers on the provision of actual data as required for disclosure of the group's Scope 3 emissions.
- Reporting inclusion: energy and Scopes 1 to 3 GHG emissions for operations in South Sudan have been included in 2017 reports.

Stakeholders

This report has been created for stakeholders that have shown the most interest in MTN's management of its sustainable business responsibilities, and include regulatory authorities, investors, shareholders and analysts, civil society, advocacy and activist organisations, current and potential customers, the media, suppliers and our employees. Please refer to the sections on how we create value and the relationships on which we rely in the group integrated report for more information.

Sustainability standards and reporting

We use a combination of South African and global standards, protocols and guidelines to report on how we address responsible business performance. These include the following reports available on the sustainability and integrated report sections of our website:
- King Report on Governance (King IV).
- United Nations Global Reporting Initiative (GRI 4). **UN GRI4**
- Carbon Disclosure Project (CDP) report. **CDP**
- United Nations Global Compact. **UN GC**

This year we have also attempted to demonstrate how some of our business activities support the aims of the United Nations Sustainable Development Goals (SDGs).

Data collection approach

Reports are compiled using information sourced from a variety of internal reporting, data management and storage systems. Oracle information systems, network management systems, social and ethics, risk and other management and committee reports, and the results of annual surveys are some of our key sources of data. Secondary data is obtained from external sources including industry specific and sustainable business research reports, benchmark surveys and assessments of MTN's sustainability performance undertaken by external organisations.

Approvals

This report has been approved by the Group's Social and Ethics Committee, a subcommittee of the MTN Group board.

Online reports

GR	Governance report	**SH**	Stakeholder engagement table
AFS	Annual financial statements	**CDP**	CDP report
TAX	Tax report	**UN GRI4**	UN GRI 4 report
SE	Social and ethics report	**UN GC**	UN Global Compact report

Other icons

🌐 www.mtn.com/en/investors/Financial-Reporting/Integrated-Reports/pages/default.aspx

LA Limited assurance obtained

We welcome feedback on this report at sustainability@mtn.com

All about MTN

Who we are

MTN is a pure-play emerging markets mobile telco operator at the forefront of technological and digital changes. From our headquarters in Johannesburg and guided by our values, we are delivering a bold, new digital world to our 217 million customers across Africa and the Middle East – one of the world's fastest growing regions for mobile telecommunications.

Established in South Africa at the dawn of democracy as a leader in transformation, we have grown rapidly by investing in advanced communication infrastructure and by harnessing the talent of our people. We now offer voice, data and digital services to retail customers in the 22 countries in which our operations have telecoms licences. We also offer enterprise solutions to corporate and public sector customers in a total of 24 countries. Our brand is among the most admired brands in Africa as well as among the most valuable African brands.

With a market capitalisation of R257 billion at the end of 2017 we were the ninth largest company listed on the Johannesburg Stock Exchange.

Our belief
Everyone deserves the benefits of a modern connected life.

Our vision
To lead the delivery of a bold, new digital world to our customers.

Our purpose
To make our customers' lives a whole lot brighter.

Values that drive us

Relationships
Innovation
Integrity
Leadership
Can do

Vital behaviours that shape our culture

Complete accountability
Get it done
Active collaboration
Complete candour

Our approach to sustainability

Vision and focus areas

MTN's sustainability vision is to protect and create shared value for our company and our stakeholders through environmentally and socially responsible core business practices. To achieve this vision, we structure our implementation efforts by adopting a materiality-based approach. This allows us to focus our efforts in the following ways:

- Creating sustainable economic value by responding to the need to ensure digital inclusivity, supporting the growth of enterprises in our markets, and developing Internet of Things (IoT) solutions that transform natural, economic and social environments.
- Taking responsibility for our environmental impacts.
- Contributing to vibrant, successful communities in our markets by addressing matters of good governance and ethics such as anti-bribery, digital human rights, safe, healthy and supportive workplaces, and working with business partners who also wish to enhance their positive social and environmental impacts.

Governance

The MTN Group's Social and Ethics Committee, a subcommittee of the MTN Group board, dedicates standing attention to sustainability considerations, policies, risks, opportunities, ethics, innovation and creation of stakeholder value within the business's operating context. This responsibility is formally set out in the committee's terms of reference. At quarterly meetings ethics, sustainability, stakeholder, reputation management and corporate social investment (CSI) reports are presented, ensuring that the MTN Group's Regulatory and Corporate Affairs Officer accounts for the business's sustainability risks, opportunities and performance. In 2017, the Group Human Resources Officer was responsible for MTN's ethics management programme. This ensures that sustainability requirements are driven by and within core business functions, and integrated within planning and management cycles. Sustainability, stakeholder relations, issues management and CSI functions are implemented by dedicated functions within the group regulatory and corporate affairs department, which is managed by the Group Regulatory and Corporate Affairs Officer. Within our operations, stakeholder relations and CSI functions are managed by regulatory and corporate services departments. Sustainability functions are fulfilled by corporate services and by other functions including networks and information technology, facilities management and others as required. Matters of ethics are managed by the senior manager for ethics, reporting to the Chief Human Resources Officer and the Group's Social and Ethics Committee.

Materiality

Material issues refer to those aspects that have an impact on our ability to remain commercially viable and socially relevant to our stakeholders. The material issues important to MTN's sustainability are determined by reviewing the issues most important to our stakeholders, and the impact of these issues on the achievement of our business objectives. Material issues are prioritised according to the scale and nature of impact on business operations, economic performance and interests of our stakeholder groups.

The sustainability standards set out in the previous section, along with guidance from reports, publications and work efforts of organisations such as the United Nations, GSMA and ITU are used to structure our integrated reporting framework.

To determine the issues most material to MTN's sustainability, the following sources are considered:

- Feedback from all stakeholders who review the annual sustainability report.
- Engagement with all stakeholders through the e-mail addresses sustainability@mtn.com; investor.relations@mtn.com; MTNGroup. PressOffice@mtn.com; csi@mtn.com; e-mails to executives or other addresses, calls and other forms of communication.
- Information gained through engagements with regulatory authorities, media organisations, civil rights groups, community-based organisations, our customers, and general members of the public.
- Feedback from engagements with the JSE SRI, the CDP, MTN's investors and analysts, and research organisations that consult us or assess our responsible business performance.
- Information from third-party questionnaires and assessments of our publicly reported performance by universities and other third parties independent of MTN.
- Results determined from analysis, internal review and research processes including industry, peer and global developments, and issues, risk and audit management processes.

Issues identified through this process are assessed during internal materiality reviews. These issues are reviewed by the executive and the Group's Social and Ethics Committee. We undertake this review periodically to ensure that

we are responsive and can adapt to changing operating conditions.

Having considered the material issues, our material sustainability issues of focus for 2017 are set out below.

Importance to stakeholders (vertical axis: Low, Medium, High)
Material impact on MTN's objectives (horizontal axis: Low, Medium, High)

Plotted items:
- Ethics and anti-corruption
- Service access and quality
- Customer experience
- Digital human rights
- Digital inclusion
- Economic performance
- Internet of Things
- EMF
- Energy and climate
- Labour rights
- Health and safety
- CSI
- Talent
- Supply chain
- Green Offices and e-waste

Legend: ■ Sustainable economies ■ Eco-responsibility ■ Sustainable societies

Issue				
Ethics and anti-corruption	IR	SR	UN GRI4	UN GC
Access and quality	IR	UN GRI4		
Digital human rights	IR	SR	UN GRI4	UN GC
Economic performance	IR	SR	UN GRI4	www.mtn.com
Digital inclusivity	SR	UN GRI4	www.mtnbusiness.com	
Internet of Things	IR	SR		
Customer experience	IR	UN GRI4		
Talent	IR	UN GRI4	UN GC	

Issue					
EMF	UN GRI4				
Energy and climate	IR	SR	CDP	UN GRI4	UN GC
Health and safety	SR	UN GRI4			
Labour rights	IR	SR	UN GRI4	UN GC	
CSI	IR	UN GRI4	www.mtn.com		
Supply chain	UN GRI4	www.mtn.com			
Green Offices and e-waste	SR	UN GRI4	UN GC		

Group President and CEO's message on sustainability

- The digital revolution is transforming how people live, work and connect, and these changes are exciting but also create social and regulatory uncertainty.

- MTN is embracing the potential of disruptive digital solutions, as we believe this can accelerate realisation of many UN Sustainable Development Goals (SDGs).

- MTN's expertise, infrastructure, investments and co-operative partnerships and relationships enable the delivery of digital solutions and programmes that enhance people's living environments and socio-economic status.

Digital technology transforms lives

Rob Shuter, *Group president and Chief executive officer*

We are working hard to ensure our customers can enjoy the dividends of the digital age.

Q **What are the broader global trends that are impacting how MTN is creating sustainable value?**

A We are in the midst of a fast changing and exciting digital revolution. This era of disruption is only going to get better or worse, depending on which side of the fence we choose to sit. Every day, people around the world are working together, harnessing the power of digital technology to generate ideas and innovative solutions that address some of the world's greatest challenges which include access to food and water, climate change, health, poverty, quality education and unemployment.

Daily we wake up to news of amazing breakthroughs in technology and ideas that can lead to exponential growth and progress. Concepts such as cryptocurrencies, crowd sourced innovations, 3D printing, artificial intelligence, big data and the Internet of Things (IoT) are particularly inspiring for us at MTN, as these open up a world of wonderful new opportunities for industrial and economic ecosystems, and for human development.

As the digital economy evolves, these opportunities are also forcing new ways of thinking around how people's spaces and assets are used, how people interact and what talents are needed in the data age. Transformative developments are exciting, but also bring about social and regulatory uncertainty. We are witnessing increased barriers and digital 'borders' created around the internet. Growing cybersecurity and other risks have spurred authorities to enhance oversight and governance of the internet, which places their position at odds with society's demands for online freedoms. Traditional industries such as travel, accommodation and healthcare provision, among others, have been severely disrupted by the sharing economy. New job roles such as

social media managers, Uber drivers and drone operators have emerged, creating new career paths for people, while also raising questions about job security and traditional employment benefits in the 'gig' economy.

At MTN, we have chosen to embrace these developments by looking positively to the future. The number of internet users in Africa has almost doubled over the past four years and is expected to increase even more. As the leading mobile operator in emerging markets, we constantly seek out opportunities to connect people with technology, crafting bespoke digital solutions to make life easier, more meaningful and brighter for our 217 million customers across Africa and the Middle East. With low levels of internet adoption and lack of widespread access to financial and other services, coupled with the ongoing demand for mobile connectivity, we believe there is ample opportunity for MTN to help our customers benefit from better, cheaper and more reliable access to digital information and services.

Q What does sustainability mean for MTN?

A The digital world transforms lives. As the leading player in many of our markets, MTN has the expertise, infrastructure, investments and relationships that can support programmes that enhance people's living environments and socio-economic status. For us, sustainability is about protecting and creating shared value for MTN and our stakeholders via environmentally and socially responsible core business practices.

Co-operation and partnerships that help us accelerate the pace of development and overcome some of the scale, scope and complexity challenges that society faces are key. We have begun to look at our work through the lens of the United Nations' Sustainable Development Goals (SDGs), assessing where we can play a meaningful role. For instance, we are actively supporting Africa's cashless economy drive by offering mobile financial services in 14 countries, and we would like to see up to 60 million people actively accessing financial services using MTN Mobile Money within five years. Mobile financial services such as credit and transactional services, and micro-insurance support a number of UN SDGs related to extreme poverty elimination, and the development of businesses and economies. For instance, in Guinea-Bissau we have partnered with the World Food Programme to ensure that beneficiaries receive MTN Mobile Money payments easily and transparently on their handsets, while in Zambia and Ivory Coast, solar-powered solutions are extending trading hours of micro-enterprises and increasing commissions earned by mobile money dealers, while addressing the energy access deficit experienced by more than 1,3 million MTN customers.

Our solutions help communities access advice and assistance on health, education, energy, agriculture and many more vital services. In Rwanda, MTN customers can use their mobile phones to place orders for life-saving medicines to be delivered in remote areas using drones. Digital solutions also assist communities to mitigate and adapt to environmental impacts. In Nigeria, we work with cattle owners and veterinarians to track the movements of livestock, enabling identification and validation of ownership, as well as disease control, and support for international beef exports. In South Africa, where water scarcity is a reality, we are trialling low-power solutions that will help industries control water flows and identify leakages.

Q How did MTN ensure a sustainable impact in 2017?

A There are a number of meaningful solutions that we executed, and of which I am particularly proud. Highlights include tackling mobile money fraud in Uganda, reducing the cost of communication in a number of our markets to improve internet accessibility, and specifically focusing on the needs of various small and medium-sized enterprise customer subsegments, in support of their role in creating jobs and spurring economic growth. I am also exceptionally

Group president and CEO's message
on sustainability continued

Group president and
CEO's message on
sustainability

pleased at our early, promising efforts to support innovative startups, and women and youth in businesses.

We increased the number of co-operative partnerships we maintain with local authorities, social enterprises, international agencies and our competitors and vendors, to tackle environmental challenges such as the responsible management of electronic and electrical waste. We continued to listen actively to our customers and to issues raised by our stakeholders on a number of matters, in order to improve our impact.

Q **What are some of the key challenges which you foresee that may affect MTN's sustainable impact, and how are these being addressed?**

A This is always a difficult question, as some impediments to the growth of digital inclusion and sustainable impacts are rooted in structural industry constraints, such as access to sufficient radio spectrum to enable service rollout, energy shortages or the cost of capital needed for infrastructure rollout. Other challenges include an increasingly uncertain regulatory, economic and competitive environment, and the need to ensure communication costs are more affordable.

However, our BRIGHT strategy, outlining six strategic pillars, has focused us on the areas needed to build our business sustainably. This includes paying attention to the experiences that our customers have with MTN and enhancing our data and digital service offerings while ensuring technical excellence, among others. More information about BRIGHT is available in the group's integrated report.

MTN has a long-term commitment to successfully collaborate with a diverse group of stakeholders – governments, communities, international agencies and vendors across our ecosystem – to identify and deploy innovative solutions designed to tackle broad societal challenges and improve the way our customers work, play and live. We believe that this approach will also help us address some of the challenges we face in striving to make a sustainable impact.

Q **What is the focus for 2018?**

A At MTN we believe that everyone deserves the benefits of a modern connected life. Our goal is to ensure that our products and solutions are tailored to improve the quality of life of our diverse and unique set of customers, no matter where they may be in the world. We are actively focused on ensuring sustainable livelihoods and healthy natural environments in the countries in which we operate.

We have started internal discussions about what the UN SDGs may mean for our business and our stakeholders, and how we may best use our resources to effect change. This process is currently still at an early stage. However, we have already identified a number of our business activities that support the goals, and are working towards integrating this in our project activities wherever possible. A key focus for us remains the cultivation of partnerships that can accelerate the changes needed to ensure meaningful results in the markets in which we operate.

Sustainable economic value

- MTN is actively working to close the digital divide through solutions such as mobile financial services and solar-powered products that power digital communications.

- MTN helps SME businesses grow by using technology as an enabler for efficiency, management and cost control.

- We have recognised the need for a stronger ecosystem to support the growth of IoT in our markets, as this will contribute towards the realisation of a number of UN SDGs.

Sustainable economic value continued

Sustainable
economic value

MTN's solutions contribute to, and enable, digital dividends and developmental outcomes in our markets.

Digital dividends or socio-economic and developmental benefits from information and communication technologies (ICT) are starting to materialise in the markets in which we operate. Mobile technology generates 6,7% of GDP in Africa (GSMA, 2015). However, only 18% of African households have internet access compared to 53,6% on average globally (International Telecommunications Union, 2017).

We are dedicated to improving mobile connectivity, accessibility and affordability with a range of solutions aimed at the needs of various market segments including the underbanked community, youth, women, micro- and emerging enterprises, and large organisations. Our solutions support a number of the UN's SDGs.

Supporting UN SDGs

Objectives	Progress	Results
Drive deeper access to mobile financial services in MTN markets	◔	Extended the number and types of partnerships that can drive valuable services and solutions to daily challenges in cash-based economies
Improve access to and affordability of mobile internet	◔	Data costs have been reduced in a number of MTN markets, and we continue to work on solutions that will enable further reductions. Connectivity to rural and underdeveloped areas continues
Support national economic growth by serving the ICT needs of various small and medium enterprise (SME) subsegments more effectively	◔	Analysed SME subsegments in various MTN countries, and developed custom products, capacity-building programmes and dedicated engagement channels that helps them grow their businesses

Legend

✅ Completed   🔵 In progress: on schedule   ⚠️ In progress: behind schedule   ❌ Not achieved

Digital inclusion: Mobile financial services

Mobile financial services

Mobile financial services are digital solutions for receiving payment and purchasing products, transferring money, transacting with governments, businesses and peers, and enabling savings and access to credit and insurance services using mobile handsets. MTN Mobile Money and financial services are available in 14 countries. GSMA studies indicate the demand for access to financial services is so significant because there are more registered mobile money accounts in sub-Saharan Africa than bank accounts. With Africa striving towards operating as a cashless society, MTN aims to be the largest provider of mobile financial services in Africa.

Supporting UN SDGs

Challenge

Over 66% of people in sub-Saharan Africa do not have access to formal banking and financial services, which includes basic transactions, savings and credit facilities. Numerous studies indicate that simple, affordable and convenient access to financial services improves development outcomes and enables economic growth.

Solution

MTN Mobile Money and digital financial services are successfully bridging this gap, by providing sustainable, easy, convenient and secure mobile solutions to unbanked and under-banked people. MTN Mobile Money provides users with a simple, safe and inexpensive means of transferring and saving money and allows convenient payment services. This includes ensuring people can pay school and university fees, buy airline, rail and public transport tickets, purchase fuel and pay for taxi services, enjoy access to social security, settle utility, parking and other bills and transfer money locally and internationally. Our products also include savings, micro-loan and micro-insurance services. In some countries, subscribers can also use MTN's zero-rated Mobile Money application (app) for more convenient transactions without the need to dial a long set

of digits in order to access various services. Security is assured through the app's ISO 27001:2013 certification.

2017 activities and results

MTN Mobile Money has 21,8 million active subscribers. We are continually increasing the coverage and types of services offered in our operations, including in remote areas where the digital and financial services divide is often the greatest.

We worked to expand our offering of innovative mobile financial services. Our efforts spanned a number of countries. We focused on numerous areas for expanding the utility of mobile money. This included the addition of high interest-bearing savings accounts and loans, increasing access to micro-insurance, ATM cash deposits and withdrawals, collecting and disbursing retirement and other grants, enabling customers to 'tap-and-go' by paying for transactions using their cellphones, and enabling mobile payments for water and electricity services, parking fees and subscriptions.

New partnerships and solutions

In Ivory Coast, MTN is actively working to offer a range of innovative mobile financial services for example through the launch of MoKash, the first ever fully digital savings and lending product in Ivory Coast. Following approvals from the Central Bank of Africa (BCEAO), we will now be able to offer additional services. This supports the regional strategy for financial inclusion which is being advocated by BCEAO, and extends our offering of a number of transactional and payment services including wage and toll fee payments, remittances and more, through thousands of distribution points. These services are convenient, secure and simple, enabling cashless transactions in the country.

Partnerships to enable connectivity, interoperability and ensure large scale and impactful solutions are fundamental in the mobile money ecosystem. MTN Ghana and Fidelity Bank are working together to offer the **Y'ello** Savings account, a high interest-bearing savings account. MTN and Afb Ghana also launched Qwikloan, a fully digital loan to help customers access capital, using their Mobile Money accounts, to enhance their businesses. The service is aimed at over one million customers in the informal sector, and ensures affordability by limiting the number of loans

Digital inclusion: Mobile financial services continued

customers can take within a day or a week. Mobile lending via MTN Mobile Money is also available in Uganda and Zambia, and pilots are planned for other countries.

In Rwanda we worked with the Commercial Bank of Africa to launch MoKash, enabling Mobile Money users to save, earn interest and obtain short-term financing. As in other countries, an agreement between MTN Rwanda and Canal+ now also allows customers to pay for their satellite television subscriptions using MTN Mobile Money. We were also pleased to have recently entered into an agreement with the Kigali Veterans Cooperatives Society, which is responsible for the collection of parking fees in Kigali, to enable acceptance of instant mobile money payments, ensuring convenience and ease of access to services used by motorists. Taxi Moto customers can now also pay their fares following an agreement between MTN and Yego Moto. Our partnerships with Cogebanque and with Amasezerano Community Bank now enables our customers in Rwanda to deposit and withdraw money using MTN's push (to transfer) and pull (to withdraw) service, from ATMs and their MTN Mobile Money wallets.

MoMoPay was launched in Benin, Cameroon, Ghana, Ivory Coast, Rwanda, Uganda and Zambia. This tap-and-go service allows pharmacies, petrol stations, travel companies and transport services to accept payments for their goods and services from customer handsets, and ensures merchants can pay their suppliers and their employee salaries also using mobile phones. Bank transfers are also facilitated. In Benin, the service is used by Zemidjan motorcycle taxis and urban taxis, for instance, allowing cashless, easy and secure contactless payments for transport services.

In Sudan, MTN in partnership with the Nile Bank launched a mobile cash service. This will enable users to perform money transfers, purchase electricity and pay bills and government fees using their handsets. Users in Liberia can now pay their taxes using MTN Mobile Money. MTN Zambia has launched a 'Bank for Free' partnership with Stanbic Bank. Stanbic accountholders who are also MTN subscribers can access the online banking portal and Stanbic websites without reducing their available data bundles. This digital connection also improves remote access, reducing the need for people to go into bank branches to transact.

MTN Mobile Money ensures that social aid can be facilitated a lot easier.

MTN's Mobile Money platform facilitates payment of social welfare grants for orphaned children and allowances to the elderly in Swaziland. In Uganda, MTN and the National Social Security Fund (NSSF) have begun working together to ensure individuals, small and medium entities can now pay their NSSF contributions using MTN Mobile Money. This offers ensuring a way for people to save for their retirement needs conveniently. In Guinea-Bissau, the World Food Programme's feeding scheme disbursements to beneficiaries is facilitated by MTN Mobile Money.

