Module: Introduction

Page: Introduction

CC0.1

Introduction
Please give a general description and introduction to your organization.

The MTN Group is a leading emerging markets operator, connecting subscribers in 22 countries in Africa and the Middle East. Our offerings include voice, data and internet services, cloud services, machine-to-machine monitoring technology, mobile money, as well as numerous other mobile services (including mHealth, mEducation and mInsurance). MTN is listed on the JSE Limited in South Africa under the share code “MTN”. At 31 December 2014, MTN had over 223 million subscribers across its operations in Afghanistan, Benin, Botswana, Cameroon, Cyprus, Ghana, Guinea-Bissau, Guinea Republic, Iran, Ivory Coast, Liberia, Nigeria, Republic of Congo (Congo-Brazzaville), Rwanda, South Africa, Sudan, South Sudan, Swaziland, Syria, Uganda, Yemen and Zambia.

CC0.2

Reporting Year
Please state the start and end date of the year for which you are reporting data.
The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.
We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.
Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed
Wed 01 Jan 2014 - Wed 31 Dec 2014

CC0.3

Country list configuration

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country
Afghanistan
Benin
Cameroon
Cyprus
Cote d Ivoire
Ghana
Guinea-Bissau
Guinea
Iran, Islamic Republic of
Kenya
Liberia
Namibia
Nigeria
Congo, Democratic Republic of the
Rwanda
South Africa
Sudan
Swaziland
Uganda
Yemen

Select country
Zambia

CC0.4

Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

ZAR (R)

CC0.6

Modules
As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire.
If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.
If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx.

Further Information

N/A

Module: Management

Page: CC1. Governance

CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Board or individual/sub-set of the Board or other committee appointed by the Board

CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

Responsibility rests with Group Board, which has delegated responsibility to the Social and Ethics committee, a function of the Group Board. The Group President and CEO have delegated executive responsibility to Mr. Paul Norman, MTN Group Executive: Human Resources and Corporate Affairs, to whom Group Sustainability reports through the Corporate Affairs Function.
Ms. Zakhiya Rehman is the Group Sustainability Manager and is responsible for all climate change and sustainability initiatives and issues at MTN. The Group Sustainability function focuses on building the foundations for a more sustainable business and implements environmental or social core business projects at both Group and operational level in partnership with business functions. Please refer to https://www.mtn.com/Sustainability/MoreOnSustainability/Pages/SustainabilityGovernanceDiagram.aspx for more information.

CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

No

CC1.2a

Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment

Further Information

N/A

Page: CC2. Strategy

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Board or individual/sub-set of the Board or committee appointed by the Board	All operating countries	1 to 3 years	Group Business Risk Management (BRM) is responsible for the identification and overall reporting and management of the 23 Principal Risks which impact the MTN Group. BRM reports regularly back to the Board via four board committees, notably the Group Executive Audit, Risk management and Compliance, and Social and Ethics Committees, as appropriate to different components of enterprise risk management and auditing. Of the 23 material (Principal) risks at Group level, climate change is explicitly considered as part of Principal risk 21. This is the potential threat to continuity of operations as a result of political, environmental and macro-economic events.

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

The Group's Business Risk Management Framework and processes govern identification and management of MTN's principal risks.