Remittances
Foreign remittances remain a significant source of investment and income in many of our markets. With MTN's participation in 28 digital remittance corridors in multiple countries and regional blocs, we leverage our mobile infrastructure and partnerships to enable cross-border transactions. For instance, MTN and EcoCash recently signed an agreement to enable remittances between Zambia and Zimbabwe.

Micro-insurance
Coping with the costs of accidents and losses is a challenge to low-income segments, and their vulnerability impacts their economic resilience, resources and daily living conditions. A relatively minor traffic accident can result in the loss of income to motorcyclists and taxi services, and a small medical emergency by a parent may result in the immediate prevention of children to attend school due to their inability to pay school fees.

MTN and aYo offer two solutions to reduce such risks for vulnerable households. 'Recharge with Care' offers subscribers the option of free hospital or life cover, which increases the more subscribers recharge their airtime packages. Subscribers can also boost their cover by purchasing additional cover using their airtime and available MTN Mobile Money balances. 'Send with Care' enables

Digital inclusion: Mobile financial services continued

Lonestar Cell MTN empowers female market agents

Lonestar Cell MTN launched a campaign supporting female market agents, most of whom do not have access to banks, and may therefore face additional hurdles in transacting, saving and remitting funds. The aim of this campaign is to empower females, who are often the breadwinners, by enabling their financial inclusion and supporting educational requirements. By completing a minimum of 20 transactions monthly valued at LRD1 500 (approximately R137), and submitting proof of previous educational fee payment for one of their dependants, agents qualify for educational assistance to the value of LRD2 000 (approximately R183). Female agents are also incentivised to recruit other female merchants, with a payment of approximately R60.
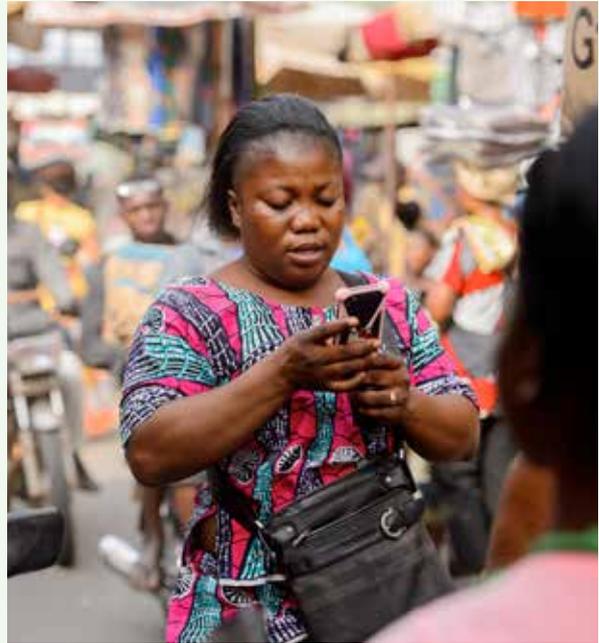
subscribers to ensure their immediate families can receive full life and accident hospitalisation cover to the value of three times the remittance amount, for a period of 120 days. Focus group and interview study results indicate that customers appreciate these solutions, and testimonials reveal the positive difference it has made when people were compelled to use cover for example, to meet their hospitalisation requirements.

MTN Swaziland and Old Mutual Insurance offer MTN Mobile Money customers free funeral assistance.

Tackling fraud

Incidents of fraud are common in financial services, and the effects of these were particularly notable in Ghana. MTN Ghana worked closely with authorities and other mobile operators to introduce an agent registry that will blacklist mobile money operators who have committed fraud. A 'Cash Out' feature was also introduced, allowing customers to opt out of transactions with agents prior to initiation and completion. Judges and police are being trained on how the mobile money system works and how customers may be defrauded during transactions, which will help inform prosecutions and judgments. Police services also assist in screening people who apply for mobile money agencies, while agents

who commit fraud are sanctioned by MTN. Transaction monitoring and tracking systems, customer helplines and education campaigns, and system audit trails further ensure that MTN provides as secure a service for our customers as possible.

Interest payments on MTN Mobile Money accounts

In Ghana, a number of MTN's Muslim customers expressed concern about automatically receiving interest payments on positive MTN Mobile Money balances, due to religious considerations. MTN Ghana worked with communities to understand these concerns. Customers can now opt out of interest accruals, selecting USSD options on their handsets to instruct MTN accordingly. The interest they would have earned will be invested by MTN into community projects.

Looking ahead

Our ambition is to become the largest provider of mobile financial services in Africa, with 60 million active MTN Mobile Money customers within the next five years. By working in partnership with a number of organisations and stakeholders, expanding our network of agents and rolling out Mobile Money kiosks, we believe MTN is well positioned to support the drive for cashless economies in Africa.

Digital inclusion: Powering communications

Powering communications is MTN's solution to the challenge of energy access, affordability and reliability in many of our markets. This issue hampers the inclusivity of digital communications and the widespread growth of digital connectivity services. Access to prepaid solar mobile services ensures affordable device charging solutions to those with limited access to power sources. These initiatives are largely in support of our retail and small enterprise customers, community service organisations such as healthcare facilities and schools, and MTN Mobile Money agents.

Supporting UN SDGs

Challenge

The lack of access to energy in many countries in which we operate impedes the growth of digital communications, connectivity and inclusivity. According to GSMA, more than 640 million Africans live off the energy grid and over one-third live in 11 MTN markets. However, over 600 million of these individuals have access to mobile devices. The cost of energy, infrastructure and accessibility to reliable power are critical issues in these countries. Availability, convenience, service utility requirements and affordability dictate a choice between using kerosene and paraffin lamps and candles, disposable and car batteries, and diesel generators. These options can be highly inefficient, dangerous and sub-optimal for daily living requirements, are harmful to the environment, and exacerbate pollution and climate change issues. In addition, governments have been increasing taxes on diesel, grid power and kerosene, resulting in increasing unaffordability of basic power by many communities.

Governments face the challenge of meeting the UN's SDGs 7 and 13 without the provision of basic, environmentally friendly utility services. MTN faces the challenge of growing the market for basic and value-added services (VAS) in the

absence of charged mobile devices. Our ambitions for growth, deepening customer and dealer relationships and attracting and retaining new customers are aligned with the SDGs.

Solution

MTN is assisting home users and micro-enterprises to overcome some of these challenges through the provision of pay-as-you-go or prepaid mobile solar energy systems. This involves a basic lease-to-own solar microgrid solution, with capacity starting from 10 watts, which can be used to charge LED lightbulbs, cellphones and other mobile digital devices, televisions, radios, and shaving machines. Customers can also extend their products by purchasing additional solar panels and selecting from an increasing range of electronic and electrical devices and accessories. Some solutions may even charge TVs so that users can access on-demand content such as educational programmes.

Our prepaid mobile energy solutions comprise one or more solar panels of between 10 watts and 80 watts, connected to a battery and control unit, with USB and cigarette charger-type ports, and accessories including LED bulbs and mobile phone chargers. The solutions are available in various sizes and price ranges. These are configured to meet the needs of two segments of customers namely small office and home users, and micro-enterprises (independent entrepreneurs and MTN Mobile Money dealers).

Our customers are predominantly based in rural and semi-urban areas, head up households and are largely self-employed or operate small businesses. These solutions have enabled multiple socio-economic benefits to individuals, farmers, businesses, public services and communities. Home users typically require prepaid solar solutions for lighting, cellphone and computer charging, and for charging radios and televisions. Small businesses also benefit from these products. In addition to charging these devices for customers for a fee, MTN's solar-in-a-box solution offers additional revenue streams to entrepreneurs such as from haircuts and shaving services using the shaving accessory, and access to MTN Mobile Money services. Entrepreneurs also use this to power their own businesses, enabling them to trade for longer hours during the evening. Healthcare facilities, community centres and schools are also keen users of our prepaid solar mobile solutions.

Digital inclusion: Powering communications continued

Affordability and pricing of these solutions are critical components of ensuring widespread access to prepaid solar mobile energy. Customers purchase our products by placing a deposit on the unit purchased, then paying the unit off over time through incremental MTN Mobile Money or mobile airtime credit payments, on a lease-to-own basis. The pay-as-you go payment model is proving to be more affordable for our customers than requiring full payment upfront. Payments are spread over a five-year period, allowing customers sufficient time to pay off their units. We have also found that, through this payment model, a number of our customers have been able to afford upgrades to their products by purchasing additional accessories, or new units with higher power output, over time.

Solar power is highly cost-competitive with other energy sources. In Nigeria for example, the cost of charging is approximately NGN50 per day (approximately R5,00), compared to an average cost of NGN1 600 per day (based on eight hours a day) or R53,33 a day for other sources of energy.

MTN's prepaid solar power solutions are offered with our product vendors and in some cases with local or national governments and microfinance institutional partners offering Mobisol, ReadyPay, Greenlight Planet and Lumos solutions in Benin, Ivory Coast, Nigeria, Rwanda, Uganda and Zambia.

We estimate that more than 1,3 million people are currently benefiting from MTN's solar charging solutions.

For our stakeholders, these products help close the digital and energy access divide, improve financial inclusion and access to economic and other opportunities, help avoid greenhouse gas emissions and reduce fire and air pollution risks from the use of kerosene and candles. For MTN, such solutions are critical components of our revenue and business growth and ensure that we meet our objective of deepening digital inclusion.

2017 activities and results

In 2017 prepaid solar lighting and charging solutions Lumos was launched commercially in Nigeria and Ivory Coast, and ReadyPay in Zambia (with ReadyPay pilots planned in Ivory Coast).

Studies by product vendors and the GSMA indicated that prepaid solar energy solutions enable small businesses to operate and trade for up to three additional hours per night, and assist children to study for between two and three hours at night as well. Prepaid solar energy generates income, creates jobs, powers clinics and community centres and can reduce the risk of fires and air pollution from other flammable or dangerous fuel sources.

Results of MTN's partnerships with solution vendors to address the need for access to affordable and clean energy in some countries are outlined below.

In Uganda, Fenix's ReadyPay solution has been available commercially since 2013. ReadyPay was also launched in Zambia in 2017, at an entry cost of US$190 (approximately R2 268). Economic and social impact studies in both Uganda and Zambia highlight the following results:

- Number of units sold: **169 935**.
- Number of end-users (based on an assumption of six people per household): **1 105 860**.
- Number of small enterprise customers: **30 625**.
- Average user fuel cost savings per day: between **US$0,15 (R1,79)** and **US$0,29 (R2,46)**.
- Estimated number of households where students use system to study at night: **147 600**.
- Estimated greenhouse gas emissions avoided: **3 613** tonnes.

ReadyPay was launched in Zambia in late 2017 and is already proving to be a success. Approximately 5 000 customers purchased the product within the first month of the launch, exceeding the target of 2 000.

Lumos was launched in Nigeria in 2017 at a cost of NGN10 000 (approximately R331), payable over a five-year period. Just over 81% of customers surveyed in 2015 reported a reduction in their energy costs as a result of the use of Lumos. Results to date have shown a significant impact on Nigerian customers. In 2017:

- More than **73 000 customers** purchased Lumos, including **118 dealers**.
- Over 300 000 people currently enjoy access to electricity as a result of their use of Lumos.
- When fully charged, Lumos can power lights, cellphones, fans, computers, televisions and other electronic devices (all at once, every day) for as **little as NGN150 per day** (approximately R4,97).
- Approximately **50 dealers** currently offer community charging services using MTN Mobile Money solutions at present, and over **20 000** mobile payment transactions are processed each month.

Digital inclusion: Powering communications continued

- Estimated greenhouse gas emissions avoided: more than **30 184 tonnes** based on 73 000 units.

Lumos was also launched in Ivory Coast in November 2017, and early results have been promising. It is estimated that only 40% of Ivorians are connected to the national electricity grid. The solution is available in MTN stores across the country.

Mobisol home and business solar solutions have been available to customers in Rwanda since 2014. A new development in 2017 offered Mobisol and MTN Rwanda's customers the option of purchasing high-quality smartphones on an affordable instalment payment plan. Customers are also able to enjoy access to free data bundles over the period of the loan.

In Sudan, MTN and the Regional Centre for Renewable Energy and Energy Efficiency (RCREEE) signed an agreement to offer prepaid solar energy on a pilot basis to domestic households. RCREEE is funded by the African Climate Change Fund. MTN Sudan will facilitate payments for prepaid solar energy via MTN Mobile Money.

Environmental impact and waste management

Prepaid solar mobile energy systems replace dangerous, noisy and polluting systems with clean, renewable solar energy. While statistics on avoided fires and air particle emissions are unavailable, anecdotal feedback from some of our customers indicated their relief at being able to replace kerosene and candles for some of their energy requirements, especially for their children's need for lighting during study periods.

An estimated greenhouse gas of 3 613 metric tonnes of GHG emissions have been avoided in Uganda and Zambia, and 30 184 tonnes in Nigeria in 2017.

We are also concerned about the waste electronic and electrical (WEEE) products that may be generated, along with plastic and other components of the solutions. We have commenced discussions with some of our partners on long-term solutions to address this matter. Fenix, for instance, is already working on solutions which include the repair and refurbishment of old or faulty units to extend the useful lives of assets such as batteries and solar panels, and the refurbishment and recycling of hardware at local service centres. ReadyPay is powered by lithium iron phosphate batteries, which have a longer lifespan compared to sealed lead acid batteries. Solar panels are expected to last more than 10 years. ISO 14001 certified disposal companies are contracted to assist with management of ReadyPay waste outputs. ReadyPay's product development team is also assessing solutions for complete paper-based packaging, and is actively sourcing recyclable plastics and electronics for use in product lines.

Both MTN and our partners are searching for more rigorous recycling programmes and waste handlers with whom environmentally responsible solutions can be implemented.

Looking ahead

The challenge of powering communications is of considerable importance to both MTN and our stakeholders. Inclusivity of digital communications is reliant on charged devices. With its strong link to mobile financial services and digital solutions, which are a fundamental aspect of MTN's BRIGHT strategy, we are working on the partnership and implementation plans to ensure these critical and intricately linked components of MTN's sustainability strategy are set up for success and expansion.

MTN will continue to explore potential solutions to enable people to access clean, affordable, environmentally friendly sources of power. For example, MTN Nigeria's target is to ensure one million Nigerians can access mobile solar electricity services nationally, and we aim to have an additional 150 000 Lumos customers in 2018.

Digital inclusion: Other solutions transforming lives

In ensuring that MTN's sustainability vision of creating shared value for ourselves and our stakeholders is achieved, we strive to understand what is important to some stakeholders who may be traditionally thought of as outside our direct line of business or comprise subsegments of our main stakeholder groups for example women and children. Digital innovations and mobile connectivity have laid the foundation for technologies such as mobile health, mobile education and others to transform the mode and quality of public service delivery on a massive scale. It also has the potential to promote inclusion for disadvantaged or marginalised groups such as women and disabled individuals.

However, the incorporation of these technologies into current health, education and other platforms is fraught with challenges which include aspects related to language and curriculum standardisation, affordability and access to network connectivity, among others. We have been working on addressing the needs for such solutions, within these constraints, at a country level.

Supporting UN SDGs
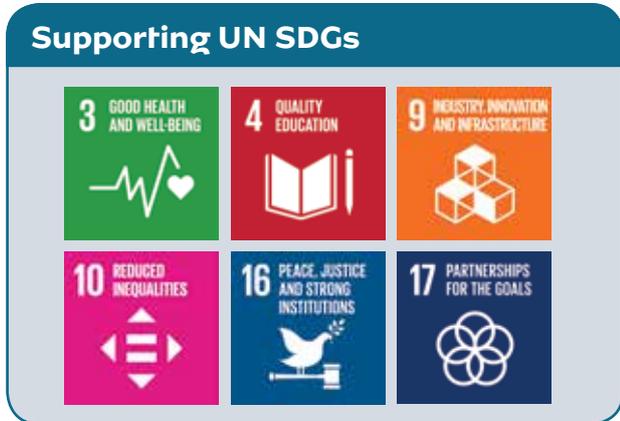
2017 activities and results

Our focus during 2017 has been strengthening our understanding of how to ensure widespread and effective incorporation into current systems of the types of solutions that can help close the digital and socio-economic divide.

MTN operations maintain awareness of local challenges that may be addressed through digital solutions, and have developed a number of partnerships or offered mobile solutions structured to meet daily needs.

We spent time researching the needs of various industry and customer segment verticals and are now developing plans to address some of the challenges inherent to this important development area. We continue to work with stakeholders both inside and outside of the traditional MTN subscriber base, such as governments, social enterprises, healthcare providers, civil society organisations and others, to explore new areas of need and to support relevant initiatives. Therefore, although we launched some mobile solutions during the fiscal year, our focus was on researching the solutions that are most suitable to the markets in which we operate and planning how best to deliver those solutions in a large-scale, coherent manner.

mHealth

MTN's digital inclusion technologies are currently available in a number of our operating countries. During the year we launched new and renewed existing initiatives for mHealth services in two areas. The first is connecting individuals to the healthcare services and information that they need, when they need it. The second area provides technological standards for users with disabilities.

We renewed our partnership with UNICEF to provide Ghanaians with essential information about health and social issues. The initiative was established in 2015 to alleviate the anxiety of Ghanaians during the outbreak of Ebola and cholera. Through a digital platform known as Agoo, Ghanaians have had the opportunity to call and receive responses to their queries in critical moments during health epidemics. Now, over 2 000 calls are received per day, providing information to over 725 000 callers per year. The renewal of our partnership with UNICEF and Agoo in 2017 enables us to offer assistance on broader social issues such as counselling for youth, how to protect oneself from violence and tips on leading a healthy lifestyle. The service is free for MTN subscribers.

Part of our plan to connect people and communities that might not be digitally connected under normal circumstances is the provision of technological standards for individuals with disabilities. MTN Irancell has become one of the first mobile operators in Iran to implement standards for users with disabilities. An assistive toolbar on MTN Irancell's website provides special services for the blind and hearing impaired. Users can increase the size of the text, change the colour contrast so that the content of the page can be seen more clearly, or choose an audio playback option. MTN Irancell has made it possible for hearing-

Digital inclusion: Other solutions transforming lives continued

impaired subscribers to inform their callers about their situation by activating a service enabling ring-back tones to be played for callers, indicating that the receiver of the call is hearing impaired and requesting the caller to switch to SMS communications. The service is free of charge.

mEducation
Similar to our mHealth launches, we expanded our mEducation initiatives in the two areas of providing access to information and providing technological standards.

An initiative called Mobile Class, an educational service, is now available on MTN's Uganda network. The service connects students to mobile educational information, enabling them to request primary revision questions using a mobile phone. Content covering primary school subjects of English, mathematics, science, social studies, literacy I and literacy II is available, and aligned to the Ugandan primary school curriculum. The service provides an affordable solution for students to actively engage in interactive study content at a cost of UGX2 000 or approximately R7 per day.

In Cyprus we launched an innovative product to assist university and college students. The MTN 4G Broadband-in-a-Box unit plugs into an ordinary electrical socket, saving on time-consuming and potentially costly installation procedures. This enables students to access the internet at home, with no need for a fixed line, at a cost of €29 (the equivalent of R430).

Connectivity, access and affordability
Rural connectivity and the cost of data communications are critical components of bridging the digital divide in our markets. Cellphones are often the primary means by which many people access the internet, but the cost of data for this service is often a barrier to greater use.

Traditionally, developing mobile networks has required the construction of high-powered base stations and significant financial investment, making it uneconomical to service rural, sparsely populated areas in countries such as Rwanda. The Rwandan government's vision of achieving 100% network connectivity is supported by MTN Rwanda and Vanu Rwanda, who partnered in 2017 to address these challenges in a cost-effective manner. The service targets 8% of Rwanda's population. This will enable access to

voice and data services as well as mobile money services. The installation of micro base stations which can operate using solar power can have a transformative effect on rural people's lives, help people in urban areas to connect with their families in rural areas. It also mitigates environmental impacts by avoiding the use of diesel-powered generators.

In South Africa, MTN customers who traditionally use data for simple messaging services such as WhatsApp typically only use up to 5 megabytes (MB) of data per month. Once they had exceeded this limit, out-of-bundle (OOB) charges of up to R2/MB were previously incurred. This meant that simple digital communications were highly unaffordable for millions of people. MTN South Africa responded to these concerns by reducing out-of-bundle data rates to R0,29/MB, for any customer that uses 5MB or less per month for three consecutive months. In addition to the 29 cents pricing, all other MTN customers who use more than 5MB are now charged R0,60 per MB for OOB data. This positive development will largely support the needs of up to 5 million customers who are predominantly located in rural and township areas of the country.

According to the Uganda Communications Commission, nearly 60% of Ugandans have access to a mobile phone, but not all these handsets are connected to the internet.

MTN Uganda partnered with Fero Mobile to launch an entry-level smartphone. The Fero A4100 costs UGX119 000 (approximately R382).

The need for such affordable devices was demonstrated by the fact that over 15 000 handsets were sold in the first two weeks after the launch. MTN Uganda also structured as combined voice and data solution that enables customers to add data to their packages based on their usage, budget and spending habits, supporting the demand for flexibility and affordability of internet access. This solution to a demand for affordable and customer-centric internet connectivity was met with good feedback from customers. MTN Uganda also aims to further reduce data rates in 2018.