Assessment of country- and asset-level risks are the responsibility of business risk managers in each MTN operation, who consider 23 principal "top down" risks – of which climate and environmental risks are incorporated in Principal Risks 21 and 22. Risks are prioritised based on a quantified probability and impact assessment, and response strategies developed based on the nature and materiality of the risk. This is reported to the local operations' executive, audit and risk compliance committees as appropriate.
Environmental, physical, financial and regulatory risk identification and mitigation processes are identified, managed or co-ordinated in conjunction with the risk owners by some of the 53 trained Energy and Carbon champions and other individuals within each country. Our energy and carbon champions are mostly positioned in technical functions, and are supported by finance, facilities, business risk management and corporate services team members. This approach enables each country's operation to actively manage physical, financial and regulatory risks and impacts in a customised manner, within local operating and environmental contexts.
Consolidation and reporting of each country's activities and results is undertaken via quarterly energy and carbon reporting processes by the Group sustainability unit, and via monthly/ quarterly overall risk and legal reports to their Group Business Risk Management and Group Legal functions. Group level environmental risks are incorporated in sustainability, and energy and carbon reports, which are ultimately presented on a quarterly-annual basis to the various executives and to the Group Social and Ethics Committee, and more frequently if required in terms of risk quantification results to Group Risk Management, Compliance and Corporate Governance Committee within overall risk reports.

CC2.1c

How do you prioritize the risks and opportunities identified?

The Group's risk management approach is set out on page 47 of the MTN Group Integrated Report for the year ended 31 December 2014, available at https://www.mtn.com/Investors/FinancialReporting/Documents/INTEGRATEDREPORTS/2014/MtnGroupIntegrated_Report2014.pdf

To determine the sustainability risks and opportunities issues most material to MTN's sustainability each year, we take the following sources into account:
- Feedback from internal and external stakeholders that review the annual sustainability report.
- Engagement with external stakeholders via the addresses sustainability@mtn.co.za and investor.relations@mtn.co.za
- Information gained through engagement with regulatory authorities, media organisations, civil society and community-based organisations, our customers, and general members of the public
- Feedback from and engagement with the JSE SRI, the CDP, and MTN's investors, shareholders 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 university organisations and other third parties not commissioned by MTN, and
- Our own internal review and research processes including industry, peer and global developments, and our risk and audit management processes.

Issues identified through this process are weighted during an internal materiality review. These issues are reviewed by the executive, and the Group social and ethics committees. We undertake this review periodically to ensure that we are responsive and can adapt to changing operating conditions.

Top risks identified relate to energy costs, access, security and reliability; and future carbon budgets and taxes in South Africa. We also monitor the risk and impact of extreme weather events on our infrastructure and business continuity. Our risk management measures (GHG reduction and alternative energy projects) are

described in subsequent sections of this response.

CC2.1d

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

Main reason for not having a process	Do you plan to introduce a process?	Comment

CC2.2

Is climate change integrated into your business strategy?

No

CC2.2a

Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

CC2.2b

Please explain why climate change is not integrated into your business strategy

Climate change management issues are partially integrated into MTN's business strategy, through the following elements.
• Integrated risk identification and management processes, and assurance processes
• The Group's Eco-Responsibility focus area which supports the Group's strategic pillar of "creating stakeholder value"

• The Group's drive to manage the carbon impact of energy use (see https://www.mtn.com/Sustainability/Documents/Reducing_Greenhouse_Gases_2014.pdf)
• Quarterly oversight of the Group Executive and Social and Ethics Committees

Climate change management is not yet integrated in terms of Group-level emission reduction targets, but all MTN countries of operation drive energy efficiency programmes and activities aimed at reducing energy consumption.

Progress towards full integration will require that some climate change risks such as business continuity and broad environmental trends -already listed in the Group's risk universe- are extensively understood, managed, and reported by all operations consistently as part of enterprise risk management. The Group also needs to continue focus and accelerate innovation and rollout of ICT solutions that enable other industry sectors to manage their environmental impact or air, water, energy and other natural resources through cloud computing and dematerialisation, more cost-effectively and efficiently, although efforts in this respect have started.

CC2.2c

Does your company use an internal price of carbon?

Yes

CC2.2d

Please provide details and examples of how your company uses an internal price of carbon

MTN South Africa's internal pricing of carbon in energy investment cases takes into account various regulated and anticipated regulated penalties and incentives available nationally, including carbon taxes, peak and off-peak energy rates applicable to energy consumption, and certain incentives available within the income tax act, amongst others.