Digital inclusion: Other solutions transforming lives continued

To make digital communications more affordable and to improve internet accessibility in Liberia, we introduced an offer of five days of calls for LR0,50 (R0,05) specifically for economically marginalised customers who could not afford to purchase the prevailing offer of three days of calls offer for LRD1 (R0,09). This new offer lowered entry barriers for mobile communication services and ensured they could communicate for an additional two days and at half the price of the previous rates. We also selected five regions that were less economically developed than Monrovia, and lowered the cost of mobile services by offering free SIM cards with five days of calls for LR0,50 (R0,05). In these towns, customers often struggled to afford mobile call costs for a full month. We estimate that at least 250 000 customers may now be able to access more affordable communication costs in these regions. To avoid 'bill shock' when customers receive statements for their data usage that may exceed their expectations in Liberia, we also reduced data PayGO rates by over 58%, to LRD0,05 (R0,005). This rate is available to all our subscribers.

Close to one million customers in Liberia were able to access unconditional free 24-hour calls made via MTN's virtual store in 2017.

With the adult literacy rate of around 47% nationally, a number of our customers were unable to browse through complex Unstructured Supplementary Service Data (USSD) menu-driven product catalogues. Lonestar Cell MTN introduced the first ever voice-based 'virtual store' in Liberia. All Liberians can now dial a short code and select unlimited calling for multiple days for a very affordable price. We introduced free 24-hour calls for 100 000 randomly selected customers using this virtual store. Customers are supported by two virtual shopkeepers, who guide them through the store.

In Iran, MTN also reduced data tariff rates by 50% for the approximately 8,5 million subscribers who use local network traffic solutions. Internet tariffs for local messenger services, used by an estimated 300 000 subscribers daily, were also reduced by over

33%. In Zambia, data bundle prices have been reduced by up to 84% to ensure our customers can afford to access the internet more easily. Headline prices were reduced by up to 15%, and MTN Zambia now offers free Facebook Flex. MTN Zambia also aimed to reduce voice bundle prices by up to 72% in early 2018.

Mitigating impact of currency fluctuations on incomes
The depreciation of the Liberian dollar against the US dollar is affecting the Liberian economy and contributing to the financial hardships faced by Liberians. Liberians face the challenge of large exchange rate fluctuations on a daily basis, leading to challenges in purchasing goods and services for citizens, who may not know the price they will be charged before setting out. MTN Liberia launched an airtime voucher with the option to pay in Liberian dollars rather than US dollars, ensuring people have greater certainty about costs, and can plan their finances more effectively.

Security and national emergencies
MTN works towards the goal of safe cities and societies. An industry-first fingerprint biometric system to protect our South African customers against identity theft was launched late last year. The biometrics will be used to authenticate the identity of postpaid subscribers when they undertake a range of transactions, such as applying for a new contract or an additional SIM card, performing an upgrade or SIM swap and loading chargeable value-added services. The system links to the South African Credit Bureau's consumer database, to match the customers' fingerprints with their identity number. If someone other than the account-holder attempts to undertake a new transaction on a customer's account, the biometric system can intercept the transaction and identify the criminal. The system will be rolled out in 2018 to all MTN stores in South Africa.

MTN Nigeria, in partnership with the Lagos State Domestic and Sexual Violence Response Team (DSVRT), launched a short code to report cases of sexual and domestic violence in the state. By dialling or sending an SMS to a specified number, using keywords such as 'child abuse', users will be given information on steps to take for the responsible active case. Available in multiple languages, the short code system will provide residents with an easy method of reporting cases and receive prompt responses to their reported incidents of child

Digital inclusion: Other solutions transforming lives continued

abuse and domestic violence. MTN contributes to the initiative by providing the service at no charge.

> **MTN Cyprus supports internet safety for children, ensuring students are educated about safety during online browsing, cyber bullying and cyber ethics.**

In Iran, following a regional earthquake, MTN maintained the network without any outages, and activated free calls for subscribers in surrounding cities. Other operators' subscribers were also able to roam on MTN's network if they faced issues with their own operators' services.

Initiatives such as these demonstrate MTN's commitment to our government and civil society stakeholders, who may be facing challenging environmental and social circumstances.

Looking ahead

The focus of our efforts for 2018 will be to invest in the necessary infrastructure to support mobile technologies, including those that have the biggest potential for large scale adoption across verticals and countries. An example of this is our collaboration with Ericsson to launch a 5G trial in a bid to bring the first 5G technology to the African continent. MTN South Africa has tested a range of 5G use cases and applications in its test lab. We are optimistic that this will lead to commercial deployment of this technology in the near future. By enabling connectivity of a host of solutions, the 5G network offers a whole new world of potential for the continent, for example remote healthcare through connected robots offering world-class surgery in most remote areas. The potential of such solutions to transform the lives of our customers is promising and exciting. We also continue to look for ways to ensure affordable internet access for our customers.

Transforming enterprises: Enabling growth

Enabling emerging enterprise growth

The existence and growth of small and medium enterprises (SMEs) is especially critical in the emerging regions of Africa and in many parts of the Middle East, where MTN operates. To support their growth, MTN continues to provide fundamental digitally enabled solutions that are targeted to the requirements for the underserved small enterprise sector. This promotes sustainable livelihoods in our markets and helps us support the UN's SDGs for productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourages the formalisation and growth of micro-, small and medium-sized enterprises.

Supporting UN SDGs

Challenge

Youth and overall population unemployment, coupled with population growth, urbanisation and infrastructure access and affordability challenges remain key concerns in many developing regions. Entrepreneurs fulfil an important economic, product and service delivery role in many markets. Stimulating innovation to meet local requirements within the constraints posed in these markets, and supporting the growth of small enterprises, are critical aspects of economic inclusion, job creation and social development. Partnerships that include governments and private agencies are crucial for the long-term sustainability of these businesses. This includes those that are dedicated to enabling the growth of startups and small businesses, providing access to finance, regulatory, marketing and other business advisory services and offering mentorship and networking opportunities that help reduce the cost of business for emerging enterprises.

Solution

SMEs are a key customer segment for MTN. We believe that SMEs are the next generation of digital businesses, and can spur economic growth in our markets. SME business designs are often digital in nature, blurring the line between the digital and physical worlds. We are

focused on helping entrepreneurs take their business to the next level, using technology as an enabler to achieve operational efficiency, management and cost control.

We focus on four types of SMEs, namely the SoHo market (small home office), micro-enterprises, small enterprises and emerging enterprises, all of whom have different needs and commercial behaviour patterns. By specifically focusing on context and needs-based solutions designed to meet the affordability, connectivity, efficiency and management needs of these customers, we can help these businesses thrive in challenging environments, compete with larger businesses and contribute to national outputs and income and job creation. Our initiatives in this regard are focused on network solutions for small businesses, capacity building, supporting start-up organisations and income-generating opportunities including for women, youth and our own customers.

2017 activities and results

In 2017 we placed a major focus on SME market analysis to identify, understand and provide effective solutions to SMEs. Within the SME segment, a number of subsegments exist. These subsegments comprise different types of businesses, with varying rates of business maturity and needs. We spent time understanding the composition of these subsegments, which may typically include operations of between one and four people, often running small home-based or office operations, or small commercial and service ventures. We analysed their preferred communication channels and ways of operating and transacting, in order to ensure that the products we offer were tailored to best suit their needs. The group's SME strategy was finalised and a guideline to all country operations was issued, to assist our operations in better understanding the needs of the SMEs in each country. We are now starting to develop localised, insight-driven ICT solutions to support the requirements of SMEs. As a result, we believe that SMEs using our services will be equipped with fit-for-purpose, localised digital solutions that enable them to better compete in their space of operations, and more easily realise their growth objectives. We also defined the partnerships approach we will deploy in our various markets, and have begun identifying and engaging the right partners to help us meet a common objective of providing value to SME customers.

Transforming enterprises: Enabling growth continued

ICT solutions for SMEs

Affordable and efficient connectivity solutions are critical to our customers, and several innovative and convenient network and internet solutions were offered specifically for small businesses. Our initiatives support our drive to improve access and connectivity. We have focused our efforts on ensuring digital connectivity and affordable access to tailored solutions for SMEs, including female-owned enterprises, support for and capacity building through entrepreneur education, and income-generation opportunities for entrepreneurial MTN subscribers and the youth.

In Cyprus, we recently launched a fibre-optic network that covers all cities as well as rural areas around these cities to provide customers and clients with a more robust internet connection, cloud business telephony and connectivity solutions. In Botswana, MTN SKYe Connect for SMEs was launched. This is an all-in-one internet solution for SMEs that offers ICT-related services. This solution provides seamless internet connectivity with services including cybersecurity, webhosting and content management. The solution releases capacity in these businesses, allowing them to focus on marketing and growing their operations. MTN Kenya now also offers easy accounting and cloud solutions as well as data hosting facilities for SMEs.

We also launched two initiatives to support the digital transformation of SMEs in Cameroon. MTN ProBox+ is a mobile data solution developed to assist small catering and hospitality businesses take advantage of high speed internet without heavy infrastructure and installation requirements. These businesses can easily create a website to promote temporary events, and offer access to and web backup of existing ADSL and fibre-deployed websites, ensuring better network coverage, faster access and volume benefits. Also in Cameroon, the MTN PME Pack, specifically designed for SMEs, was launched in partnership with APME (Small and Medium Enterprises Promotion Agency), following our partnership agreement in 2016 to connect 20 000 SMEs to ICT services. This solution enables SMEs to access mobile voice, data, SMS, hosting services and financial services.

In Botswana, MTN and FNB are working to ensure that MTN customers will have access to pre-negotiated banking packages and offers

that can be accessed at MTN points of sale. FNB's SME customers will have access to similar services, enabling them to conveniently access pre-negotiated MTN packages at special rates.

Capacity building and education for SMEs

Entrepreneurial capacity building is critical to ensure the longevity and sustainability of small businesses. We have launched numerous initiatives to achieve this objective, many of which are offered through partnerships with educational experts. In Nigeria, MTN and Tricom Experimental Projects hosted entrepreneurs at a capacity-building workshop, giving small business owners the opportunity to learn from leading business owners and to incorporate feedback into their own businesses. MTN Cameroon and APME hosted masterclasses to assist entrepreneurs gain brand visibility, increase sales, access new markets and improve their financial, customer and workforce management. A starter ICT kit solution with device, voice, data and web presence solutions at highly competitive rates for the new SMEs was also made available.

In Ivory Coast, we conducted a number of SME education initiatives, including our IT Days programme to educate entrepreneurs on how technology can assist development and inclusivity, and a cloud computing workshop, where information on how such solutions can simplify and digitise operations, was presented. In South Africa, MTN and FinFind hosted the Business Digital Entrepreneur Masterclass, assisting startups and small businesses to understand where to access small business funding.

In Cameroon and South Africa, masterclasses for SMEs provide access to valuable skills, experts and networks, helping build capacity that assists entrepreneurs gain brand visibility, increase sales, access new markets and improve their financial, customer and workforce management.

Supporting startups, women and youth in business

MTN Ivory Coast launched the first edition of an incubation programme to assist young entrepreneurs. **Y'ello** Startup is designed to help these entrepreneurs design and deploy innovative digital solutions with a strong impact on the socio-economic environment. Similar programmes were launched in Benin and South

Transforming enterprises: Enabling growth continued

Africa. In Benin, the country's first innovation centre is now being used as a startup incubator aimed at revolutionising digital technology through web and application developer promotion. MTN South Africa launched the Venture Incubation Programme to help entrepreneurial teams test and validate their business models. MTN's App Challenge and App of the Year programmes champion the development of digital applications that meet local needs in an easy, low cost and innovative manner in a number of MTN countries, enabling entrepreneurs to grow their businesses. These challenges are designed to uncover digital innovation and identify emerging entrepreneurs from high school students to female-owned enterprises. It also helps entrepreneurs refine their business models and supports the commercialisation of solutions.

> In 2017, the MTN App Challenge in Ghana recognised the importance of healthcare suppliers' application Amatsii, a two-in-one app enabling procurement of medical drugs between distributors and hospital and retail pharmacies.

Using Amatsii, members of the public can also obtain information about drugs and their availability, including whether these medicines are covered under the National Health Insurance Scheme, and whether pharmacies have sufficient stocks.

MTN Yemen's Small and Micro-enterprises Promotion Services (SMEPS) initiative is an important contributor to the national SMEPS programme focused on economic growth. One of the programmes is the 'Make your Qamaria by yourself' campaign, aimed at reviving Yemen's tradition of developing products that are consistent with international standards. Sales channels now promote products and generate income for craft producing families, empowering low-income craft makers, including female-operated enterprises.

MTN Rwanda, together with the International Trade Centre (ITC), launched SheTrades, aimed at contributing to gender equality and assisting women in business transition from small-scale trading to large-scale enterprises. A certified education programme and mobile application, to which MTN contributes browsing and downloads free of charge, enables female entrepreneurs to obtain easy access to knowledge-sharing opportunities, customers, investors, suppliers and connect with other female entrepreneurs.

MTN Zambia has also worked with partners to create and develop opportunities for income generation. The MTN Tamanga Be Your Own Boss initiative gives MTN Zambia subscribers an opportunity to purchase airtime in bulk via MTN Mobile Money and to resell it at a profit realised from commissions. This initiative also helps to resolve a major challenge in Zambia, which is the reluctance of mobile subscribers to use electronic channels to recharge their airtime requirements. As subscribers are not bound by location or region to register for the service, it also ensures widespread availability of airtime, even in the remotest of areas.

As part of our drive to grow youth engagement and empowerment, MTN Nigeria partnered with Lagos state government to launch the Bus Shelter Kiosk initiative. The partnership deal will construct approximately 50 bus shelters equipped with MTN retail kiosks, which will be managed by young people. In addition to empowering youth, the bus shelter kiosks offer MTN customers the opportunity to conveniently access services to resolve their queries. In partnership with the Federal government, we also launched the N-Power Volunteer Project, which addresses the challenges of youth unemployment and weak industries. This project is part of the government's direct job creation and social inclusion initiative to address unemployment by recruiting 500 000 volunteers, who are trained and provided with relevant skills to start businesses or assist in improving aspects of public services. MTN supports this programme through the distribution of cellular devices from our service centres and providing data to volunteers. Devices are preloaded with content on agriculture, health, education and technology.

Transforming enterprises: Enabling growth continued

In 2017 we reached 116 039 volunteers and empowered 110 500 volunteers with devices and data to access the training programme.

Following our successful management of the MTN app awards for entrepreneurs in South Africa, we will extend this programme to our operations, initially commencing in Kenya. We also seek to increase the number of SME recipients of education and training through MTN's masterclasses.

Looking ahead
Our focus for 2018 will be on using the results of the information collected and our analyses to ensure progress towards our goal of helping small businesses and entrepreneurs to thrive by using digital solutions. Identifying the appropriate partnerships with other complementary roleplayers will be a key step in the process. Partners may include retail financial institutions, and government agencies working to support the growth of SMEs. Such partnerships are critical in supporting the needs of the SME market, as MTN cannot ensure SME development alone.

Transforming enterprises: Internet of Things (IoT)

The Internet of Things (IoT) enables machines and infrastructure to be monitored and operated remotely. This technology can radically transform both large and small enterprises in terms of efficiencies, distribution and even business models. IoT, including smart devices, machine-to-machine (M2M) and cloud-based solutions enable a wide range of industries to connect networked devices that exchange information, perform actions and respond intelligently to their environments without direct human intervention. This creates a co-operative ecosystem of intelligent assets that can enable a range of possibilities to improve business performance, efficiency and other economic benefits. IoT solutions require robust partnerships, networks and mobile infrastructure as foundations to ensure organisations and societies can leverage the range of potential benefits.

Supporting UN SDGs

Challenge

By enabling machines and infrastructure to be monitored remotely, IoT and its applications can help deliver various services in emerging markets, especially those that are underserved. However, according to Ericsson, IoT in Africa may be progressing slowly due to underdeveloped mobile networks, pricing and accessibility. This pace may be hindering potential socio-economic progress that could be enabled by these technologies.

Solution

With the potential of IoT to contribute to several UN SDGs, we have recognised the need for a stronger ecosystem to support the growth of IoT in our operating countries. We are working to increase the roll out of infrastructure that will enable the uptake of IoT by industries and enterprises across our operations in Africa and the Middle East.

We are also piloting Narrow Band-IoT (NB-IoT) technologies, a new solution that extends the utilisation of IoT by making it more efficient to connect objects that require a long battery life and that are in areas where network signals may have difficulty penetrating. Co-operating with partners to build IoT ecosystems will help us accelerate the development of IoT in our markets.

2017 activities and results

MTN's IoT solutions are most pronounced in South Africa, Nigeria and Iran, with some solutions also launched in Benin. We will continue to roll out solutions in other countries.

Historically in South Africa, our efforts have been focused on laying down the foundations for efficient connections between devices. Until 2017, a basic SIM and data proposition was available for connectivity. A network solution to efficiently connect these systems was required. We therefore partnered with Cisco Jasper, enabling MTN to be the first mobile operator in South Africa to deploy an automated connectivity platform for IoT. The infrastructure on which this is placed is shared by all MTN countries, which will allow IoT solutions to be replicated across our markets with much less effort, by enabling us to seamlessly connect devices with solutions designed around the needs of specific industries for example wildlife and vehicle tracking. This enables our clients to work with one industry partner to connect devices for a single industry vertical rather than a complicated network of multiple industry partners. It also aligns with MTN's strategic imperative of being the connectivity partner of choice. Our customers in nearly every industry are looking to innovate and transform their businesses by offering connected services. This enables us not only to support our business customers but also to support enterprise transformation and sustainable economic growth, and foster innovation as set out by the UN's SDGs.

Transforming enterprises: IoT continued

> **The next terrain of connectivity is about connecting industries and enterprises by creating linkages between people, devices and machines** says Babak Fouladi, Group Chief Technology and Information Systems Officer.

The launch of MTN Nigeria and Sponge Analytics' Animal Identification and Management Solution (AIMS) has seen a small but steady uptake of our solution to the problem of increasing cattle theft. AIMS makes it possible for owners of livestock, pets and other animals to identify their animals electronically, by using a radio frequency identification (RFID) scanner to read and pass on information about the animal's unique identification code and owner's profile, after a chip has been injected into the animal. The information is hosted on the AIMS portal. The animal's identity number is then sent to system users, allowing them to access ownership details and monitor animal locations. A solar-powered GPS-enabled solution defines geo-fenced areas for grazing, which ensures that possible disease outbreaks can be contained, and possible human conflicts reduced. The solution is currently available via veterinary services in four regions. The once-off cost of the chip is NGN2 000 (approximately R64). Over 20 000 RFID chips have been sold to dealers and vets. Herders can also send distress signals using an app on their handsets, in the event of an emergency. With the ability to trace animals, ownership details and facilitate disease surveillance and control, this solution can also ensure Nigeria's participation in the beef export market.

The opportunity to improve operations and delivery of services, and to raise the level of quality assurance for the fleet management industry, has been noted by MTN. Improvements can be achieved by tracking goods in transit, monitoring and maintaining vehicle and driver safety, and increasing the reliability and efficiency of fleets through fuel usage and routing diagnostics, all of which can be enabled with IoT solutions. Fleet tracking solutions are available in many of our markets, and we continue to demonstrate deeper value through innovative features and enhancements. For instance in Iran, we showcased a fleet management solution which can streamline operations such as public transportation tracking, fare payments and emergency response. An automated vehicle location feature enables emergency services to assign accidents, fires or electricity outage missions to the nearest response units, and supports situational updates, allowing easy documentation of all the information exchanged along the mission operation. This solution also integrates with automatic fare calculation and cashless fare payment systems for public transport services. Fares can be settled using MTN's Near Field Communication (NFC) enabled SIM cards or other cards.

Fleet tracking is also currently available in Benin through a partnership agreement between MTN and Ctrack. The partnership enables MTN's business customers to seamlessly integrate a standard fleet management and vehicle tracking solution into their existing mobile network offering, at an affordable rate. The tracking platform uses MTN's Pan African IoT SIM cards, enabling businesses to benefit from a single rate for IoT activity, and as a result significant cost and accessibility barriers are removed. MTN and Ctrack plan to roll out the offering to other countries.

> **MTN Irancell launched the country's first Smart City in Anzali, aimed at enhancing quality of living using smart technologies.**

Phase 1 of Irancell's Smart City programme will result in the application of intelligent solutions to solid waste management, optimal green space

Transforming enterprises: IoT continued

irrigation and the measurement of water in reservoirs. Phase 2 will target other city services including street lighting, air pollution monitoring, reporting of the availability of parking spots and the use of NFC-enabled payments for services.

In South Africa trials of MTN's Connected Driver solution to monitor and assess driver behaviour commenced. This solution, which will be offered in collaboration with Huawei, uses an onboard diagnostic device that connects a vehicle to a mobile application for personal use, or to a data centre for commercial use by organisations such as insurance companies and fleet management services. It enables monitoring and assessment of driver behaviours such as speed and braking, and can sense driver fatigue, sending warning signals to the driver. Insurance companies and fleet management firms can use data analytics to risk-rate drivers more effectively. They can also offer incentives for better driving, which will reduce accidents and the associated claims.

Another useful application of IoT is MTN's Smart Refrigerator solution, which enables remote monitoring of refrigerators before a power outage occurs, allowing inventory control, monitoring and cold chain management. It also helps to improve quality control in commercial organisations so that the end-product can be served to consumers

at the optimal temperature, enabling the bottler or supplier organisation to monitor their products at points of sale.

In 2017 we spent time implementing trials for four types of IoT solutions across our operating countries. Our goal is to deploy solutions such as fleet management tracking, smart meters for water and other utilities, Connected Wildlife, and smart refrigeration at commercial scale once network foundations have been laid. MTN's IoT products are examples of solutions that can vastly change the way industries and businesses operate and serve their customers.