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

Trade associations
Other

CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
GSMA	Consistent	GMSA's Green Power for Mobile initiative, under the "Mobile for Development" programme is described at http://www.gsma.com/mobilefordevelopment/programmes/green-power-for-mobile. We support GSMA's position that our industry has a role to fulfil in managing greenhouse gas emissions, but we also believe that governments should encourage mobile machine-to-machine (M2M) communications in sectors where the potential to reduce emissions is greater. Research has identified the potential for the mobile industry to reduce the GHG emissions in other sectors — including transportation, buildings and electrical utilities — by at least four to five times its own carbon footprint. The savings principally come from smart grid and smart meter applications, and smart transportation and logistics. GSMA's full position with respect to global emission reductions is available at http://www.gsma.com/publicpolicy/wp-content/uploads/2014/10/MPH_Oct2014_Eng_web.pdf On an interim and annual basis, MTN contribute research information the GSMA Mobile Energy Efficiency (which enables network operators to evaluate the relative energy efficiency of networks) and Green	GSMA Board. The GSMA represents the interests of mobile operators worldwide. Spanning more than 220 countries, the GSMA unites nearly 800 of the world's mobile operators with more than 230 companies in the broader mobile ecosystem, including handset makers, software companies, equipment providers and Internet companies, as well as organisations in industry sectors such as financial services, healthcare, media, transport and utilities. The GSMA also produces industry-leading events such as the Mobile World Congress and Mobile Asia Expo.

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
		Tracker programmes.	

CC2.3d

Do you publicly disclose a list of all the research organizations that you fund?

CC2.3e

Do you fund any research organizations to produce or disseminate public work on climate change?

CC2.3f

Please describe the work and how it aligns with your own strategy on climate change

CC2.3g

Please provide details of the other engagement activities that you undertake

MTN is an active member of the National Business Initiative (NBI) which is a voluntary group of leading national and multi-national companies. As a collective group of NBI members we are working together towards sustainable growth and development in South Africa through partnerships, practical programmes and policy engagement. MTN supports the NBI in advocating for the collective role of business in support of the private sector's role in managing climate change (including most recently through the Public Sector Energy Efficiency (PSEE) initiative) and other broader sustainability issues. MTN engages during face-to-face discussions, workshops and training events and other opportunities where business shares experiences, learns and pushes each other to achieve more with regard to the collective climate change challenge. The key issues on which we engage with policy makers through the NBI include:

- South Africa carbon tax: MTN acknowledges the need to transition to low carbon climate resilient economies but realises that this transition will result in costs, especially in the short term. These costs need to be carefully managed through the design and implementation of policies and instruments such as a carbon tax. This needs to be done through careful consultation with stakeholders and based on the best available information. The lack of regulatory clarity, without consideration possible duplications in tax regimes and energy management drives nationally, as well as lack of commitment on how carbon taxes will be used to improve the national state of energy security, efficiency, and transition to a low-carbon economy is a matter of concern.
- Cap and trade: The development of national, sector and sub-sector Desired Emission Reduction Outcomes and the subsequent allocation of company level carbon budgets in South Africa needs to implemented over an appropriate time period and to an appropriate extent. MTN acknowledges the need to transition to a low carbon economy and supports government measures to create an enabling environment that balances climate change mitigation (which has short term costs) against other national developmental objectives.

In addition, the MTN Group has signed up to the United Nations Global Compact, and has for the past three years reported business performance against the United Nations Global Reporting Initiative. We engage with different business platforms, host educational visits to our innovative energy sites, and showcase best practices.

CC2.3h

What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

All MTN's direct and indirect activities that influence policy on climate change are coordinated and managed by the Group's Sustainability Manager (who reports directly to the Group Executive: Human Resources and Corporate Affairs), and through this function, to the various Group Committees under the MTN Group Board.