Looking ahead

Our customers require digital solutions to a range of challenges faced by their businesses. How IoT manifests in different industries is varied and enterprises within and across industries have different needs. The best way for MTN to address these needs is to ensure that the foundations are laid to enable the IoT solutions that are relevant for industries and enterprises. We plan to enable the seamless deployment of IoT solutions based on the expansive network infrastructure that we have rolled out across operations in Africa and the Middle East. This includes launching a low-power wide area network solution in Nigeria by the end of 2018 and in other countries in 2019.
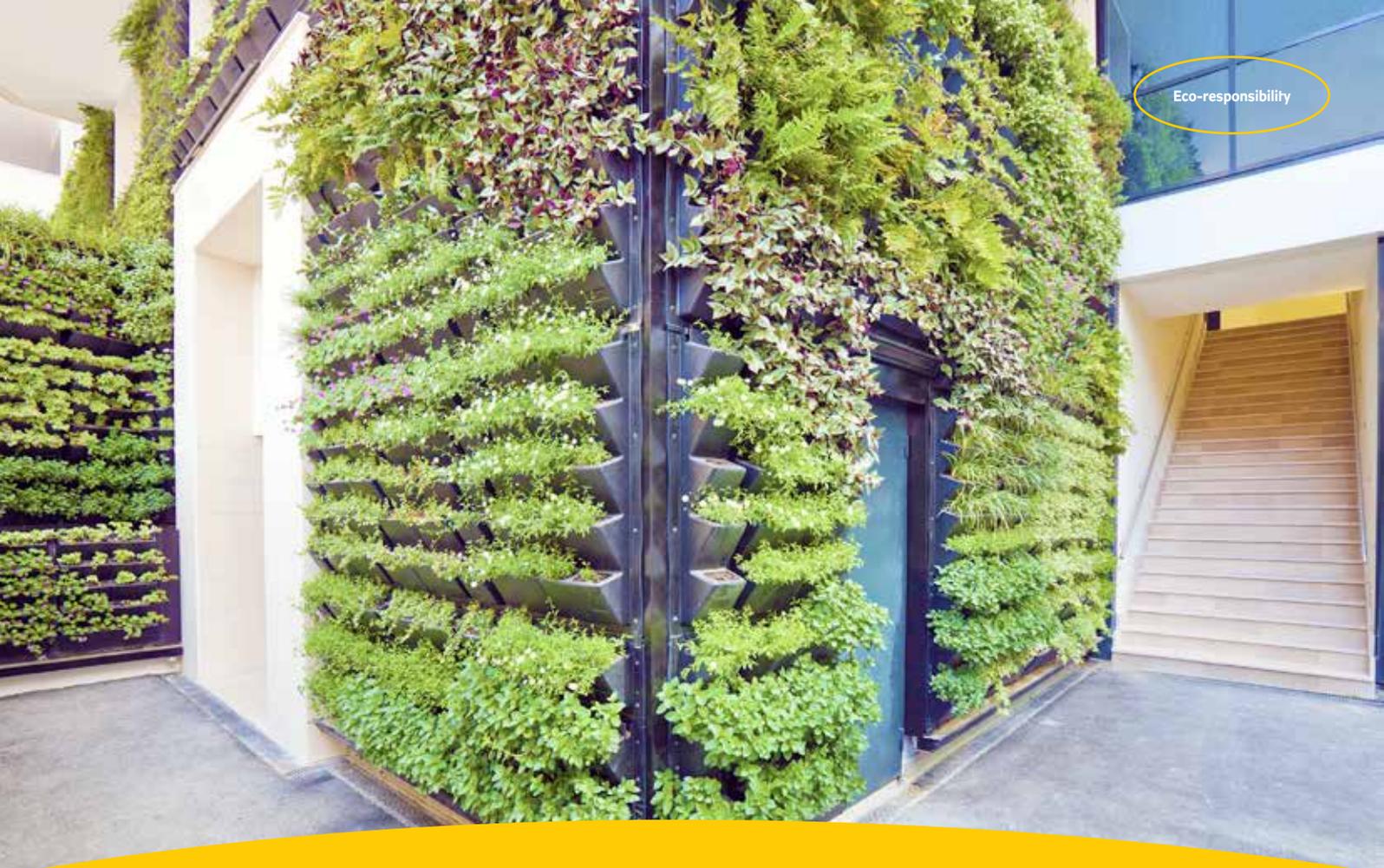
Eco-responsibility

- While we work actively to reduce our climate impact, the growth of our energy-intensive networks challenges us as we attempt to reduce our greenhouse gas emissions.

- Despite the challenges of managing electronic and electrical waste on the African continent, we remain committed to tackling this global problem, and have co-ordinated a number of partnerships that offer early but promising results.

- MTN's Green Office programme is delivering savings in energy, water and paper use, increasing the amount of waste sent for recycling, and enhancing awareness of environmental issues among our employees.

We strive to reduce our use of natural and manufactured resources, and to do more with less.

Many of the countries MTN operates in have the least economic and social resources to build their resilience and mitigate the impact of significant environmental impacts. We therefore recognise the importance of reducing our impact on the environment and in the communities in which we operate. We are also leveraging our capabilities and fostering partnerships to address resource constraints and improve efficiency in the use of natural resources, through smart technologies as highlighted in the section on IoT and in the section on powering communications to close the digital services divide.

Supporting UN SDGs

Objectives	Progress	Results
Finalise group environmental policy to replace or complement existing country operation policies	⚠️	The policy has been defined and taken through a consultative process. An assessment of the implementation path to meet policy objectives is currently under way. The policy is planned for finalisation in 2018.
Commence phase 2 of Green Office programme and extend to two more premises	🕐	Operations continue to track their progress on initiatives. MTN Irancell, Swaziland and Gallo Manor joined the programme in 2017.

Legend

✅ Completed   🕐 In progress: on schedule   ⚠️ In progress: behind schedule   ❌ Not achieved

Energy and climate

Supporting UN SDGs

Energy use

The primary energy consumers for MTN's operations are our technical facilities: network sites, data centres, switches and hubs. This is the infrastructure that enables the communication services we provide. It is responsible for 95,8% of the total MTN energy consumption. Energy consumption and associated emissions at our head offices and regional buildings, fleet vehicles and from travel are immaterial in relation to emissions from our technical facilities. The diagram below indicates the relative energy required by each of our major infrastructure types, and the associated GHG emissions.

Energy sources

Our energy profile consists of electricity provided by national utility providers, as well as the energy we generate from purchasing diesel which is mainly used to run our network sites, data centres and other infrastructure. In countries such as South Africa and Iran, the bulk of our electrical energy is sourced from the national grid generated from coal combustion, as well as from a mix of resources including natural gas, oil and hydropower. In other countries such as Nigeria and Sudan, electricity is generated from stationary diesel combustion sources.

All our operations seek to move towards more efficient and climate-friendly sources of energy, including switching to hydropowered grids and alternative energy sources such as solar-powered solutions.

2017 results

Our operations consumed 19 095 879* gigajoules (GJ) of energy in 2017, mainly from grid electricity, diesel and petrol. The group's GHG emissions for 2017 increased by 24,7% to 2 006 248 tCO_2e.

This excludes (immaterial) GJ energy consumed by leased vehicles used for business travel, due to the inability of car rental agencies to supply actual fuel consumed (litres), as required to calculate GJ fuel energy used.

GJ energy and GHG emission by facility type

	GJ emissions (tonnes CO_2e)	Energy used (GJ)
Network sites	1 686 836 (tCO_2e)	16 307 675 (GJ)
Data centres	228 359 (tCO_2e)	1 988 444 (GJ)
Buildings	71 018 (tCO_2e)	562 584 (GJ)
Fleet	20 035 (tCO_2e)	237 175 (GJ)*

■ GJ emissions (tonnes CO_2e)   ■ Energy used (GJ)
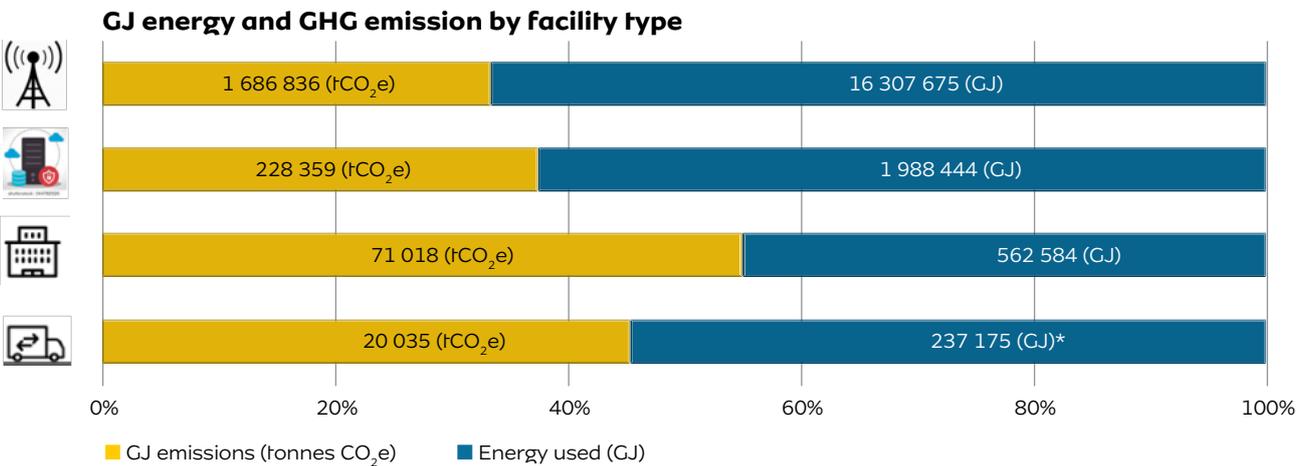
Energy and climate continued

Annual emissions tCO_2e

| | 950 564 | 1 040 722 | 1 520 895 | 1 513 527 | 1 589 888 | 1 609 174 | 2 006 248 |

Scope 1	536 541	652 790	769 471	793 098	645 428		324 101
Scope 2	407 492	384 725	636 184	595 177	651 233	755 109	806 339
Scope 3	6 531	3 208	115 240	143 252	293 227	538 462 / 315 603	875 808
	2011	2012	2013	2014	2015	2016	2017

■ Scope 1   ■ Scope 2   ■ Scope 3
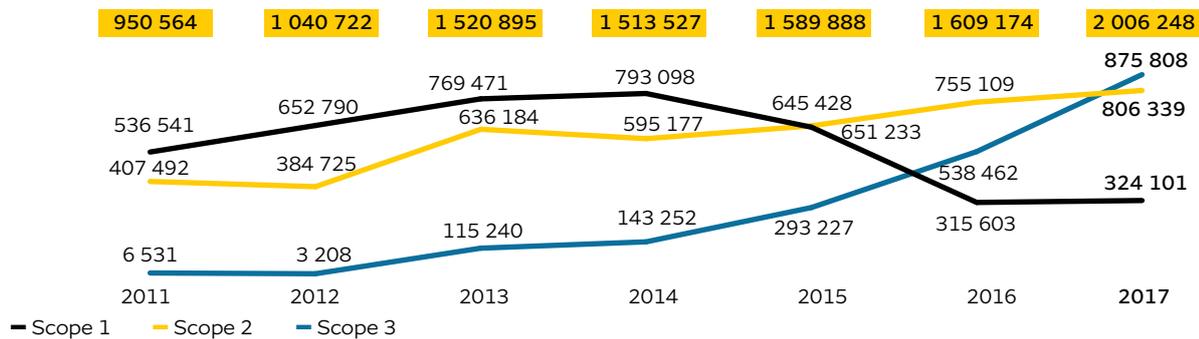
Key data about MTN's energy and emissions results for 2017 include the following:
- GHG intensity per subscriber: 0,0091 tonnes of CO_2e (2016: 0,0071).
- Total energy consumption: 19 095 879 GJ (2016: 13 958 118 GJ).
- Total electricity consumption: 1 372 017 MWh (2016: 1 201 988 MWh).
- Total diesel consumption: 374 704 kℓ (2016: 247 625 kℓ).
- Total Petrol consumption: 3 163 kℓ (2016: 4 175 kℓ).
- GHG emissions avoided: 1 529 tCO_2e (2016: 833 tCO_2e).

There are two reasons for this increase:
- We consumed approximately 24% more energy in 2017, compared to 2016, mainly in our operations in South Africa, Iran, Nigeria, and Ghana (together representing about 85% of our total electricity consumption). This increase is mainly driven by the growing number of network sites across these operations, and a general increase in electricity requirements for both existing infrastructure and for our ongoing investments in 4G sites, which are more power-intensive. This mainly impacted our Scope 2 emissions.
- In 2017, we conducted an exercise to reconcile data on the number of network sites sold or outsourced as recorded by MTN, and that recorded by our tower management partners. We also calculated emissions based on MTN's data, as compared to emissions calculated on data supplied by tower management companies in previous years. This has resulted in an increase of 62,65% on identifiable indirect (Scope 3) emissions for 2017. We do not expect to record increases due such a reconciliation process in future, but will continue to monitor this.

In light of MTN's strategy to sell a number of our network sites to tower management companies in Cameroon, Ghana, Ivory Coast, Nigeria, Rwanda, Uganda and Zambia, our Scope 1 emissions have decreased, and have been largely replaced by Scope 3 emissions. Given our reliance on these leased sites, we expect that Scope 3 emissions may become more material over the medium to long term, while Scope 1 emissions will decline proportionately.

Emissions boundaries, operational approach and Scope 3 methodology

Our emissions reporting boundary includes all MTN operations where we maintain a network, have operational control over facilities and operations where we provide enterprise services, with the exception of Yemen and Syria. The exclusion of these countries from our carbon reporting process is due to security and physical access challenges, including site refuel and maintenance, owing to the unstable macro-situation in these markets.

In determining MTN's GHG footprint, we use the operational control approach. This means that we account for 100% of the emissions from operations MTN controls. We also report on emissions where we are not the majority owner or operator of the infrastructure for example, on leased network infrastructure. This is because energy consumption costs are passed onto MTN either directly or as included in a consolidated site usage fee. We believe this is a more comprehensive approach to accounting for our emissions.

Energy and climate continued

Scope 3 greenhouse gas (GHG) emissions from network sites managed by IHS Holdings in Cameroon, Ivory Coast, Nigeria, Rwanda and Zambia were previously calculated based on actual monthly diesel and electricity consumption data. Following the group's changes to its investment stake in the IHS Group in 2017, IHS is no longer able to supply actual data.

In line with the GHG Protocol's principles of completeness of reporting, we have therefore developed an estimation methodology, based on the Protocol's average data approach, to account for these emissions. The method makes use of the average historical monthly energy consumption data and the historical average number of network sites per month to help MTN approximate the average energy consumption value per network site per month. This value is then multiplied by the number of network sites each month, to estimate the total monthly energy consumption for all network sites. This method ensures comparability of reported results in previous years, as recommended by the GHG Protocol. Going forward, this methodology may be reviewed and refined where possible as MTN works with our tower management partners and suppliers on the provision of actual data as required for disclosure of the group's Scope 3 emissions.

Impact of site outsourcing on MTN emission's Scope 3 profile

Considering our growing business and especially the increased number of network sites situated in remote areas in conjunction with rising energy costs, MTN's strategy to outsource network sites to tower partners that specialise in operating these types of infrastructure remains a priority. In total, 20 391 former MTN network sites are now owned and operated by tower management companies in Cameroon, Congo-Brazzaville, Ghana, Ivory Coast, Nigeria, Rwanda, Uganda and Zambia. This represents approximately 39% of the network infrastructure MTN uses to deliver services.

As reported previously, outsourcing has resulted in a general decrease in MTN's Scope 1 emissions, with an associated increase in Scope 3 emissions.

We have found that our tower partners place importance on energy efficiency as this can help reduce operating costs in an environment where energy demand and costs are continuously growing. By 2016, 5 702 sites leased by MTN were operated using solar and other climate-friendly solutions. Similar data for 2017 is unavailable. As described in the section on emissions boundaries, operational approach and Scope 3 methodology above, MTN does not have access to actual consumption and investment data from our tower management partner companies, and we are therefore unable to determine the 2017 GHG savings that may result from our partners' investments in efficiencies and low-carbon energy to power the sites that we lease.

Internal assurance assessments

In 2017, a number of operations undertook internal audits to understand how MTN's investments in our network and business growth plans may be influencing our emissions. Internal assurance assessments also enable us to improve systems and reporting processes. For example, during 2017, MTN Swaziland completed an energy efficiency audit to identify areas with significant losses and improve operating efficiencies. Similarly, in light of increased outsourcing activities in Ivory Coast, we have undertaken an internal audit of critical infrastructure to improve processes and controls over these areas. Although these country-specific audits have been undertaken in our operations, we are not yet in a position to provide external assurance on our consolidated emissions for the group.

Efficiencies and alternative energy

To reduce emissions, save operating costs, mitigate and adapt to the negative impacts of climate change on our physical, financial and regulatory risk profiles, we have continued to modernise our existing network, and ensure that our new infrastructure investments are energy-efficient and make use of alternative energy solutions to be more resilient.

Eco-responsibility continued

Energy and climate continued

Some of our efforts to manage the growth of our Scope 1 and 2 emissions in 2017 include the implementation of energy efficiency and alternative energy initiatives. Between 2011 and 2017, these initiatives have been implemented in more than 18 000 sites (including MTN-owned sites and outsourced sites). The cumulative impact of these initiatives has been estimated as follows:

- Total alternative energy sites leased by MTN from tower management companies: **5 092**.
- Total solar and solar-hybrid sites owned by MTN: **3 147**.
- Total of **12 758** energy efficiency sites.
- Diesel reduction: **17 816 kℓ**.
- Electricity saved: **38 250 MWh**.
- Emissions avoided: **69 584 tCO$_2$e**.

For 2017, we have seen the following results for MTN-owned sites:

- Additional energy-efficient sites: **216** sites (2016: 15 sites).
- Additional sites powered by alternative energy sources (solar and solar-hybrid): **459** sites. (2016: 1 001)
- Diesel reduction: **317 kℓ** (2016: 3 115 kℓ).
- Electricity saved: **1 026 MWh** (2016: 35 MWh).
- Emissions avoided due to diesel and electricity reductions: **1 529 tCO$_2$e** (2016: 339 tCO$_2$e).

In 2017 we conducted a once-off exercise reconciling our investments in solar and solar-hybrid sites (using deep cycling battery solutions to reduce generator run-times and GHG emissions). We found that we had under-reported our investments in previous years, and have therefore restated the number of sites reported in previous years. Going forward, we will conduct reconciliation exercises more regularly, and ensure our site and GHG reports reflect the reduced GHG impacts of these investments. We have not recalculated emissions saved due to investments in solar and solar-hybrid solutions up to 2017, and will report this in our 2018 reports.

Below is a list of some of the savings we have achieved due to ongoing energy efficiency and alternative energy investments:

- Total direct Scope 1 and 2 GHG avoided/reduced in 2017: **1 529 tCO$_2$e** (2016: 833 tCO$_2$e). This is additional carbon that would have been emitted in 2017 if it was business as usual.

- Total GJ energy saved in 2017: **15 274 GJ** (2016: 8 631 GJ).
- Cumulative diesel savings since 2011 to 2017: **17 816 kℓ**.
- Cumulative electricity savings since 2011 to 2017: **38 250 MWh**.
- Cumulative GJ energy savings since 2011 to 2017: **676 967 GJ**.
- Cumulative GHG avoided/reduced since 2011 to 2017: **69 584 tCO$_2$e**.

Though our strategy to outsource our network incorporates the responsibility to work with our partners and suppliers to reduce their Scope 1 and 2 emissions (which are MTN's Scope 3 emissions), our ability to influence the deployment of efficient energy solutions and low-carbon sources of energy, and therefore to realise direct energy efficiencies and GHG savings, is greatly limited. We do however, continue to engage with our network partners to understand the programmes they may have implemented or are planning to implement. This engagement gives us greater confidence that our outsourced infrastructure has systems and controls in place to mitigate negative impacts for our business and ensure business continuity. Although we do receive good support from our network partners, we recognise the costs, challenges and barriers they may have to overcome, especially when operating in remote areas.

In 2017, our partners have continued to work on monitoring and maintenance of energy optimisation measures that have been implemented in the past years and thus no new initiatives were reported as being implemented during 2017.

Please refer to our website for an infographic and case studies showcasing how we continue to reduce our reliance on fossil-based fuels by driving energy efficiency and investing in the roll out of renewable energy technologies.

🌐 https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/default.aspx)

Energy and climate continued

Energy and climate risks, mitigation and opportunities

Climate and weather-related risks (sometimes referred to simply as climate risks) encompass business risks that arise from extreme weather events or from gradual changes in climatic conditions. These may also include risks that result indirectly from weather and climatic impacts to the environment and society. The group's risk management framework, which includes two principal risks regarding environmental risks and impacts to MTN, is complemented by a climate change risk reporting template. This report is completed monthly by energy and carbon champions in our operations.

The top physical, financial and regulatory risks faced by MTN are:

• The impact of changes in mean and/or variability of environmental events on our infrastructure operations. These include extreme weather events such as heavy snow, heavy rainfall, heatwaves and drought. Impacts from these events range from being direct (physical damage to our network sites) to being indirect (e.g. disruption to energy supplies due to severe storms and snow fall, or loss of production time by infrastructure suppliers).

• The potential financial impact of climate change-related laws and regulations. For example in South Africa, the National Treasury first introduced the possibility of a carbon tax in a discussion document in 2010. The design was then proposed in 2013 followed by the publication of a Draft Bill late in 2015 which announced the expected start date as 2017. The implementation of the tax has been delayed and further commentary from affected organisations and from other stakeholders will be invited in 2018. Other MTN operations that report potential carbon tax regulations include Cyprus, Cameroon and Guinea-Conakry.

• Both physical and regulatory risks may result in financial costs to MTN (e.g. increased use of diesel to power generators during electricity outages, etc.). In addition, increasing general costs of (mainly fossil fuel-based) energy, and global and national energy security and pricing dynamics pose financial risks to us.

While some of these risks are beyond MTN's control, we continue to observe these trends and work to mitigate risks where possible. Some mitigation solutions include:

• Improving resilience through the implementation of energy efficiency (for example, by modernising and improving existing systems) and low-carbon energy initiatives. These assist in reducing energy costs as well as maintain business continuity in the event of power disruptions from national grid supply. This approach also mitigates the cost of potential carbon taxes to our business.