The Group's Sustainability manager is responsible for coordinating engagement activities around climate change across business units and geographies to ensure that we have a common approach that is consistent with MTN's sustainability (including climate change) strategy. Networks and Technology and Facilities teams in all operations are increasingly aware of the need for integration of energy, climate and other environmental matters in business planning and implementation. The Group's Base Station and Networks Toolkit also sets out more environmental matters for consideration in network infrastructure implementation. In some MTN countries, Leadership in Energy and Environmental Design and/ or ISO14001 certification is in place or being worked towards.

Energy costs, consumption, risks and carbon intensity in terms of the Carbon Disclosure Project are monitored by many of the 53 trained energy and carbon champions across our operations. Each MTN country of operation maintains their own energy management strategy or practice, in line with business performance and operational efficiency management requirements. This approach enables each country's operation to actively manage and monitor its energy use mix, costs, configuration of efficiency and reduction solutions, and other requirements within local operating and environmental contexts. Our energy and carbon champions are mostly positioned in technical functions, and are supported by finance, facilities, business risk management and corporate services team members.

Quarterly reports are submitted by 22 MTN operations and we hope to incorporate one more operation (MTN South Sudan) in 2015. We also actively engage with our tower management partners in Ghana, Uganda, Cameroon, Côte d'Ivoire, Rwanda and Zambia. Energy consumption and efficiency reports from our operations and tower management companies are consolidated for analysis by the Group, and performance is presented in sustainability reports to the executive and Group social and ethics committee, which oversees the Group's sustainability performance. Operations receive detailed feedback of performance results in order to implement required improvements, review opportunities on projects undertaken by other operations.

The Group's Social and Ethics statement, available at www.mtn.com/sustainability, incorporates statements with respect to our environmental responsibilities, and

sets this out in terms of responsible business commitments and activities by our business partners and suppliers.

CC2.3i

Please explain why you do not engage with policy makers

CC2.4

Would your organization's board of directors support an international agreement between governments on climate change, which seeks to limit global temperature rise to under two degree Celsius from pre-industrial levels in line with IPCC scenarios such as RCP2.6?

Yes

CC2.4a

Please describe your board's position on what an effective agreement would mean for your organization and activities that you are undertaking to help deliver this agreement at the 2015 United Nations Climate Change Conference in Paris (COP 21)

We have long maintained the economic and societal necessity for the reduction of our environmental impact in the countries in which we operate, which are among the most environmentally vulnerable parts of the world, and largely with the fewest economic resources to cope with the effects of climate change. We operate in many developing countries and support the principle of common but differentiated responsibilities (all countries have a responsibility to contribute towards the climate change challenge but developed countries must take the lead). Within these countries MTN works to close the digital divide and assist societies to dematerialise and develop in a more sustainable way through the use of ICT products. We do not intend to take a direct role in a post-Kyoto agreement but will work with and support the efforts of business organisations such as the NBI and GSMA.

Further Information

• The only country of operation currently affected by regulatory carbon pricing is MTN South Africa, which has been steadily working towards energy efficiency, security, reduction and alternative energy investment for more than eight years, partially in recognition of these regulatory developments. Internal investment cases consider the potential cost of carbon taxes. • In other countries where we operate, there is little or no regulatory development related to carbon pricing, even in cases where some of these countries are listed as Least Developing in terms of UN standards. However, these operations will continue to monitor national and international developments in order to amend investment cases and operational activity accordingly as appropriate.

Page: CC3. Targets and Initiatives

CC3.1

Did you have an emissions reduction target that was active (ongoing or reached completion) in the reporting year?

No

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment

CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions	Target year	Comment

CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment

CC3.1d

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment

CC3.1e

Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years

Network and non-network technical facility energy use contributes 96.3% of MTN's GHG profile on a country-by-country basis, and is the largest energy cost component for the company.
i) We do not have a target for the following reason. We use 'actual consumption' and 'cost' targets which have appropriate positive correlation on emissions reductions. We have found this to be a more appropriate internal lever to addressing this issue, ensuring improved sustainability-business integration by working with and enhancing existing KPIs wherever possible. This approach also works well on our internal understanding of the issue of GHG emissions and is helping drive operational work towards reductions. Currently, Emissions per Subscriber is also used as proxy measure of efficiency, but is not adopted as a formal target. Targets will ultimately be set as energy consumption reduction targets, given the direct correlation between energy consumption and GHG emissions.
ii) Three aspects of the business will change MTN's GHG profile. The net and cumulative impacts of these have not been assessed. We expect to see the following changes in our emissions over the next 5 years:
a) GHG Emissions reductions: Our reliance on energy to power network and data centre operations is the largest contributor to the Group's greenhouse gas emissions. We therefore actively focus on improving electricity and diesel use efficiency, and we continually invest in alternative and less carbon-intensive forms of energy to power our operations, improving our resilience and ultimately reducing our impact on the environment. Our energy efficient and alternative energy investments over time have resulted in a reduction and avoidance of 29 034 tCO2e in 2014. More details may be located within this report, and at https://www.mtn.com/Sustainability/Ecoresponsibility/Pages/Energy-and-climate.aspx;
https://www.mtn.com/Sustainability/Documents/Reducing_Greenhouse_Gases_2014.pdf and
https://www.mtn.com/Sustainability/MoreOnSustainability/Pages/CaseStudies.aspx
b) Transfer of GHG emissions from Scope 1 & 2 to Scope 3: the impact of MTN's BTS outsourcing strategy will result in a transfer of the emissions from Scope 1

(and to a smaller extent Scope 2) to Scope 3, changing the emissions profile of the company.
c) Increase in GHG emissions: The Company's growth in enterprise service offerings and increased investment in 3G and 4G services will require ongoing investments in data centre infrastructure, which is expected to result in relatively small increases in the Group's GHG profile. (The increase will occur as a result of increased investment in data centre technologies and centres, despite the fact that these new technologies and facilities are planned for optimal and efficient energy consumption during construction and operation).

CC3.2

Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

Yes

CC3.2a

Please provide details of how the use of your goods and/or services directly enable GHG emissions to be avoided by a third party

The Global e-Sustainability Initiative has assessed that ICT-enabled solutions can help the world achieve carbon abatements in the region of 9,6GtCO2e (16,5% of global emissions) by 2020. Although our solutions in this domain are relatively small, opportunities are growing rapidly, and include cloud computing for virtualisation and other efficiencies, and machine-to-machine products to address risks of water leakage, reports on air quality composition for improvement efforts, and encouragement of energy-efficient driving by fleet drivers using our fleet management solution. MTN's M2M offering includes fleet management, fuel management, utilities management, smart home services and security solutions. MTN's Cloud Computing services are now available in 10 countries up from 8 in 2013). More information is provided at https://www.mtn.com/Sustainability/sustainableEconomicValue/Pages/EnterpriseServices.aspx#

CC3.3

Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or implementation phases)

Yes

CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	4	5478
Implementation commenced*	1	5877
Implemented*	47	13862
Not to be implemented	0	0

CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Building services	The following are a list of the solutions deployed by all MTN operations as appropriate to individual and collective network sites, as part of the overall CAPEX investment programme,	6509	Scope 1 Scope 2	Voluntary			1-3 years	6-10 years	The GHG reductions from these projects are included in the total annual reductions from projects implemented in 2014 of 13 862 t