• Enhancing adaptation measures through learning from past experiences. In instances where infrastructure is upgraded or replaced, our new designs are influenced by current and likely future events, and we consider the need for new equipment to better withstand physical risks such as temperature increases, or for supplementary services such as pumps for water extraction if required.

We are also encouraged by the work of some governments in the markets in which we operate, with respect to curbing coastal erosion in densely populated areas, where MTN may be present. In some of the countries we operate in, we have actively engaged with environmental ministries around issues of climate change management and other related programmes.

Read more

MTN's IoT solutions addressing water, energy, animal management, and smart city and refrigeration requirements may be reviewed in the section on transforming enterprises: IoT in this report.

Reducing MTN's GHG emissions: https://www.mtn.com/en/mtn-group/sustainability/eco-responsibility/Pages/energy-and-climate.aspx

Associated reports

Latest MTN Group CDP, UN GRI 4 and UN Global Compact Communication of Progress reports on https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx and at https://www.cdp.net/en

Positions

Environmental positions with respect to how we manage and operate our networks, and manage health aspects in the use of mobile technologies: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx

Case studies

Case studies on MTN's solutions environmental issues https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Case-studies.aspx

Environmental management

Supporting UN SDGs

Environmental policies and standards

Policies

Many of our operations have existing environmental management policies in place, but these policies have been drafted independently of, and prior to the group's standardisation processes, and may therefore not uniformly set out material aspects required by the group. In 2016, we completed a gap analysis to help us identify the aspects that may be missing, and to help us improve on consistency, comparability and accountability of MTN's environmental performance across the group. We aimed to complete this process and ensure finalisation of the group's environmental policy in 2017. The drafting process of our group environmental policy presented a great opportunity to consult with our various operations and understand the critical guidelines needed to encourage good environmental stewardship, given the varying environmental contexts in which our operations are located.

While we did not complete the policy consultation process in 2017, we aim to do so in 2018. Once complete, the policy will be distributed for implementation across our operations, to ensure a standardised focus on prioritised material environmental impacts, aspects and opportunities, and to enhance governance and management in a consistent manner across our business. In the interim, our operations continue to be guided by the existing environmental management policies, and the group's environmental position, located on our website.

Standards

MTN Cyprus and MTN South Africa maintain their ISO 14001 status, following annual audits of each operation's performance by independent external organisations. We have previously reported about MTN South Africa's silver level Leadership in Energy and Environmental Design (LEED) certification. While MTN South Africa maintains the features and building management aspects specified in LEED, it has made the decision not to renew its certificate following a cost-benefit assessment.

Environmental management and MTN's suppliers

We believe that environmental risk on our supply chain is likely to impact us in future. We are also concerned about the global rate of consumption of resources, and the impact of waste materials on natural environments and communities. For these reasons, we are extending our focus to understand if our suppliers have the necessary systems in place to cope with any adverse climate, environmental or social impacts, and if they are actively working towards reducing their environmental footprints.

MTN's new supplier code of conduct was distributed in 2017. The code sets out the minimum standards that suppliers, their employees and subcontractors must adhere to when conducting business with us, and articulates our expectation that they conduct environmentally sustainable business activities. This includes reviewing the state of their workplace environments, ensuring environmental authorisations, permits and reports are submitted to MTN upon request, reducing resource consumption, preventing pollution and minimising waste outputs, and ensuring responsible management of hazardous materials. Acknowledgement of this code is a prerequisite for working with MTN.

Suppliers that have not worked with MTN prior to the release of this code are automatically required to acknowledge the code when first registering on MTN's procurement system, before a working relationship (or the awarding of a contract) can commence. Due to the number of existing suppliers who work with MTN, roll out of the code will take time. Existing suppliers will be reviewed against an annually administered supplier 'health check' form, which will trigger the requirement for them to accept the code. Some of our operations have also started including environmental requirements in the tenders they issue.

Environmental management continued

We also collaborate with equipment manufacturers and vendors on solutions that can help both MTN and our suppliers reduce our environmental impact. For further details, please refer to the environmental impact section of our work on powering communications and how our partnerships are helping address our customers' environmental issues.

Greening Office operations

About MTN Green Office

MTN's Green Office programme aims to reduce the consumption of natural and manufactured resources in the office environment through active conservation initiatives and the promotion of sustainable practices. Activities are focused on reducing consumption and waste from energy, water, paper and toner, general plastic, glass, tin, electronic and other waste. Solutions that enable sustainable practices in the group's procurement chain, travel activities and event management have also been specified.

Each country operation has the flexibility to set their own plans, targets and customised projects to ensure they can undertake the most impactful projects. Phase 1 aimed to introduce the programme to our operations and ensure that baselines were developed. The focus of phase 2 was to achieve and track progress against the baselines by implementing conservation and sustainability initiatives. Some operations undertook environmental audits which informed their activities and target setting.

2017 activities and results

We decided to continue running the programme operationally, expanding the scope of implementation over the next few years. The project is no longer phased-in as it previously was. This will ensure that operations can work on embedding the results of their activities, implement more solutions to realise greater benefits, and have greater creativity and flexibility in working with suppliers and other external organisations to improve environmental impact management.

In 2017, we realised benefits in a number of areas, including energy and greenhouse gas reductions, water and paper savings and others.

Green Office results

807 181 kWh
of electricity reduced in office and non-technical operations

1 617 685 kg
of paper saved

178 000
disposable cups avoided

108 200
envelopes not used

3 142
printer cartridges/toners not purchased

144 000 kℓ
potable water use avoided

215,7 tonnes
of e-waste reduced

141 728 kg
general waste reduced

Environmental management continued

In 2017 MTN Afghanistan began a project to install LED lights in its main building, and is scheduled for completion in 2018. It is estimated that this initiative will decrease the amount of energy consumption by 50%. In addition to this, MTN Afghanistan switches off geysers and boilers in summer months to reduce the amount of energy consumption in buildings. Ensuring energy-efficient buildings is also a feature of our operations in Cameroon, and the Yaoundé head office site has been selected for piloting initiatives.

The reduction of bottled and municipal water consumption has been managed well in Afghanistan and Cyprus, through initiatives that include replacing individual plastic bottles of water with centrally located, refillable water dispensers, staff awareness of the impact of plastic bottles on the environment, and water leakage identification and management. In Guinea-Bissau, the need to ensure grey water reuse has been included in specifications for the new head office building under development.

Reducing the use of paper and toner is a quick solution to decreasing costs and environmental impact, with paper savings identified by several operations including in Afghanistan, Cyprus, Ghana, Iran, Kenya and Sudan. MTN Nigeria conducts "No Print Day" campaigns to encourage staff to print less. Sending customers their statements electronically, and requiring digital signoffs instead of printed signed copies of documents, are in place in a number of countries. In Afghanistan, these savings also meant that 211 ink cartridges were not replaced. MTN Cyprus has achieved a 96% increase in paper recycling rates, including paper waste from MTN stores. In Iran, multiple initiatives and staff guidelines were developed to reduce the use of paper and associated products. In total, the operation was able to avoid the use of 178 000 disposal cups, 5 700 rolls of paper slips, 243 printer cartridges, over a million envelopes, and 236 100 sheets of paper in 2017 alone.

Managing plastic waste outputs is proving to be more challenging, but we are pleased to report that 1 808 kg of plastic was recycled by two operations. Our operations in Cyprus have met their target of achieving 5% reduction in the use of plastic, metal and drink containers. Also in Cyprus, targets to reduce fuel consumption were met through several initiatives, including

posting simple efficient driving advice and tips in all fleet vehicles.

Contracted staff that maintain MTN's facilities are also involved in our programme. In Sudan and at MTN Group operations in Gallo Manor in Johannesburg, basic environmental training was undertaken. Cleaning staff now separate waste on the premises daily, for more effective recycling and disposal. Contractors are requested to purchase materials in bulk to reduce packaging waste, and are advised on how and why to rationalise the use of chemicals. Cleaners are also encouraged to use biodegradable cleaning products.

> **Encouraging employees and contracted facility management organisations to become more aware of their environmental impact increases realisable savings.**

Creative ways of advising staff about how to reduce their use of energy, water, paper, etc. are deployed. These include short impactful videos and sharing of QR codes that can be read by smartphones, from which users can access educational internet context, text and e-mail-based 'tips of the week', inter-departmental competitions and idea-generation, regular campaigns regarding paper, water, pollution and more.

Some operations also engage with our customers on environmental management and what MTN is doing in this regard. Several MTN countries also discuss joint programmes with, or engage in activities that can support the work of, local environmental commissioners and national regulatory authorities such as reforestation programmes following fires, and organising forums discussing climate change impacts on agriculture, among other initiatives.

Waste electronic and electrical equipment (WEEE) management

The development of ICT, which is at the core of the digital economy, presents challenging effects on the environment. WEEE or e-waste

Environmental management continued

can be toxic and harmful to the environment and to human health if not handled properly. As the global shift to a digital world continues, the problem of how to manage e-waste streams is also increasing.

E-waste can also be an important source of income for a waste collectors and handlers. E-waste comprises electronic and electric material including cellphones, computers, televisions, batteries and chargers, and many other items have reached the end of their useful lives. These products contain valuable materials such as ferrous metals, gold, glass, mercury, plastic and other manufactured elements that can generate an economic value when extracted.

As a major operator in Africa, which has been visibly affected by the growing problem of e-waste imported from other regions, along with its own increasing waste outputs, we are concerned about this issue. The United Nations Environmental Programme has found that e-waste is one of the fastest growing streams of waste in developing countries. MTN generates e-waste largely from end-of-life radio or network equipment, products that enable cooling, and computing devices such as laptops. Our customers also generate waste when they discard old cellular handsets and tablets. Non-MTN subscribers and organisations who are no longer able to use their assets such as computers, data centre and technical equipment, and other electronic devices, face such challenges too. This complicated and growing problem requires active collaboration among a range of like-minded organisations and communities to tackle the problem in a co-ordinated and impactful manner.

We have worked with various governmental, corporate and other organisations to raise awareness, facilitate collection and improve e-waste management practices among handlers, albeit on a very small scale. We acknowledge that the scale and scope of this complex problem exceeds our capacity to achieve substantial outcomes on our own, but our partnerships enable us to continue to design solutions to address this problem in a number of countries.

Our partnerships focus on improving the volumes of waste collected both within our own operations and from the public. We also try to ensure that e-waste is diverted to responsible

handlers who either extract valuable components or dispose of it in accordance with standards such as ISO 14001, ISO 18001 or SERI R2. Our e-waste management programme is still at a nascent stage. Initiatives including supplier take-back agreements or waste collection agreements have been recently signed or are ongoing in Benin, Cameroon, Cyprus, Iran, Ivory Coast, Nigeria, South Africa, and Uganda.

Our contracts with network equipment manufacturers often contain clauses with respect to supplier responsibility for old equipment. Following an agreement on product take-back during a network modernisation project undertaken between MTN Cameroon and Ericsson, 53 tonnes of e-waste was collected and shipped to a certified recycler in South Africa for responsible disposal of decommissioned equipment. This partnership supports circular economy principles, reduces environmental impacts and risks, and can ensure that e-waste is collected and processed in a more economical and responsible manner.

Just over 215 tonnes of e-waste was recycled in 2017.

Read more
ISO 140001 guidebooks for e-waste enterprises at https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx

Associated reports
Latest CDP report, UN GRI 4 and UN Global Compact Communication of Progress reports at https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx

Positions
Environmental positions with respect to how we manage and operate our networks, and manage health aspects in the use of mobile technologies: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx

Sustainable societies

- A number of ethics-related policies including our positions on how we conduct business and gender diversity management have been developed or updated.

- Despite challenging macro- and MTN-specific circumstances surrounding the global digital human rights environment in 2017, we finalised our due diligence approach and made some progress in terms of the UN's Guiding Principles on Business and Human Rights.

- The permanently connected digital world has changed how companies and employees operate and work together, and we have assessed the impact on MTN, and on how we attract and retain talent.

We actively work towards improving the lives of our customers, employees and other stakeholders who may be affected by our operations.

The relationships we have with our stakeholders are important for our business to function sustainably. The structures of our communities, the workplace, and our operating environment are constantly changing. As one of the largest mobile network operators in our markets, we are aware of the impact we can make by contributing positively to the lives of our stakeholders. We consistently and diligently work towards ensuring our practices are ethical, responsible, healthy, equitable and meet the requirements of good governance.

Supporting UN SDGs

8 DECENT WORK AND ECONOMIC GROWTH

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Objectives	Progress	Results
Update group gift, hospitality and entertainment, whistle-blowing, fraud management, and gender equality and diversity policies	✅	Positions are now published on the group's website, at https://www.mtn.com/en/mtngroup/sustainability/cases-and-library.aspx
Commence roll out of supplier code of conduct	🔵	New suppliers are now required to acknowledge the supplier code of conduct on MTN's procurement system, before a working relationship (the awarding of a contract) can commence. Existing suppliers will be reviewed against the annual supplier 'health check' form, which will trigger the requirement for them to accept the supplier code of conduct. The code may be viewed at https://www.mtn.com/en/mtngroup/supplier/supplier-conduct-at-mtn
Enhance employee training and education on ethics	🔵	A total of 451 employees completed online ethics-related courses (cumulative since 2014: 20 928). In 2017 e-learning was balanced with facilitator-led conversations about integrity in the workplace. An ethics module and assessment is now included in onboarding activities for all new staff.
Enable online safety for children	🔵	The group is reviewing a system that will provide the ability to block web URLs deemed illicit by the Internet Watch Foundation (IWF), and that are being reported as illicit through IWF worldwide operator channels and members. In Cyprus, MTN has set up a free helpline to assist young people, offer advice and ensure illegal web activity can be reported.

Legend

✅ Completed 🔵 In progress: on schedule ⚠️ In progress: behind schedule ❌ Not achieved

Digital human rights

Digital human rights addresses the right of people to freely, safely and responsibly express themselves online, and to share as little or as much information as they wish, in line with their desire to maintain privacy of themselves or of their views. This report outlines some of the challenges MTN faces with respect to managing digital human rights, the key concerns highlighted by stakeholders in respect of digital human rights, and how we are responding.

Supporting UN SDGs

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Operating context and challenges

Digitisation and mobile connectivity spurs economic growth and transforms many aspects of societal welfare such as health, education and access to financial, utilities, social and commercial services and more. At the same time, increased complexities around preserving national security within and across states, individual privacy and freedom of expression may constrain these outcomes.

The rise of digital technology, and particularly the use of social media platforms, has enabled the opportunity for people to connect and communicate instantly, without restrictions posed by locations and borders. This development has enhanced how people enjoy their rights as set out in the United Nations' Basic Declaration of Human Rights. It has also created concerns regarding how citizens voice their views, and potential impacts on national security, in countries around the world. In the last two years, we have also learnt about content manipulation and the much-publicised concept of 'fake news' using social media, which has, to an extent damaged trust in social media for both governments and the public. Growing cybersecurity risks and breaches, and the concern about the spread of terrorism using digital communications have created legitimate concerns about the abuse of the open nature of the internet. Authorities have responded to these challenges by updating and strengthening regulation regarding internet usage. Globally, governments have also placed stringent restrictions on the use of social media and digital communications. These issues have become increasingly complex. While regulation may often

be necessary to maintain balance and factual accuracy, it has put into question the rights of individuals. Questions are also raised about the economic impact of restrictions on digital communications, which may hamper the ability of businesses and individuals to operate as usual when such events occur.

Implications

The expectations from, and responsibilities of, telecommunication companies like MTN, internet services, software and hardware suppliers and other organisations in the ICT ecosystem have become increasingly complicated and blurred in this contextual environment. The role of MTN is additionally complicated due to the varied contexts and regulations given our operations in 24 countries. Our new operating reality requires balancing the protection of human rights with the risks of non-compliance with everchanging regulations and orders.

ICT companies are on the frontline in the fight for users' rights. Customers demand the restoration of services or lifting of restrictions on communications rapidly when restrictive events occur. Civil society calls for the resistance of requests, and greater transparency when companies are required to comply with requests that may affect rights. However, authorities may not always provide detailed information about the services affected, how long events are expected to last, and the reasons for these in their requests. The solution or path to follow is therefore never clear and executive level professionals need to be involved in many situations, whether these are considered a crisis or not.

Solution

MTN's commitment to conducting business responsibly and ethically, while complying with applicable laws, regulations, and the terms of operating licences is increasingly being tested in a number of countries in which we operate, and by the actions of global actors. MTN has responded to this challenging context by building our human rights management efforts. The changing context and regulatory environment requires our ongoing efforts, and we do not anticipate ever 'completing the digital human rights project'. Our plans include further implementation, activities, constant refinement and course-correction as situations and operating conditions evolve, and the roll out of the policies and tools we have developed, to ensure that these are embedded appropriately across the group.

Digital human rights continued

We draw on global human rights principles and digital human rights frameworks, guidelines and recommendations of the United Nations, regional blocs, civil rights groups and expert views. We pay close attention to the opinions expressed by our stakeholders, and this can influence our processes, approaches and activities.

Over the past several years we have put in place policies, procedures and governance frameworks, and incorporated digital human rights into our risk, stakeholder and other management processes. These formal approaches have been specifically developed for flexibility and decision making under multiple scenarios. This allows us to adapt and respond quickly in light of the constant changes and significant pressures we may suddenly encounter.

As MTN is reliant on the flow of communications for our existence, ensuring that our customers can easily and safely communicate within this context, while acting in accordance with prevailing regulatory requirements and the terms of our operating licences, is an ongoing pursuit. We strive to ensure the rights of all customers using our services, while acting in accordance with prevailing laws and licence conditions.

The sum of our activities set out below encompasses MTN's due diligence approach with respect to managing digital human rights responsibly.

Due diligence process, policies and activities in 2017

After identifying potential and actual impacts on our business and our stakeholders in 2016, we developed our approach to due diligence, and refined this in 2017 based on macro-developments and assessments of the materiality of certain impacts on MTN. We studied global frameworks and principles such as the United Nations Guiding Principles on Business and Human Rights. We educated ourselves further on these issues with support of organisations such as the National Business Institute of South Africa and the UN Global Compact, along with the World Business Council on Sustainable Development. We continually review the work of the United Nations Commission on Human Rights and other organised groups working on this issue, and engaged with stakeholders and independent human rights experts to assist in the development of business processes. We have also started a review of some of the existing policies that direct and enable MTN's digital human rights activities, to confirm if the principles we set when the policies were first drafted remain relevant to current and anticipated operating conditions. Updates to the digital human rights policy will be finalised in 2018.

Policies

All policies are approved by executive management and signed off by board committees.
- The group freedom of expression, privacy and security (digital human rights) policy.
- The group customer data records policy.
- The group information security policy.
- The privacy policy for the group and each country of operation and customer terms and conditions of service, which are available on each MTN country's website.

Digital human rights continued

We continue to make progress on various aspects of our due diligence approach as set out below.

Assess impact — Identify actual and potential risks and impacts on MTN and stakeholders

Remedy — Identify potential remedial solutions for affected customers

MTN Group's digital human rights due diligence approach

Develop policy — Maintain updated policy position

Track and communicate — Monitor, review and report impacts and business performance

Integrate and act — Enable teams to respond appropriately through processes and procedures

Frameworks and implementation

Embedding these policies into our strategic activities and operations is critical to our success in navigating the digital human rights context in a manner appropriate to each operating country, and within a global digital world. We have previously reported that we have been developing a digital human rights toolkit, an assessment tool that assists our operating countries to make decisions and take appropriate actions in varying situations. We did not progress as much or as rapidly as we would have liked to in 2017 in terms of its rollout, but are nevertheless pleased to be in a better position to ensure the decisions we make are aligned to the principles we adopted in our policies.

The toolkit includes detailed guidelines and checklists for decision making in our operating countries. We have based the toolkit on the United Nations' Guiding Principles for Business and Human Rights (Protect, Respect and Remedy Framework). The principles ask that companies assess their actual and potential impacts on all internationally recognised human rights. Digital human rights are not a standalone material issue, but rather it is a lens through which to understand all social and environmental impacts on people. Interpreting this for our operational requirements has taken us more time than we had anticipated. Obtaining internal consensus has also taken time. The toolkit was distributed to country operations via the offices of regional vice presidents for commentary last year. Group business risk management, legal, and regulatory and corporate affairs functions also reviewed the toolkit, and commentary on implementation and application challenges was received.

Implementation involves the application of three key steps to be executed by crisis, issue and risk management teams:

- Applying a decision tree, which outlines what the management team of operational units should do in the event of circumstances that may impact digital human rights.
- Key steps in the decision tree are supplemented by decision-making checklists that detail specific questions, considerations and steps that are required to start and ensure completion of the human rights issue.
- A risk assessment document that guides operations on pre-emptively identifying emerging risks on a scheduled basis (in addition to ongoing environmental scanning and risk management).

Although rollout of the toolkit was planned for 2017, this was delayed due to the challenge of developing a standard framework and approach that adequately addresses the varied political and regulatory environments in our operating countries. We needed to take special care to ensure that the toolkit and MTN's responses are practical and can be applied by each country, in a fairly standardised manner to ensure the group's governance requirements are met, while being flexible enough to accommodate environmental differences. While under development, it was tested and revised for situations as these occurred and is therefore an evolving document. The toolkit evolved in response to lessons learnt, incidents, changing political and operational landscapes, and the constantly changing digital context.

Digital human rights continued

We have not been hampered by the fact that a 'final' version of the toolkit was not available when events occurred: we have been using the draft toolkit to help us manage situations dynamically. This process, along with multiple reviews and internal commentary processes, affirmed that the toolkit is flexible enough to accommodate a range of scenarios that MTN may face in its 24 different operating countries. It also confirmed that it provides a formally documented set of guidelines that can be applied to decision making and issue resolution. Flexibility to respond to the differing conditions facing each of our countries, while adhering to standard governance and responsible business practices required by the group, was one of our key concerns, and we believe that this has now been accommodated.