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	network modernisation and capacity upgrade, and energy cost and utilisation reduction: energy-efficient battery banks and cabinets with free cooling, free cooling, outdoor site installation, energy efficient lighting, and hybrid diesel-deep cycle batteries to reduce diesel use. Specific examples of projects implemented in 2014 include the deployment of outdoor BTS sites in 16 locations in Swaziland using free cooling to reduce energy consumption, and investment in 200 hybrid diesel BTS sites in Sudan and a further 29 hybrid diesel BTS sites in Benin, both resulting in diesel savings.								CO2e. The investment required is included in CAPEX and other initiatives: not available separately for this report.
Energy efficiency: Processes	The following are a list of the solutions deployed at data centres, switches, buildings and other facilities by all MTN operations as appropriate to individual and collective network sites, as part of the overall CAPEX investment programme, network	6269	Scope 1 Scope 2	Voluntary			1-3 years	6-10 years	The GHG reductions from these projects are included in the total annual reductions from projects implemented in 2014 of 13 862 t CO2e. The investment required is

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	modernisation and capacity upgrade, and energy cost and utilisation reduction: optimisation and improved energy efficiency of processes at data centres and BTS sites, and waste heat capture. Specific examples of projects implemented in 2014 include the fine-tuning of operational set points at BTS sites across South Africa in order to reduce energy consumption.								included in CAPEX and other initiatives: not available separately for this report.
Low carbon energy installation	Alternative energy investments in MTN Group networks in 2014 include investment into solar energy at 92 new sites. This includes the development of solar-hybrid BTS sites Cyprus, Sudan and Yemen, and the deployment of solar BTS sites in Guinea Bissau.	117	Scope 1 Scope 2	Voluntary			1-3 years	6-10 years	The GHG reductions from these projects are included in the total annual reductions from projects implemented in 2014 of 13 862 t CO2e. The investment required is included in CAPEX and other initiatives: not available separately for this report.
Low carbon energy installation	This initiative refers to the installation of Africa's first Concentrating Solar Power	184	Scope 2	Voluntary	231040	4500000	16-20 years	21-30 years	Note that the GHG reductions associated with this project are

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	(CSP) cooling system, at MTN South Africa's data centre. The plant has a peak cooling capacity of 330kW. Solar mirrors are used to generate pressurised hot water at a temperature of 180°C, which in turn powers an absorption chiller. The chiller produces chilled water that is used to cool the IT equipment, bringing about significant reductions in energy consumption for cooling.								reported separately here and not included in the GHG reductions for 'Low carbon energy installation' above.
Transportation: fleet	This activity includes initiatives to reduce fuel consumption by MTN vehicle fleets. Specific examples in 2014 include the introduction of a vehicle fuel management policy and improved monitoring of vehicle use by MTN Swaziland, and the introduction of fleet management software to track and manage fuel use by vehicles in MTN Cameroon.	783	Scope 1	Voluntary			1-3 years	6-10 years	The GHG reductions from these projects are included in the total annual reductions from projects implemented in 2014 of 13 862 t CO2e. The investment required is included in CAPEX and other initiatives: not available separately for this report.

CC3.3c

What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Lower return on investment (ROI) specification	As part of business case development, MTN determines the breakeven point and return on investment period. This applies to all projects, including energy and carbon reduction projects, which must meet internal return on investment criteria.
Other	As part of the Group's Climate Management strategy currently being developed, business cases are increasingly being used to demonstrate not only OPEX savings, but GHG and carbon tax savings where possible and appropriate, depending on the MTN country of operation's specific operating conditions.

CC3.3d

If you do not have any emissions reduction initiatives, please explain why not

Further Information

N/A

Page: CC4. Communication

CC4.1

Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s)

Publication	Status	Page/Section reference	Attach the document
In voluntary communications	Complete	MTN Group Sustainability Report 2014 – Group President and CEO statement (Page 3 - 4); Environmental Management (Page 17 - 19); Energy and Climate (Page 20 - 24); Annual Sustainability Value Add Statements (Page 34 - 36)	https://www.cdp.net/sites/2015/46/12546/Climate Change 2015/Shared Documents/Attachments/CC4.1/MTN_Group_Sustainabilty_Report_2014.pdf
In voluntary communications	Complete	Assurance Statement MTN Group Integrated Report for year ending 31 December 2014: For the assurance statement, pages 52, 53 and inside back cover.	https://www.cdp.net/sites/2015/46/12546/Climate Change 2015/Shared Documents/Attachments/CC4.1/MtnGroupIntegrated_Report2014.pdf
In voluntary communications	Complete	MTN Group UN GRI 4 Report for year ending 31 December 2014. (Complete Report)	https://www.cdp.net/sites/2015/46/12546/Climate Change 2015/Shared Documents/Attachments/CC4.1/MTN_Group_UN_GRI_Report_2014.pdf
In voluntary communications	Complete	MTN Group UN Global Communication of Progress Report for year ending 31 December 2014.(Complete Report)	https://www.cdp.net/sites/2015/46/12546/Climate Change 2015/Shared Documents/Attachments/CC4.1/MTN_Group_UN_Global_Compact_Report_2014.pdf

Further Information

N/A

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Risks driven by changes in regulation
Risks driven by changes in physical climate parameters
Risks driven by changes in other climate-related developments

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Carbon taxes	A carbon tax based on energy use is to be introduced in South Africa. This risk currently only affects MTN South Africa; however MTN Cyprus and MTN Zambia also report increasing legislative	Increased operational cost	1 to 3 years	Direct	Virtually certain	Medium-high	MTN could potentially expect to be taxed on 20% to 40% of their Scope 1 emissions (at R120/tCO2e), which would result in a potential liability of between R0.7m and	MTN is reducing the impact of a potential Carbon Tax by optimising energy efficiency at its technical and non-technical sites and looking to implement alternative energy at these sites as well. The carbon tax only poses a direct threat to MTN South Africa; however it may become a reality in other countries. Solar, wind, gas and fuel cell energy is used at 28 off-grid sites in South Africa and tri-generation power is used at the head office. Due to the project's success, it is being replicated across three other sites in South Africa. Other energy reduction initiatives in South Africa include the use of heat wheel technology; investment in battery cabinets with active cooling, sodium metal chloride batteries and free cooling in BTS sites as well as temperature setting adjustment; and in 2014 the operationalisation of a concentrated solar power plant with a peak cooling capacity of 330 kW. These measures aim to reduce GHG emissions, increase energy security, and reduce financial costs associated with future carbon tax risks. The Group Sustainability	MTN South Africa has undertaken energy efficiency optimisation across 7,200 BTS sites, and implemented 28 off-grid sites. In addition, MTN SA invested in a gas-powered tri generation plant in 2010, is

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	activity with respect to carbon taxes in those countries. While MTN South Africa is one of the largest operations in the MTN Group, the financial impact of this tax is estimated at less than 1% of MTN's overall energy costs, at prevailing figures. Anticipated for 2016, a rate of R120 per tonne of CO2 will be levied and will increase by 10% annually.						R1.1m (based on MTN South Africa's 2014 Scope 1 emissions). In addition, pass-through costs from Eskom, estimated at R0.04/kWh, would increase our energy costs by around R15m (increasing each year). Some of this could potentially be offset (but the mechanisms around	Manager also engages in policy dialogue and advocacy to ensure that carbon budgets and the design of the tax captures the operational realities of the sector and company. MTN Cyprus is also monitoring possible carbon tax regulatory developments nationally, and all MTN countries of operation continue to invest extensively in energy efficiency.	implementing 3 other similar sites nationally, and with international co-funding, implemented a CSP plant for data centre cooling in 2014, together with free cooling at one data centres, and in total these initiatives have cost approximately R36,7 million since 2010.

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	The detailed application of this tax to industries, sectors, company activities and scopes of emissions remains under discussion/ evaluation by the government, and to the best of current information available, MTN continues to assess the implications on the company's South Africa operations. A Carbon Tax Bill still needs to be passed and therefore						offsets are still to be determined in line with existing and evolving tax regimes (penalties and incentives) in this respect.		