Through our due diligence approach, we attempt to balance societal needs for security, privacy and freedom of expression with prevailing regulation and the terms and conditions of our operating licences.

Stakeholder engagement

Various groups of stakeholders have an interest in this matter. This includes customers, governments and regulatory authorities, civil society and community groups, the media, investors, global bodies such as the United Nations, and business organisations. Many have views that oppose those of other stakeholders, and reconciling these and responding appropriately to multiple perspectives will continue to challenge MTN and the ICT sector. The key challenges can be summarised as the need to balance individual rights to receive and impart information and ideas with the concerns of authorities about the spread of misinformation online, ensure cybersecurity, and the need to ensure that online platforms take more responsibility for ensuring accurate and responsible communications.

We engage at length, and on demand, with key stakeholder groups.

The top concerns expressed in 2017 are indicated below. Where MTN has acted on these concerns, our responses are also listed.

Stakeholder concern	Our response
Does MTN have a clearly articulated approach to due diligence or can MTN demonstrate that it clearly understands the steps that must be taken to manage digital human rights matters?	Yes. See 'due diligence, policies and activities in 2017' above
What are MTN's principles and positions as expressed in the group's digital human rights policy?	Read more at 🌐 https://www.mtn.com/en/mtn-group/ sustainability/cases-and-library/Pages/ Document-library.aspx
Is MTN guided by United Nations frameworks in managing events?	Yes. See 'frameworks and implementation' above
Is senior management actively involved in managing events that affect rights?	Yes. See 'governance and management' below
How are decisions made if requests received from authorities may infringe on rights?	See 'frameworks and implementation' above
Are the group's digital human rights management toolkit, checklists and guidance notes, which MTN started compiling in 2016, complete and being used operationally?	Partially. See 'frameworks and implementation' above
Are regular risks assessments undertaken?	No, risks assessments have commenced but are not regularly undertaken, or in a standard manner, across the group. See 'risk management in 2017' below

Digital human rights continued

Our stakeholders were pleased to learn that our due diligence approach was finalised, and that work on the toolkit described below is advancing steadily. Our offering of remedies to the situation we faced in Cameroon was also noted as evidence of application of the UN's Guiding Principles. We were also commended for publicly communicating our principles and commitment in terms of our policy. Improvement in both country level and group governance structures and the allocation of executive responsibilities for effective management of crises were also credited.

Listening to the concerns and views of our stakeholders, while discussing the challenges MTN faces, and what our approaches and practices are, has been invaluable in ensuring our processes and management of digital human rights remain as responsive to emerging situations as possible.

Risk management
Following a risk identification process, digital human rights risks were incorporated into the group's principle risk register, management and reporting processes. This includes a probability and impact assessment, to ensure that events are managed as effectively as possible in terms of the overall risk rating and impact on MTN and our stakeholders. Some work on sensitising high-risk operations has started informally, but more work is required and activities in this respect will be undertaken over time.

Major incidents
Between January and April 2017, and again from late September 2017 until January 2018, internet and social media services were restricted in the north and south west regions of Cameroon. This created several challenges for our operation in Cameroon, and raised questions from stakeholders about the decisions we made, what processes we followed, and how we were mitigating the impact on our customers.

We applied our due diligence processes to reviewing the request for service restrictions received from authorities, and ultimately complied with these requests. Decisions were also taken in line with those made by other operators in our sector. We made efforts to address the key concerns of multiple stakeholder groups. In April 2017, when internet services were restored, remedies were made available to affected customers by way of offers of 3MB of free data per customer for a period of time.

Governance and management
In addition to managing our digital human rights activity through our risk management frameworks, we have improved operational and group crisis management processes and oversight for critical events. In 2016, we set out country level and group governance structures and responsibilities for effective management of incidents. In line with our efforts to ensure consistency, more work to ensure group-wide standardisation took place in 2017. In previous years, the Group Regulatory and Corporate Affairs function was only involved in contributing to resolutions on an informal or ad hoc basis. In 2017, this function was also co-opted into issue management and resolution processes.

For MTN, crisis digital human rights events may be defined as instances that have a potential mass, wide-ranging and material impact on a large number of MTN's stakeholders, or that may significantly impact our ability to offer our regular products and services. For crisis events, a core senior team in the affected MTN country operation manages and resolves each incident. This team is also supported by corresponding functions at the group level. Major instances of data requests and service interruptions are managed directly by the country CEO, Head of Business Risk Management, and Head of Regulatory Affairs and Corporate Services. This function may also include senior management for information technology and human resources, depending on the nature of the event. The CEO of the affected country will also inform the regional Vice-President of such events. The regional Vice-President is a member of the group Executive Committee. Group functions that comprise the executive crisis and issue management team help the country crisis and issue management team respond to events, provide guidance and advice, assist with stakeholder management and communications, and generally ensure that all support required by the country management team is available.

Non-crisis events, which may also include private party or other requests for individual data or access to customer records, are operationally managed by legal, compliance or other suitably qualified officers in each country.

Digital human rights continued

Looking ahead
Our plans for 2018 are to continue to build and embed our digital human rights policies and practices across the group, using the guidelines set out in the toolkit. We are also currently updating the digital human rights policy, and will finalise and distribute this to our operations once the policy is approved by the group's Executive, and Social and Ethics committees.

Managing our digital human rights risks and continuing to link them to our group risk management framework remains a priority. We are also keeping up to date with macro-developments both globally and in MTN markets, including assessing where legislation that may impact online rights may be under review. We believe that this proactive approach can also help us mitigate emerging risks and potential implications to both MTN and to our stakeholders.

A critical action for us is to distribute our due diligence process in a more formal way. This will include basic awareness about the toolkit for operational teams that may support executive crisis teams and issue management councils. This process is expected to continue into 2019.

Associated reports

More information on our digital human rights activities may be located in UN reports on our website:

UN GRI4   UN GC

Positions

https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx

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The workplace

Supporting UN SDGs

8 DECENT WORK AND ECONOMIC GROWTH

Challenge
The global demand for talented, flexible, highly skilled, digitally connected employees who are able to help organisations realise their goals in a more effective, impactful, efficient and rapidly transforming environment required MTN to review the central role of our employees in ensuring we realise our strategic objectives. We are constantly challenged in ensuring our people remain motivated, engaged and responsive to helping MTN address the dynamic shifts and potential risks and opportunities we face as a global organisation delivering key services to millions of people.

Employee wellness, health and safety
Employee wellbeing programmes and ongoing awareness and support activities are implemented by all MTN operations. This ensures a healthier quality of life for our staff, promotes greater awareness about physical, financial and other aspects of health and wellness, and ensures that tools and services are available to support our employees in times of personal or work-related stresses. MTN Swaziland implemented a monthly wellness programme, which includes activities ranging from aerobic exercises to education on critical illnesses. MTN Kenya engaged with the pension fund administrator and focused on financial wellness for employees. MTN Syria hosted a campaign to enhance awareness about breast cancer, ensuring a specialist doctor could engage with the female employees, while MTN Liberia declared one month as a health month, focusing on a variety of health and wellness programmes. This included lectures by medical professionals, and hosted daily physical activity classes, to improve employees' resilience. In Nigeria, regular newsletters, advisory and motivational e-mails and other communications alert staff to risks and dangers posed by physical environments and provides suggestions with respect to occupational safety, while inviting staff to share improvement suggestions. Other operations also conduct physical and financial health and wellness events and awareness sessions throughout the year.

We pay close attention to global disease outbreaks and communicable diseases, and create awareness around diseases to ensure that our employees and their families remain as safe as possible. For instance, no employees were affected by the Marburg virus outbreak in east Uganda and MTN operations were not affected. Contingency measures were implemented and employee advice was offered on how to prevent the risk of infection. In Ivory Coast, MTN's inhouse doctor successfully treated two employees and three of their family members who contracted dengue fever. In Nigeria, one employee was affected by an outbreak of chicken pox. Using a hospital contracted by MTN's medical insurer, the employee was treated successfully. MTN Nigeria also maintains inhouse doctors to provide advisory and other services to employees. Inhouse doctors or nurses, or contracted-in medical specialists are also available on a part-time or full-time basis in a number of countries where we operate.

Broader events within countries, for example during times of civil unrest, can also impact employee health and safety. In such instances, travel precautions for employees are implemented to ensure safety. Medical, security and emergency services are also available to all our employees. Inhouse occupational therapists or external specialists also provide counselling and post-event trauma assistance to any of our employees who have been affected by traumatic events during the course of executing their responsibilities.

We regretfully report that we experienced one fatality in 2017, and 34 workplace-related injuries. The fatality occurred as a result of a door which fell on a contractor. The injuries were sustained mainly during vehicle accidents, and by incidents of employees tripping or falling.

The new world of work
The workplace of today is significantly different from that of a decade ago. New types of jobs, roles and skills requirements that enable businesses to operate in a permanently connected digital world are now becoming more commonplace. Some of the characteristics of these changes include work that is more complex, agile and faster paced, requires virtual collaboration including human engagement with intelligent machines, and entrenches organisations' dependency on people's competence with new technologies. Employees

The workplace continued

need to demonstrate a vast range of skills. These include the ability to use collaborative digital technologies to instantly engage and share critical information, to lead virtual, geographic-dispersed teams, including the systems of other organisations in the overall business ecosystem, the need to engage with stakeholders using social media and more. While these changes are exciting and pose new opportunities, uncertainty and challenges are also created. Companies require adaptable employees with new attitudes, mindsets and both technical and soft skills that allow organisations to compete more effectively for access to both markets and talent. Employees expect organisations to offer support for their requirements, which may include flexible working hours and locations, investment in the need for lifelong learning, demonstration of ethics and corporate values aligned to their own, and structuring of career paths, compensation and benefit solutions that enable them to be more flexible in their career choices, while offering security in an increasingly insecure global workplace.

> "The digital workplace lives at the intersection of people, organisation, and tools. It is part of a new way of working that is more open, collaborative, engaging and ultimately productive for people and organisations." MTN Nigeria.

MTN is aware of these changes and the impact on how we operate, attract and retain talent. It is the quality of our people, that will have the greatest impact on businesses' profitability and provide us with a competitive advantage to drive future business value. Global talent reviews, succession planning and psychometric assessments help us to identify individuals for the right job, at the right time, in the right place. The extraction of talent analytics further assists us in identifying key risks to predict future scenarios and inform predictive trend analysis. Succession planning is a key outcome of our talent management process, ensuring our teams are equipped to operate strategically and effectively in the digital world.

Investment in new types of skills is also critical to ensure the realisation of our strategy. In 2017 we assessed the skills and capabilities that our people need to operate under these changing workplace conditions. The MTN Academy now offers a service known as Degreed, a series of short online courses that enable employees to learn about subjects ranging from leadership skills and communication to computer science, data analysis and statistics, at any time. Degreed is structured to assist employees to transform how they think more cognitively, critically and in designed-orientated ways. This ensures that employees can adapt to changing workplace requirements more easily and continue their professional development. We invested over R252 million in employee training and development in 2017.

Taking employees along the journey in a practical way provides an opportunity for people to envision their future roles, career paths and opportunities in the new world of work. MTN Nigeria embraced the digital workplace, and has implemented a change management office to facilitate the workplace transition over a period of two years. While several digitally enabled initiatives were established in the information security, customer relations, marketing and human resource functions, all employees were formally introduced to this programme through the launch of a Digital Day. This was aimed at inviting staff to become true digeratis, or people that are knowledgeable about digital and information technology trends, and to develop their digital capabilities through online learning courses, quizzes, competitions and departmental challenges. Demonstrations were held on how mobile, cloud, social media, analytics, virtualisation and big data may be adopted within work processes and education on services such as digital currency, social media and digital collaboration services were offered to all employees.

MTN has also embraced the artificial intelligence revolution, with the introduction of a special colleague to the workplace. Ziya, a chatbot, or computer programme able to engage in conversation with humans, is one of the group's new human resource specialists. Ziya was introduced to MTN Group employees based in Johannesburg in late 2017. She is a live, fully interactive animated character, and can demonstrate life-like facial expressions. Her services, which include assisting with leave

The workplace continued

balance and policy requests, and canteen menu options, will be available to group head office employees working in Johannesburg in 2018.

Digital security in the new workplace is more critical than ever, with multiple connections between internal and external systems and communications infrastructure, the use of cloud services for information storage, and increasing using employee-owned devices on MTN's corporate network. To mitigate risks to both employees and the organisation, a number of awareness programmes, including e-mail alerts and webinars related to cybersecurity, responses to hacking, and information security risks were undertaken. We are also in the process of developing social media use guidelines for our employees.

Gender equality

We have committed ourselves fully to the articles of the Convention on the Elimination of all forms of Discrimination against Women, as well as to the Women's Empowerment Principles of the United Nations Global Compact.

Diversity is both a moral imperative and a source of competitive advantage, as it enables innovation and access to a wider range of experiences and skills.

A study to determine how to attract, retain and develop female talent at MTN, and to ensure the workplace is more gender friendly, was undertaken in 2017. The results informed a concerted decision by the group executive to enhance the conduciveness of the workplace for women and to address gender representation at various organisational levels. Quick wins to improve the working environment, such as designated services for pregnant and new mothers have been identified. The programme is currently focused on the MTN Group and MTN South Africa operations, and is ultimately aimed at being rolled out to the rest of our operations over time.

Please refer to the group's website for our policy position on gender issues.

📌 Positions

Ethical and labour positions may be located at 🌐 https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx

Reports

More information on our labour practices may also be located in reports on our website:

(UN GRI4) (UN GC) (IR)   Remuneration report

Annual sustainability statements

Sustainability value add statement

The group's business performance and plans are set out in the MTN Group Limited integrated report for the year ended 31 December 2017.

The table set out below indicates MTN's sustainability-related business performance in terms of South African and global standards, protocols and guidelines as indicated in the section 'about this report'. We set out our performance in terms of material indicators that provide a clear, comprehensive and useful measure of our progress quantitatively. This statement complements and extends the MTN Group statement on how we create and sustain value, as reported on pages 12 to 15 of the MTN Group Limited integrated report for the year ended 31 December 2017.

Indicator	Notes	Unit	2017	2016	2015	2014	2013
THE WORKPLACE							
Total employees		Number	**18 931**	19 989	21 804	22 204	25 424
Employee turnover		%	**7,9**	7,2	7,8	8,3	7
Employees retrenched		Number	**337**	330	335	752	315
Expatriate staff		%	**0,95**	0,8	0,8	0,9	1,1
Females		%	**36,83**	37	37	37	36
Females at group board level		Number	**3**	3	3	3	2
Females: senior manager and above		%	**1,6**	1,8	1,6	1,5	1,3
Females: middle management		%	**3,3**	Not previously reported	Not previously reported	Not previously reported	Not previously reported
Employees unionised (group)		%	**Not available**	3,8	Not previously reported	Not previously reported	Not previously reported
Employees unionised (South Africa)		%	**933**	22	16	Not previously reported	Not previously reported
Employee learning and development	1	R million	**252**	392	224	254	293
Learning and development hours per employee	1	Hours	**22,4**	32	12,9	17,4	31,9
Employee culture survey results	2	%	**70** (LA)	67	66	65	68
Employees receiving performance review	3	%	**95**	95	100	100	100
Workplace-related deaths	4	Number	**1**	3	0	0	5
Workplace-related serious Injuries	5	Number	**34**	22	17	12	41
Number of calls to tip-offs anonymous whistle-blower line		Number	**119** (LA)	120	128	260	687
Employees undertaking online ethics training	6	Number	**451**	958	1 456	1 104	–

Sustainability value add statement continued

Indicator	Notes	Unit	2017	2016	2015	2014	2013
ENVIRONMENT							
GHG emissions	7	Tonnes carbon dioxide and equivalent (tCO_2e)	**2 006 248**	1 609 174	1 589 888	1 531 527	1 520 895
• Scope 1: direct emissions		tCO_2e	**324 101**	315 603	645 428	793 098	769 471
• Scope 2: indirect emissions		tCO_2e	**806 339**	755 109	651 233	595 177	636 184
• Scope 3: indirect emissions		tCO_2e	**875 808**	538 462	293 227	143 252	115 240
GHG intensity per subscriber		tCO_2e	**0,0091**	0,0071	0,0072	0,0069	0,007
Energy savings (diesel)		kℓ	**313**	3 705	2 870	2 846	3 055
Alternative energy sites:	8	Number					
• Cumulative up to year under review			**3 147**	2 688	1 687	555	Not available
• Actual: year under review			**459**	1 001	1 132	Included above	Not applicable
GHG avoided/ reduced:							
• Cumulative up to 2015		tCO_2e	**Not applicable**	Not applicable	Not applicable	29 034	54 587
• Actual financial year			**1 529**	833	7 947	Not applicable	Not applicable
Green Office: e-waste	9	Tonnes	**215,7**	537,1	534,5	326	469
Green Office: paper use avoided		kg	**1 617 685**	15 646	15 271	Not available	Not available
Green Office: printer ink cartridges/toners not purchased		Number	**3 142**	Not available	Not available	Not available	Not available
Green Office: Envelopes not required		Number	**108 200**	Not available	Not available	Not available	Not available
Green Office: disposable paper cups avoided		Number	**178 000**	Not available	Not available	Not available	Not available
Green Office: electricity savings in office and non-technical operations		kWh	**807 181**	518 023	Not available	Not available	Not available
Green Office: potable water savings		kℓ	**144 000**	117 250	Not available	Not available	Not available
Green Office: general waste reduced		kg	**141 728**	Not available	Not available	Not available	Not available
Green Office: plastic, metal and drinks cartons waste avoided		kg	**1 540**	1 808	629	Not available	Not available

Sustainability value add statement continued

Indicator	Notes	Unit	2017	2016	2015	2014	2013
ECONOMIC DEVELOPMENT AND SOCIAL INCLUSIVITY							
Corporate social investment (MTN Foundations)	10	R million	**172** (LA)	294,4	335,4	282,5	314
Employee volunteers		Number	**11 027**	10 459	8 209	9 571	11 562
Black economic empowerment (South Africa): 2017	11	Score out of 130	**102,65**	See 2016 below	See 2015 below	See 2014 below	See 2013 below
• Ownership (20 base points and 3 bonus points)		Score out of 25	**25**	See 2016 below	See 2015 below	See 2014 below	See 2013 below
• Management and control (10 base points and 1 bonus point)		Score out of 23	**13,71**	See 2016 below	See 2015 below	See 2014 below	See 2013 below
• Skills development		Score out of 20	**11,87**	See 2016 below	See 2015 below	See 2014 below	See 2013 below
• Enterprise and supplier development		Score out of 50	**40,07**	See 2016 below	See 2015 below	See 2014 below	See 2013 below
• Socio-economic development		Score out of 12	**12**	See 2016 below	See 2015 below	See 2014 below	See 2013 below
Black economic empowerment (South Africa): up to 2016	11	Score out of 100	**See 2017 above**	87,83	76,60	85,72	75,58
• Ownership (20 base points and 3 bonus points)		Score out of 23	**See 2017 above**	21,28	20,70	21,34	21,00
• Management and control (10 base points and 1 bonus point)		Score out of 10	**See 2017 above**	10,67	9,57	10,37	11,00
• Employment equity		Score out of 10	**See 2017 above**	6,28	2,47	5,45	5,02
• Skills development		Score out of 17	**See 2017 above**	5,80	3,24	8,39	7,23
• Preferential procurement (20 base points and 6 bonus points)		Score out of 20	**See 2017 above**	20,28	20,91	19,66	9,61
• Enterprise development		Score out of 11	**See 2017 above**	11	7,71	8,51	9,72
• Socio-economic development		Score out of 12	**See 2017 above**	12	12	12	12

Sustainability value add statement continued

Notes

(LA) Please refer to our website 🌐 for data that has been externally assured and for which a limited assurance statement is available.

1. The lower headcount in 2017, along with the fact that MTN's call centres were outsourced, accounts for the reduced spend and number of training hours undertaken by PFTEs in 2017 compared to 2016.
2. The group culture audit (GCA) indicates the sustainable engagement of employees. This measures employees' sense of connection to the organisation, which is marked by support for company goals and values, pride in working for MTN, willingness to exert discretionary effort on the job, perceived enablement to ensure top performance and perceived energy to maintain necessary levels of work-related activity.
3. Employees who have joined MTN or terminated their employment during the financial year under review may not be eligible to complete a full year of performance reviews using the human resource information system (HRIS). MTN accepts a 5% non-completion margin on HRIS.
4. The death is attributed to serious injuries sustained by a contractor, when a door fell upon her.
5. The majority of injuries occurred due to road traffic accidents sustained by employees (e.g. field sales agents or maintenance staff) in the line of duty. Some accidents were sustained when employees tripped or otherwise hurt themselves, resulting in fractures.
6. As MTN's ethics training programme matures, the number of existing employees who undertake online training on ethics-related courses will likely plateau and likely decline over time. In 2017 e-learning was complemented with facilitator-led conversations to existing and new employees regarding integrity in the workplace. This will also ensure ethics awareness among employees remains current. An ethics module and assessment is also included in onboarding activities for all new staff.
7. MTN's GHG emissions increased due to two primary factors: (i) a material increase in the number of network sites, and the type of sites, from 2G to 3G and from 3G to 4G/LTE mainly in South Africa, Iran, Nigeria and Ghana (such sites conduct more data traffic and are therefore more power-intensive) and (ii) in 2017, we conducted a once-off exercise to reconcile data on the number of network sites sold or outsourced as recorded by MTN, and that recorded by our tower management partners and based on the number of sites, recalculated our GHG emissions. Please review the eco-responsibility section of this report for more information.
8. In 2017 we conducted an exercise to reconcile our investments in solar and solar-hybrid sites (using deep cycling battery solutions to reduce generator run-times and GHG emissions). We found that we had under-reported our investments in previous years, and have therefore restated the number of sites. Going forward, we will conduct reconciliation exercises more regularly, and ensure our site and GHG reports reflect the reduced GHG impacts of these investments.
9. Partial data is only available for the South African and Cameroonian operations. The reason for the decrease in e-waste handover was due to the fact that IT and technical e-waste was generated only when old equipment was replaced by new equipment or upgraded, the impact of the change in the employee laptop warranty period from three years to four years and the option offered to employees to purchase their laptop for personal use once the warranty expires. Equipment such as printers and some services are also leased, not owned, and are therefore replaced by the service provider at the end of their warranty or useful period. In Cameroon, 53 tonnes of e-waste was handed to Ericsson as part of the supplier take-back agreement, for shipping to and processing in South Africa.
10. Various factors contributed to this decline: currency fluctuations, declining margins and in some cases the inability to implement programmes due to socio-political challenges in some countries. CSI spend is also not static each year: project payment milestones and implementation phases of projects will determine how projects are funded over particular years.
11. The ICT industry BEE sector code as applicable since 2012 was revised in November 2016. Material changes include the fact that management control now incorporates employment equity, and enterprise and supplier development now incorporates preferential procurement. This has resulted in the element scores reducing from seven to five. There has also been a significant increase in weighting points for all pillars, except for socio-economic development, resulting in an increase from 100 to 130 points.

UN Global Reporting Initiative (GRI) 4 report

We prepare our report in accordance with Global Reporting Initiative (GRI) G4 guidelines, selecting core indicators material to our business. In reviewing this report, the following sources (document or web link) must be referenced in order to comprehensively assess our response:
- MTN Group integrated report 2017 (IR) **IR**
- MTN Group sustainability report 2017 (SR) **SR**
- MTN Group Carbon Disclosure Project report 2017 (CDP) **CDP**
- MTN Group Global Compact Communication of Progress Report 2017 (UNGC) **UN GC**
- MTN Group website 🌐 (www.mtn.com)

Index	Description	Information (document or web link)	Page(s)
STRATEGY AND ANALYSIS			
G4-1	CEO statement	• IR: Q&A with Group President and CEO • SR: Group President and CEO's message on sustainability	30 – 31 5 – 8
G4-2	Impacts, risks and opportunities on stakeholders and financial performance	• IR: Top risks to value creation	20 – 21
ORGANISATIONAL PROFILE			
G4-3	Name of reporting organisation	• MTN Group Limited	
G4-4	Primary brands, products, services	• IR: What we offer • https://www.mtn.com/en/what-we-do/Pages/default.aspx	3
G4-5	Location of headquarter's operating structure	• 216 – 14th Avenue, Fairland, 2195, South Africa	
G4-6	Geographic scope/ map of operations	• IR: Where we operate and how we performed • https://www.mtn.com/en/mtn-group/about-us/our-story/Pages/where-we-are.aspx	8 – 9
G4-7	Nature of ownership and legal form	• https://www.mtn.com/en/investors/Pages/default.aspx	
G4-8	Markets served, sectors served and profile of customers/ beneficiaries, profile of customer base	• https://www.mtn.com/en/what-we-do/Pages/default.aspx	
G4-9	Scale of the reporting organisation including number of employees and operations	• IR: About this report • SR: Scope and boundaries	Inside front cover Inside front cover
G4-10	Number of employees by employment contract and gender	• IR: How we sustain value • SR: Annual sustainability statements	14 51
G4-11	Percentage of employees covered by collective bargaining agreements	• SR: Annual sustainability statements	51

UN Global Reporting Initiative (GRI) 4 report continued

Index	Description	Information (document or web link)	Page(s)
ORGANISATIONAL PROFILE continued			
G4-12	Describe the organisation's supply chain (types, number of, and locations of suppliers including any sector specific characteristics of the supply chain)	• The appointment of suppliers and vendors involves a thorough selection and evaluation process, to ensure the most qualified vendors are selected based on fairness, objectivity, transparency and merit. This process is in line with our supply chain policies and procedures manual, applicable to all MTN operations. All suppliers are required to adhere to our policies, standards and procedures • https://www.mtn.com/en/mtn-group/supplier	
G4-13	Changes occurring within the reporting period regarding size, structure or ownership	• Annual financial statement at https://www.mtn.com/en/investors/Pages/default.aspx	
COMMITMENTS TO EXTERNAL INITIATIVES			
G4-14	How the precautionary approach/principle is addressed	• Environmental management positions at https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx	
G4-15	External economic, environmental and social charters or principles subscribed to/endorsed	• SR: Standards and reporting	1
G4-16	Memberships of associations and national or international advocacy organisations	• National Business Initiative • Groupe Speciale Mobile Association (GSMA)	
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES			
G4-17	Organisational structure	• IR: Where we operate	8
G4-18	How report content and aspect boundaries are defined and how the organisation has implemented reporting principles	• IR: About this report • SR: About this report	Inside front cover 1
G4-19	List all material aspects identified in the process for defining report content	• IR: Material matters impacting value creation • SR: Our approach to sustainability	16 – 17 3 – 4
G4-20	For each material aspect report the aspect boundary within the organisation	• SR: About this report	1

Index	Description	Information (document or web link)	Page(s)
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES continued			
G4-21	For each material aspect report the aspect boundary outside of the organisation	• SR: About this report	1
G4-22	Effect of any restatements of information in previous reports, and associated reasons	• Annual financial statement at https://www.mtn.com/en/investors/Pages/default.aspx • SR: Sustainability value add statement	51 – 53
G4-23	Significant changes to report content/scope (material aspects) from previous reports	N/A	
STAKEHOLDER ENGAGEMENT			
G4-24	List of stakeholder groups engaged by the organisation	• IR: Relationships on which we rely to create value • SR: About this report	18 – 20 1
G4-25	How are stakeholders identified?	• IR: Relationships on which we rely to create value • SR: About this report	18 – 20 1
G4-26	Approaches to stakeholder engagement (who, how, and what outcomes)	• IR: Relationships on which we rely to create value • SR: About this report	18 – 20 1
G4-27	Stakeholder concerns and how the organisation has responded. Report the stakeholder groups that raised each concern	• IR: Relationships on which we rely to create value • SR: About this report	18 – 20 1
REPORT PROFILE			
G4-28	Reporting period	• 1 January 2017 to 31 December 2017	
G4-29	Date of most recent report	• 31 December 2016	
G4-30	Reporting cycle	• Annual	
G4-31	Contact point	• https://www.mtn.com/Pages/Contact-us.aspx	
REPORT PROFILE: GRI CONTENT INDEX			
G4-32	'In accordance' option chosen, GRI context index chosen, external assurance report	• 'In accordance' – Core • GRI context index – G4 • SR: Annual sustainability statements	55
G4-33	Policy and current practice on independent assurance, and whether the highest governance body is involved in seeking assurance for the sustainability report	• Assurance statements are available at https://www.mtn.com/en/investors/Pages/default.aspx	

Index	Description	Information (document or web link)	Page(s)
GOVERNANCE			
G4-34	Governance structure including highest governance committees, and committees responsible for decision making on economic, environment, and social impacts	• IR: Governance • SR: Our approach to sustainability	56 – 75 3
G4-35	Process for delegating authority for sustainability topics from the highest governance body to senior executives and other employees	• SR: Our approach to sustainability	3
G4-36	Executive level position(s) with responsibility for sustainability topics including reporting lines to highest governance body	• SR: Our approach to sustainability	3
G4-37	Process for consultation between stakeholders and the highest governance body on sustainability topics	• SR: Our approach to sustainability	3
G4-38	Composition of the highest governance body (board) and its committees – detailed	• IR: Governance	56 – 75
G4-39	Is Chairman of highest governance body also an executive officer?	• Yes	
G4-40	Nomination and selection process for highest governance body and committees including criteria such as diversity, independence, and expertise for nominations and selections	• IR: Governance	56 – 75
G4-41	Process followed by the board for managing conflicts of interest	• IR: Governance	56 – 75

UN Global Reporting Initiative (GRI) 4 report continued

Index	Description	Information (document or web link)	Page(s)
GOVERNANCE continued			
G4-42	Highest governance body's role in development, and approval of organisation's value statements, policies and strategies related to sustainability	• IR: Governance – Social and Ethics Committee • SR: Our approach to sustainability	62 3
G4-43	Measures taken to develop and enhance board's knowledge of sustainability	• Not available	
G4-44	Processes for evaluating board's sustainability performance and actions taken in response to evaluations	• Not available	
G4-45	Board's oversight of sustainability	• IR: Governance – Social and Ethics Committee • SR: Our approach to sustainability	62 3
G4-46	Board's role in reviewing effectiveness of risk management processes	• IR: Governance – Risk Committee • IR: Our approach to risk management	60 – 61 76 – 78
G4-47	Report the frequency of the board's review of economic, environmental and social impacts, risks and opportunities	• SR: Our approach to sustainability	3
G4-48	Highest committee or position that approves sustainability report and ensures all material aspects are covered	• IR: Governance: Social and Ethics Committee • SR: Our approach to sustainability	62 3
G4-49	Process for communicating critical concerns to the board	• IR: Our approach to risk management	60 – 61
G4-50	Nature and number of critical concerns communicated to board, and mechanisms used to resolve	• On a continuous basis, a red flag report on all compliance risks, issues and incidents being faced by the various operating companies within MTN's footprint is compiled. The report informs senior management about actions taken to address and resolve each matter noted, and supports proactive management of future compliance obligations. Due to the size of the report, each matter is assessed and prioritised, in accordance with a risk assessment methodology, and is then reported to the Group Executive Committee monthly. The full red flag report is continuously updated and is made available to members of the committee on request. The report is also made available to the Group Risk, Compliance and Corporate Governance Committee on a quarterly basis, highlighting priority red flags • On a monthly basis, material regulatory matters, and issues of importance affecting the company and its stakeholders, are compiled and presented to the Group Executive Committee by the group regulatory and corporate affairs officer. Reports also include mitigation and resolution mechanisms • On a quarterly basis, factors and stakeholder issues that influence MTN's reputation, including customer experiences (quality of service, communication costs, etc.), digital human rights, MTN as an employer, regulatory, governance and ethical matters, and the impact of sites and towers is presented to the Group Social and Ethics Committee. This report also includes engagements planned to resolve issues	

Index	Description	Information (document or web link)	Page(s)
GOVERNANCE continued			
G4-51	Report remuneration policies for highest governance body and senior executives, and describe the link between remuneration and leadership performance	• Remuneration report	79 – 83
G4-52	Process for determining remuneration	• Remuneration report	79 – 83
G4-53	How are stakeholders' views taken into account regarding remuneration	• The annual group culture audit (GCA), conducted among employees, takes into account the aspect of remuneration. The GCA indicates the sustainable engagement of employees	
G4-54	Ratio of total annual compensation for organisation's highest-paid individual in each country to median annual total compensation for all employees (excluding highest paid) in that country	• Not available	
G4-55	Ratio of percentage increase in annual total compensation for organisation's highest-paid individual in each country to median percentage increase for all employees (excluding highest paid) in that country	• Not available	
ETHICS AND INTEGRITY			
G4-56	Organisation's values, principles, standards, norms of behaviour and codes of conduct/ethics	• IR: Who we are • SR: Who we are https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx – Group social and ethics statement – Anti-corruption – Conflicts of interest – Digital human rights – Networks and environment • https://www.mtn.com/en/mtn-group/about-us/ethics/Pages/default.aspx	2 2

Index	Description	Information (document or web link)	Page(s)
ETHICS AND INTEGRITY continued			
G4-57	Internal and external mechanisms for seeking advice on ethical and lawful behaviour	• An internal ethics discussion platform exists on the MTN intranet, 'MTN Connect' • A closed group discussion platform exists on the intranet (MTN Connect) specifically for use by ethics champions at group and opco level • An ethics advice line (not anonymous) exists: MTNGroupEthics@mtn.com • An anonymous fraud reporting line exists (anonymous@tip-offs.net) • At organisational level MTN has a strategic partnership with The Ethics Institute with whom the company has organisational membership; this partnership is crucial for ethics advice required at a systemic level • Annually a perception-based, anonymous organisation climate/culture survey is conducted across the group of companies, with values and corporate integrity being two of the 16 dimensions probed • Ethics task teams at group and operations level consisting of trained ethics champions from various disciplines (e.g. finance, HR, procurement, business risk management, corporate affairs, etc.) who are available to field ethics enquiries • The MTN Group has 27 certified ethics officers (registered with the Ethics Institute of South Africa) from across various organisational disciplines, e.g. procurement, business risk management, finance (group tax), legal and HR who provide assistance and advice at both personal level and systemic level to all opcos in terms of ethics management practice • Ethics-related priority policies as well as the codes (code of ethics, social and ethics statement and employee conduct pledge) direct behaviour and practice, and contain directives on routes to follow for the reporting of ethical breaches • An issue management council exists at head office as well as in most country operations	
G4-58	Internal and external mechanisms for reporting concerns about unethical or unlawful behaviour, escalations, and whistle blowing	• All ethics-related policies indicate the appropriate route to follow with regard to the reporting of ethics policy breaches, i.e. line manager/head of function/Group Chief Officer (HR and Corporate Affairs or Group Chief Officer Business Risk Management), or the whistle-blowing line (Tip-offs Anonymous (anonymous@tip-offs.net) • An ethics advice line exists on the intranet (MTN Connect) – a social platform where employees may raise issues for purposes of gaining advice • A dedicated mailbox (MTNGroupEthics@mtn.com) in use for all staff to raise issues of concern or ask advice privately • IR: Governance: Audit Committee • IR: Our approach to risk management – fraud risk management • SR: Annual sustainability statements (calls to whistle-blower line)	67 78 52
CATEGORY: Economic **ASPECT: Economic performance**			
	Disclosure on management approach	• https://www.mtn.com/en/investors/Pages/default.aspx	
G4-EC1	Direct economic value generated and distributed (revenues, operating costs, wages, benefits, loans)	• IR: Key financial tables • Annual financial statements on https://www.mtn.com/en/investors/Pages/default.aspx	36 – 38
G4-EC2	Climate change-related financial implications and risks and opportunities	• SR: Energy and climate risks, mitigation and opportunities • CDP report: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx • Latest group CDP report: www.cdproject.net	34

Index	Description	Information (document or web link)	Page(s)
CATEGORY: Economic **ASPECT: Economic performance** continued			
G4-EC3	Defined benefit plan obligations coverage	• IR: Remuneration report	79 – 83
G4-EC4	Financial assistance from government	• In some countries, standard government rebates to encourage investment in national skills development and training is available to employers. In South Africa, for example, rebates at rates determined by the government are available on payments made in terms of the Skills Development Levies Act (where companies are registered with the South African Revenue Service, have a payroll above a government-determined threshold, and make payments of 1% of monthly payroll costs to the national Skills Development Levy)	
CATEGORY: Economic **ASPECT: Market presence**			
	Disclosure on management approach	• https://www.mtn.com/en/investors/Pages/default.aspx	
G4-EC5	Ratios of standard entry level wage compared to local minimum wage (by gender)	• Not available	
G4-EC6	Proportions of senior management hired from local communities	• We currently report on the percentage of expatriate employees, but do not indicate this by management level • SR: Annual sustainability statements	51 – 53
CATEGORY: Economic **ASPECT: Indirect economic impacts**			
	Disclosure on management approach	• IR: How we create value using the six capitals • SR: Annual sustainability statements • https://www.mtn.com/en/mtn-group/social-investments/Pages/default.aspx	14 – 15 51 – 53
G4-EC7	Extent and impacts of development of significant infrastructure investments and services and whether they are commercial, in kind, or *pro bono* engagements	• IR: How we create value using the six capitals • SR: Sustainable economic value • https://www.mtn.com/en/mtn-group/social-investments/Pages/default.aspx	14 – 15 9 – 27
G4-EC8	Significant indirect economic impacts, including extent of impacts	• Not available	

Index	Description	Information (document or web link)	Page(s)
CATEGORY: Economic **ASPECT: Procurement practices**			
	Disclosure on management approach	• The group Sourcing Committee is responsible for driving efficient procurement processes at group and in the operations. While operations are encouraged to source products and services centrally to achieve desired savings, local procurement in support of economic development is an important feature for all operations. The group's supplier code of conduct defines minimum standards that our suppliers and their employees and subcontractors must respect and adhere to when conducting business with MTN • https://www.mtn.com/en/mtn-group/supplier/Pages/default.aspx	
G4-EC9	Policies, practices, and proportion of spending on locally based suppliers	• SR: Annual sustainability statements (black economic empowerment) • https://www.mtn.com/en/mtn-group/supplier/group-scm-overview/Pages/Local-supplier-empowerment.aspx	53
CATEGORY: Environmental **ASPECT: Materials**			
	Disclosure on management approach	• The group applies the precautionary principle towards environmental management, and our operations are compliant to national laws and regulations • https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx	
G4-EN2	Materials used: weight/volume	• SR: Eco-responsibility – environmental management • SR: Annual sustainability statements	35 – 38 52
CATEGORY: Environmental **ASPECT: Energy**			
	Disclosure on management approach	• The group applies the precautionary principle towards environmental management, and our operations are compliant to national laws and regulations • SR: Eco-responsibility – energy and climate • SR: Annual sustainability statements • CDP report: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx • Latest group CDP report: www.cdproject.net	30 – 34 52
G4-EN3	Energy consumption within the organisation	• SR: Eco-responsibility – energy and climate • SR: Annual sustainability statements • CDP report: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx • Latest group CDP report: www.cdproject.net	30 – 34 52
G4-EN4	Energy consumption outside the organisation	• SR: Eco-responsibility – energy and climate • SR: Annual sustainability statements • CDP report: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx • Latest group CDP report: www.cdproject.net	30 – 34 52
G4-EN5	Energy intensity	• SR: Eco-responsibility – energy and climate • SR: Annual sustainability statements • CDP report: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx • Latest group CDP report: www.cdproject.net	30 – 34 52
G4-EN6	Reduction of energy consumption (as a result of conservation and efficiency initiatives)	• SR: Eco-responsibility – energy and climate • SR: Annual sustainability statements • CDP report: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx • Latest group CDP report: www.cdproject.net	30 – 34 52

Index	Description	Information (document or web link)	Page(s)
CATEGORY: Environmental **ASPECT: Water**			
	Disclosure on management approach	• The group applies the precautionary principle towards environmental management, and our operations are compliant to national laws and regulations • https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx • Due to the nature of MTN's business and the products and services offered, this indicator is not material. However, as part of the maintaining the ISO 14001 certifications in Cyprus and South Africa, this aspect is addressed. Other operations, while not ISO 14001-certified, maintain safety health and environmental policies, and as part of business plans, all MTN countries of operation are required to identify environmental risks as a focus area in terms of the group's principal risks. A number of MTN operations are currently implementing the group Green Office toolkit, for water saving opportunities at offices and similar premises • SR: Eco-responsibility – environmental management	35 – 38
CATEGORY: Environmental **ASPECT: Biodiversity**			
	Disclosure on management approach	• The group applies the precautionary principle towards environmental management, and our operations are compliant to national laws and regulations • SR: Eco-responsibility – environmental management • Networks and environment – https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx	35 – 38
CATEGORY: Environmental **ASPECT: Emissions**			
	Disclosure on management approach	• The group applies the precautionary principle towards environmental management, and our operations are compliant to national laws and regulations • SR: Eco-responsibility – energy and climate • CDP report: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx • Latest group CDP report: www.cdproject.net	30 – 34
G4-EN15	Direct GHG emissions (scope 1)	• SR: Eco-responsibility – energy and climate • SR: Annual sustainability statements • CDP report: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx • Latest group CDP report: www.cdproject.net	30 – 34 52
G4-EN16	Energy indirect GHG emissions (scope 2)	• SR: Eco-responsibility – energy and climate • SR: Annual sustainability statements • CDP report: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx • Latest group CDP report: www.cdproject.net	30 – 34 52
G4-EN17	Other indirect GHG emissions (scope 3)	• SR: Eco-responsibility – energy and climate • SR: Annual sustainability statements • CDP report: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx • Latest group CDP report: www.cdproject.net	30 – 34 52
G4-EN18	GHG emissions intensity	• SR: Eco-responsibility – energy and climate • SR: Annual sustainability statements • CDP report: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx • Latest group CDP report: www.cdproject.net	30 – 34 52

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CATEGORY: Environmental **ASPECT: Emissions** continued			
G4-EN19	Reduction of GHG emissions	• SR: Eco-responsibility – energy and climate • SR: Annual sustainability statements • CDP report: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx • Latest group CDP report: www.cdproject.net	30 – 34 52
G4-EN20	Emissions of ozone depleting substances (ODS)	• CDP report: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx • Latest group CDP report: www.cdproject.net	
CATEGORY: Environmental **ASPECT: Effluents and waste**			
	Disclosure on management approach	• The group applies the precautionary principle towards environmental management, and our operations are compliant to national laws and regulations • https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx • SR: Eco-responsibility – environmental management • Due to the nature of MTN's business and the products and services offered, this indicator is not material. However, as part of the maintaining the ISO 14001 certifications in Cyprus and South Africa, this aspect is addressed. Other operations, while not ISO 14001-certified, maintain safety health and environmental policies, and as part of business plans, all MTN countries of operation are required to make environmental risks as focus area in terms of the group's principal risks. A number of MTN operations are currently implementing the group Green Office toolkit, which includes addressing waste outputs and reducing consumption of resources that may lead to waste creation. The group is also working on the recycling of electronic and electrical waste (WEEE or e-waste) in both upstream and downstream processes. Initiatives are at various stages of maturity or have been completed (when in partnership) including in Benin, Cameroon, Cyprus, Iran, Nigeria and South Africa • SR: Eco-responsibility – environmental management	35 – 38
G4-EN23	Total weight of waste by type and disposal method	• SR: Eco-responsibility – environmental management • SR: Sustainability value add statement	35 – 38 52
G4-EN24	Total number and volume of significant spills	• Not available	
G4-EN25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII and percentage of transported waste shipped internationally	• The most material waste subject to this convention is electronic and electrical waste (e-waste or WEEE). In South Africa, e-waste is processed locally to the greatest possible extent, by MTN's e-waste handlers. MTN's fractions are ultimately mixed with e-waste from other companies and sources, and we are not aware of the weight of fractions shipped internationally. Short-term public awareness and e-waste collection campaigns resulting in collection and shipping of e-waste from Benin and Ivory Coast to South Africa in the past have been subject to the Convention. Local e-waste management in partnership with recyclers will commence in Ivory Coast in 2018. Supplier take-back agreements are in place in Cameroon, and safe disposal guidelines for batteries have been implemented in Iran. A public private partnership addressing extended producer responsibilities has been developed in Nigeria. For tonnage, see references below • SR: Eco-responsibility – environmental management • SR: Annual sustainability statements	35 – 38 52

Index	Description	Information (document or web link)	Page(s)
CATEGORY: Environmental **ASPECT: Effluents and waste** continued			
G4-EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organisation's discharges of water and runoff	• Networks and environment: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx	
CATEGORY: Environmental **ASPECT: Products and services**			
	Disclosure on management approach	• The Global e-Sustainability Initiative has assessed that ICT-enabled solutions can help the world achieve carbon abatements in the region of 9,6 GtCO$_2$e or 16,5% of global outputs by 2020. Although our solutions in this domain are relatively small, opportunities are growing rapidly. See reference links below • SR: Sustainable economies – powering communications and IoT • See case studies at https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/default.aspx	14 – 16 and 26 – 27
G4-EN28	Percentage of products sold and their packaging materials that are reclaimed by category	• SR: Eco-responsibility – environmental management • SR: Annual sustainability statements	35 – 38 52
CATEGORY: Environmental **ASPECT: Compliance**			
	Describe the approach to managing and reporting on compliance (with environmental laws and regulations)	• The group's legal, regulatory and compliance functions in each country of operation are jointly responsible for oversight and reports on non-compliances and fines issued. Material instances of non-compliance and fines may also be reported via the group's reputational issues and red flag reports, to group management functions and executive structures	
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	• Not available	

Index	Description	Information (document or web link)	Page(s)
CATEGORY: Environmental **ASPECT: Transport**			
	Disclosure on management approach	• Although transportation is not a source of significant environmental impact and is not deemed material, greenhouse gas emissions associated with transport are quantified • SR: Eco-responsibility – energy and climate • SR: Annual sustainability statements • CDP report: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Reports.aspx • Latest group CDP report: www.cdproject.net	30 – 34 52
CATEGORY: Environmental **ASPECT: Overall**			
	Disclosure on management approach	• The group applies the precautionary principle towards environmental management, and our operations are compliant to national laws and regulations • https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx • IR: Governance – Social and Ethics Committee • Networks and environment: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx • Mobiles and health: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx	62
CATEGORY: Social – labour practices and decent work **ASPECT: Employment**			
	Disclosure on management approach	• Our employment practices are guided by the international and local labour laws that seek to protect the rights of both the employer and employee in the workplace. Detailed monthly reports of various aspects are submitted to the Group Chief Human Resources Officer. Annual performance is presented in the Group's UN Global Compact Communication of Progress report • SR: The workplace	47 – 49
G4-LA1	Number and rates of employee hires and turnover, by age group, gender, and region	• Partial information is available, as indicated in the SR: Annual sustainability statements	53
G4-LA2	Benefits provided to full-time employees that are not provided to temporary/part-time employees, by significant locations of operations	• Not available	
G4-LA3	Return to work and retention rates after parental leave, by gender	• Not available	

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Index	Description	Information (document or web link)	Page(s)
CATEGORY: Social – labour practices and decent work **ASPECT: Labour/management relations**			
	Describe the approach to management of labour relations and how this is reported on	• Retrenchments are a result of organisational restructuring. All organisational restructures follow a strict consultation with affected staff, and with reference to local labour regulations. During this process, employees have the opportunity to interrogate the changes and offer suggestions to which management can apply their minds. Should retrenchment still be necessary after thorough consultation, affected employees are informed in person, and the discussion is confirmed in the form of a letter to the employee	
G4-LA4	Report minimum notice periods regarding significant operational changes as well as whether these are specified in collective agreements	• Employees are notified as soon as possible of restructuring processes within the organisation if considered. This follows a consultation processes. Once an employee has been confirmed for retrenchment, he/she is given at least one month's notice. This notice period may even be longer than one month, as determined by the various labour laws (which always state the minimum notice period) applicable in the countries in which MTN operates. It is important to note that MTN has a very generous retrenchment policy relative to severance pay	
	Describe the approach to managing and reporting on occupational health and safety within the organisation	• SR: Sustainable societies – the workplace	53
G4-LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programmes	• SR: Sustainable societies – the workplace	53
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, absenteeism, and total number of work-related fatalities by region and gender	• SR: Sustainable societies – the workplace • SR: Annual sustainability statements • Occupational diseases are not a feature of our business, given the nature of products and services offered • Data on lost days is not available, but is deemed not material due to the low rate of workplace-related accidents/injuries	47 – 49 53

Index	Description	Information (document or web link)	Page(s)
CATEGORY: Social – labour practices and decent work **ASPECT: Training and education**			
	Disclosure on management approach	• Employees are actively encouraged to continuously look for opportunities to improve their capabilities and skills through extensive training available digitally, face to face and from other sources supplied by MTN's Academy, or from external accredited and reputable organisations. On a regular basis, MTN Academy compiles internal reports for management on the nature of training undertaken by employees, amount of time spent on each module, and pass-rates. Certain elements of training are mandatory for all employees. Directors also receive regular and informative updates and training on legislative, regulatory, and any other business-related changes throughout their tenure. They are also encouraged to discuss their development needs with the chairman, and are provided with training where necessary • SR: Sustainable societies – the workplace	
G4-LA9	Average hours of training per employee per year (by gender and employee category)	• SR: Annual sustainability statement	51
G4-LA10	Report on the type and scope of programmes implemented for employee skills management and lifelong learning	• While detailed reports are available internally, this information is not available for external reporting currently • We provide talent management learning solutions that ensure that we continue to attract, retain and develop the talents of our employees. Our global talent standards are structured to take into account the technical and behavioural requirements for each position, level of work and functional area in our organisation. We offer training and development solutions for business, organisational behaviour, commercial, technology and leadership capabilities • SR: Sustainable societies – the workplace	47 – 49
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and employee category	• SR: Annual sustainability statement	51

Index	Description	Information (document or web link)	Page(s)
CATEGORY: Social – labour practices and decent work **ASPECT: Diversity and equal opportunity**			
	Describe the approach to managing and reporting on diversity and equal opportunity	• We aim to ensure that our workforce, across our various operations, is representative of the communities in which we operate. This ensures a diverse workforce, and represents gender diversity across sectors. While MTN's retirement age requirement is taken into account, opportunities are available to all age groups from 18 to 59. Competency-based interviews are conducted to remove any subjectivity in the selection process, ensuring that people are recruited for the skills they offer, and are thus given an equal opportunity. We comply with any local requirement stipulated by the national labour departments in relation to employment equity in the countries in which we operate • https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx	
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age, and other indicators of diversity	• IR: Governance – diversity	58 – 59
CATEGORY: Social – labour practices and decent work **ASPECT: Equal remuneration for men and women**			
	Describe the approach to management of equal remuneration for women and men, and how this is reported on	• MTN appoints employees based on a fair process that is based on human resource policies and procedures. Remuneration decisions are subject to these policies and procedures which are applicable to males and females. Remuneration is determined by position, skills, expenses, qualifications and affordability • No reports on equal remuneration for men and women are available	
G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operations	• Not available	
CATEGORY: Social – labour practices and decent work **ASPECT: Supplier assessment for labour practices**			
	Disclosure on management approach	• In 2017, the new MTN supplier code of conduct was finalised and distributed. The code identifies the human rights of suppliers' employees and requires them to treat staff with dignity and respect, including with respect to freely chosen employment, the rights of young workers and issues of child labour, non-discrimination and fair treatment, respect and dignity, wages, working hours and benefits. New suppliers are now required to acknowledge the supplier code of conduct on MTN's procurement system, before a working relationship (awarding a contract) can commence. Existing suppliers will be reviewed against the annual supplier 'health check' form, which will trigger the requirement for them to accept the supplier code of conduct	

Index	Description	Information (document or web link)	Page(s)
CATEGORY: Social – labour practices and decent work **ASPECT: Labour practices grievance mechanisms**			
	Disclosure on management approach	• The group has a defined code of conduct related to human resource management and practices. Entrenched in this is a detailed grievance procedure that ensures that employees enjoy the freedom to raise grievances, and ensures that these will be correctly mediated	
G4-LA16	Number of grievances about labour practices filed, addressed, resolved, through formal grievance mechanisms	• Not available	
CATEGORY: Social – human rights **ASPECT: Investment**			
	Disclosure on management approach	• SR: Sustainable societies – digital human rights • Digital Human Rights: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx • https://www.mtn.com/en/mtn-group/about-us/ethics/Pages/our-code-of-ethics.aspx	41 – 46
G4-HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that have undergone human rights screening	• Not available	
G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	• Not available	
CATEGORY: Social – human rights **ASPECT: Non-discrimination**			
	Disclosure on management approach	• Entrenched in the group's code of conduct are noted transgressions that carry serious penalties for any person who offends another based on colour, race, creed, political association or injury to person or their dignity. This ensures that all employees are able to operate freely within the organisation, and focus on their primary roles (which is to provide the services contractually agreed to) • https://www.mtn.com/en/mtn-group/about-us/ethics/Pages/our-code-of-ethics.aspx	
G4-HR3	Number of incidents of discrimination and action taken	• Not available	

Index	Description	Information (document or web link)	Page(s)
CATEGORY: Social – human rights **ASPECT: Freedom of association and collective bargaining**			
	Disclosure on management approach	• Employees are free to associate socially, politically, religiously or otherwise, as well as join any bargaining council without fear of victimisation. Our code of conduct enables us to correctly manage situations where an employee may infringe on these rights • https://www.mtn.com/en/mtn-group/about-us/ethics/Pages/our-code-of-ethics.aspx	
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at risk, and details of the measures taken to support these rights	• Employees are free to associate socially, politically, religiously or otherwise, as well as join any bargaining council without fear of victimisation. Our code of conduct enables us to correctly manage situations where an employee may infringe on these rights • Suppliers: Not available	
CATEGORY: Social – human rights **ASPECT: Human rights grievance mechanisms**			
	Disclosure of management approach	• Stakeholders engagement with MTN on human rights matters and concerns either on a national level, with MTN country operations, and/or with the group itself, at their prerogative. For national incidents, communicating with customers, local communities and media, and engaging authorities and other industry roleplayers are undertaken by the country management team. At a group level, engagement is undertaken on both a proactive (general information sharing) and reactive (incident-specific) basis, where possible. Stakeholders may also contact each country operation using the general complaint and grievance structure or contact details available on each country operation's website	
G4-HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	• Not available	
CATEGORY: Society **ASPECT: Local communities**			
	Disclosure on management approach	• https://www.mtn.com/en/mtn-group/social-investments/Pages/default.aspx	
G4-SO1	Operations with significant actual and potential negative impacts on local communities	• Digital human rights: SR: Sustainable societies – digital human rights • Mobiles and health: all operations engage directly, and through local regulatory authorities, with communities with respect to matters related to network installation • CSI: all MTN operations engage directly with local communities either through formal MTN Foundations, which are responsible for disbursing financial social investment initiatives in the areas of education, health, economic empowerment and national priorities, and/or through 21 Days of *Y'ello* Care, the group's annual staff volunteer programme in support of community upliftment	41 – 46

Index	Description	Information (document or web link)	Page(s)
CATEGORY: Society **ASPECT: Anti-corruption**			
	Disclosure on management approach	• IR: Governance • Group positions on anti-corruption and conflicts of interest at https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx	62 and 66
G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	• All MTN operations participate in the MTN group-wide ethics risk assessment, which is conducted independently every three years by The Ethics Institute. The next ERA will be conducted in 2019. Annually, a group-wide culture audit is conducted that includes a corporate integrity as well as a values dimension. The results of these two indexes provide insight into the efficacy of ethics risk management efforts. To ensure that high ethics risks are tracked as part of the key risks according to the MTN Group enterprise risk management (ERM) methodology, ethics risk was included in the MTN corporate risk register as from 2017. Mitigation of key ethics risks was reported to the group board's Social and Ethics Committee in every quarter. The impact of ethics risk management interventions is monitored through the analysis of trends in the corporate integrity as well as the values index within MTN's annual group-wide culture audit. Findings indicated a year-on-year improvement in employee perception of corporate integrity and values. This positive year-on-year trend in these two dimensions has been sustained since 2014. The improvement is deemed statistically significant by Willis Towers Watson, who independently conducts the MTN GCA	
G4-SO4	Communication and training on anti-corruption policies and procedures	• Some of our activities in this respect include an annual Fraud and Ethics Awareness Week, requiring all management and employees to undertake ethics pledges, and digital training and management videos. Our various operations ensure management and business risk management on issues of fraud, corruption and ethics • Various opco training initiatives led by management and BRM on fraud, corruption and ethics	
G4-SO5	Confirmed incidents of corruption and actions taken	• Due disciplinary processes are followed to investigate and resolve matters of ill-discipline including corruption. Sanctions may range from warnings to termination of employment	

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CATEGORY: Society **ASPECT: Public policy**			
	Disclosure on management approach	• For us at MTN, the approach to public policy engagement must be agile and fluid. Given the rapid pace at which the industry is changing, it is important that we are ahead of the curve when it comes to changes in the public policy universe. We do this in many ways: – Via various board committees and working groups in the GSMA: MTN Group is represented both at the GSMA board level and at the chief policy and regulatory officers group (CPROG) by the group president and CEO and the chief regulatory and corporate affairs officer respectively. Each of these bodies provide strategic insights and critical input opportunities for various studies, global research projects and standardisation efforts across the industry – In the last year, a function dedicated to public policy and regulatory governance was created within the group regulatory and corporate affairs division. Within this function is the role for research and policy management which is mainly responsible for proactively identifying important policy developments, changes and trends that may affect the business across our various markets – We continue to take a rigorous approach to engaging with regulatory and legislative bodies who invite us to provide commentary and engage in public consultations. We also ensure that each of our MTN operations are able to engage directly with their authorities at critical points in the policy cycle to ensure sufficient opportunity for crafting public policy with the relevant stakeholders in a way that can create shared value – Finally, the rise of digital services requires a more nuanced approach to public policy and subsequent regulation that emerges from this. For this reason, we are engaging with multiple industry associations, international and regional bodies as well as other stakeholders on policy directions that are mutually beneficial to customers and service providers of digital solutions • Social and ethics statement https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx	
CATEGORY: Society **ASPECT: Anti-competitive behaviour**			
G4-SO6	Total value of political contributions by country and recipient/ beneficiary	• No political contributions were made	
	Disclosure on management approach	• As a company incorporated in South Africa, the group is regulated by the Competition Commission of South Africa and the rules and regulations applicable to all companies listed on the JSE	
G4-SO7	Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes	• We have historically reported on the status and results of the lawsuit by Turkcell against MTN Group Limited and other companies in the group. Please refer to https://www.mtn.com/en/mtn-group/press-and-insights/press-releases/Pages/default.aspx for updated information	

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Index	Description	Information (document or web link)	Page(s)
CATEGORY: Society **ASPECT: Compliance**			
	Disclosure on management approach	• https://www.mtn.com/en/mtn-group/about-us/ethics/Pages/our-code-of-ethics.aspx We do business in full compliance with the laws of each country we operate in, including: • International trade laws and regulations, embargoes and sanctions • Competition laws • Fraud, anti-bribery and corruption laws • Anti-money laundering laws • Intellectual property laws • Human rights and equal opportunity obligations	
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	• Not available	
CATEGORY: Society **ASPECT: Grievance mechanisms for impacts on society**			
	Disclosure on management approach	• One of the group's key mechanisms of encouraging reports of unacceptable behaviours (or allegations of unacceptable behaviour) for investigation is the anonymous whistle-blower line for use by both employees and the public. The line is supported by telephonic and e-mail communication channels, and is managed by Deloitte	
CATEGORY: Product responsibility **ASPECT: Customer health and safety**			
	Disclosure on management approach	• Group positions on mobiles and health: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx • MTN operations maintain terms, conditions on service and legal content on the local website for the operations. These terms and conditions may also include any additional information useful to subscribers, such as activation agreements, transfer procedures, defective goods and technical fault reporting, personal information management, and more. Some aspects of customer terms and conditions are often also separately detailed for different types of value-add and internet services, phones and devices, etc. Terms and conditions of service for physical products such as mobile handsets and tablets may also be included in the product pack. In some countries, all MTN stores display MTN's commitments to consumer rights and complaints mechanisms including contact details of regulatory authorities. Product and service labelling may also be subject to additional communication, disclosure or other requirements as set out by national consumer protection regulations in each of the countries where we operate. Customer complaint and feedback services are available through walk-in service and other centres, and via voice, e-mail, social media and other digital channels	

Index	Description	Information (document or web link)	Page(s)
CATEGORY: Product responsibility **ASPECT: Customer health and safety** continued			
G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	• Group positions on mobiles and health: https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx • Regarding the position paper above, all handsets must be certified for safety before national regulators will allow distribution. The number of network sites assessed for health and safety impacts with respect to safe levels of electromagnetic fields varies for each country of operation, and is subject to requirements set out by the national telecommunications regulator	
G4-PR2	Number of incidents of regulatory non-compliance concerning health and safety impacts of products and services during their lifecycle, by type of outcome	• Not available	
CATEGORY: Product responsibility **ASPECT: Product and service labelling**			
	Disclosure on management approach	• MTN operations maintain terms, conditions on service and legal content on the local website for the operations. These terms and conditions may also include any additional information useful to subscribers, such as activation agreements, transfer procedures, defective goods and technical fault reporting, and more, and are often also separately detailed for different types of value-add and internet services, phones and devices, etc. Terms and conditions of service for physical products such as mobile handsets and tablets may also be included in the product pack. Product and service labelling may also be subject to additional communication, disclosure or other requirements as set out by national consumer protection regulations in each of the countries where we operate. Customer complaint and feedback services are available through walk-in service and other centres, and via voice, e-mail, social media and other digital channels	
G4-PR3	Type of product and service information required by the organisation's procedures for product and service information and labelling, and percentage of significant product and service categories subject to such information requirements	• The types of products and services offered by each of our operations may vary from country to country, and this information is therefore not available in a consolidated format at the group reporting levels. Some of our operations may maintain this information on their local websites. Please refer to the references as indicated in G4-HR4	
G4-PR5	Results of surveys measuring customer satisfaction	• IR: How we sustain value using the six capitals	14

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CATEGORY: Product responsibility **ASPECT: Marketing communications**			
	Disclosure on management approach	• In addition to complying with local laws, standards and codes of practice in each country where we operate, as a regulated organisation subject to oversight by national telecommunication regulatory authorities, we may be required to abide by specific additional requirements regarding marketing communications. For instance, in order for us to market voice or data products in order to grow our subscriber base, our quality of service may be subject to review by regulators before permission may be granted (in circumstances where quality of service may fall below pre-set standards or as agreed in regulatory licences)	
G4-PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotions, and sponsorship, by type of outcomes	• Not available	
CATEGORY: Product responsibility **ASPECT: Customer privacy**			
	Describe the approach to management and reporting of customer privacy	• SR: Sustainable societies – digital human rights • Group positions on digital human rights https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx	41 – 66
G4-PR8	Number of substantiated complaints regarding breaches of customer privacy and losses of customer data	• Not available	
CATEGORY: Product responsibility **ASPECT: Compliance**			
	Disclosure on management approach	• Group social and ethics statement https://www.mtn.com/en/mtn-group/sustainability/cases-and-library/Pages/Document-library.aspx	
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	• Not available	

Glossary

Term	Definition
App	Application or computer programme designed for mobile devices
BBBEE	Broad-based black economic empowerment, a South African national initiative to enable economic participation for black South Africans
BTS	Base Transceiver Station also referred to as network sites or towers
CDM	The United Nations Clean Development Mechanism allows a country with an emission-reduction or emission-limitation commitment under the Kyoto Protocol (Annex B Party) to implement an emission-reduction project in developing countries
CDP	Carbon Disclosure Project
CO_2 and CO_2e	Carbon dioxide and carbon dioxide equivalent. See GHG
EMF	Electromagnetic Fields or radio signals or waves, or energy that travels through space. See RF
GHG	Greenhouse gas; unless indicated otherwise, GHG emissions are made up of CO_2, methane (CH4), nitrous oxide (N_2O), hydro fluorocarbon (HFC), perfluorocarbon (PFC) and sulphur hexafluoride (SF6). The United Nations has identified these six gases as the greatest contributors to global warming. See CO_2 and CO_2e
GJ	Gigajoules (energy)
GSMA	Global System for Mobile Communications Association
ICNIRP	International Commission on Non-Ionising Radiation Protection: www.icnirp.de
ISP	Internet Service Provider
ICT	Information and Communication Technology
ITU	International Telecommunications Union
King IV	King IV Code of Corporate Governance for companies operating in South Africa
kℓ	Kilolitres
kWh	Kilowatt hour (electricity)
LTE	Long-Term Evolution
MMS	Multi-Media Services
MNO	Mobile Network Operator
MPLS	Multi-Protocol Label Switching
MTR	Mobile Termination Rates
MW	Megawatt (electricity)
NEM	Network Equipment Manufacturer
NFC	Near Field Communications
OEM	Own Equipment Manufacturer
OTT	Over-The-Top Operator (internet services)
RF	Radio Frequency. See EMF
SME	Small and Medium Enterprise
SMS	Short Messaging Service, also referred as texts
UN FCCC	United Nations Framework Convention on Climate Change
UN SDGs	United Nations Sustainable Development Goals
WEEE	Waste electronic and electrical equipment, also referred to as e-waste
WHO	World Health Organisation