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	uncertainty remains regarding the timing of this risk.								
Cap and trade schemes	Carbon pricing uncertainty in the international carbon market is regarded as a regulatory climate change risk to MTN, but also poses potential financial opportunity as the majority of countries in which we operate are classified as emerging countries, and some also hold Least Developed	Reduction in capital availability	1 to 3 years	Direct	Likely	Medium	Under ZAR 1 million per annum.	The Group does not foresee further participation in cap-and-trade schemes in the short term. This position is regularly reviewed and may be amended as required. Same as indicated for Carbon Taxes above. Despite lack of regulatory clarity at this stage, MTN Group continues to focus on efforts to reduce emissions where possible (as described in CC3.3).	CAPEX for tri-generation test switch and data centre for MTN South Africa: R22m in 2010.

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Country status. In 2011 MTN South Africa sold 15,284 CERs from the first tri-generation plant EDF Energy. Generation of CDM credits in MTN is not a priority given the current status of international pricing, and the value of MTN's saved or avoided emissions in mitigating our carbon taxes liability or leveraging other national tax benefits.								

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Cap and trade schemes	South Africa is implementing policy to set carbon budgets for companies. Initially this will focus on large emitters but all companies will be affected in line with achieving the Desired Emission Reduction Outcomes (DEROs) over time. MTN South Africa may be allocated a carbon budget (limit) and if so, would have to submit a pollution prevention	Increased operational cost	1 to 3 years	Direct	Likely	Medium	There is significant uncertainty regarding the design of the DEROs and carbon budget approach, especially in the case of relatively small emitters. It is not clear whether any direct requirements would be imposed on MTN South Africa or how the budgets would align with the carbon	MTN is reducing the impact of a potential carbon tax and carbon budgets by optimising energy efficiency at its technical and non-technical sites and looking to implement alternative energy at these sites as well. The carbon tax only poses a direct threat to MTN South Africa; however it may become a reality in other countries. Solar, wind, gas and fuel cell energy is used at 28 off-grid sites in South Africa and tri-generation power is used at the head office. Due to the project's success, it is being replicated across three other sites in South Africa. Other energy reduction initiatives in South Africa include the use of heat wheel technology; investment in battery cabinets with active cooling, sodium metal chloride batteries and free cooling in BTS sites as well as temperature setting adjustment; and in 2014 the operationalisation of aa concentrated solar power plant with a peak cooling capacity of 330 kW. These measures aim to reduce GHG emissions, increase energy security, and reduce financial costs associated with future carbon tax risks. The Group Sustainability Manager also engages in policy dialogue and advocacy to ensure that carbon budgets and the design of the tax captures the operational realities of the sector and company. MTN Cyprus is also monitoring possible carbon tax regulatory developments nationally, and all MTN countries of operation continue to invest extensively in energy efficiency.	MTN South Africa has undertaken energy efficiency optimisation across 7,200 BTS sites, and implemented 28 off-grid sites. In addition, MTN SA invested in a gas-powered tri generation plant in 2010, is implementing 3 other similar sites nationally, and with international co-funding, implemented a CSP plant for data centre cooling in

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	plan. As MTN South Africa is above the threshold for direct emissions the requirements are uncertain. Furthermore the initial phase (2016 – 2020) is not legislative and therefore changes to the design of system is expected over time.						tax. It is not possible to estimate the financial implications at this stage.		2014, together with free cooling at one data centres, and in total these initiatives have cost approximately R36,7 million since 2010.
Fuel/energy taxes and regulations	Rising energy costs are a material concern. The risks MTN experiences include	Increased operational cost	1 to 3 years	Direct	Virtually certain	Medium	The Group has not quantified the financial impact of this, due to the	Investments in energy efficiency and alternative energy sources are being driven strategically and operationally to mitigate risks like energy security, costs and environmental impact. The Group's CAPEX investment in modernisation and infrastructure and energy cost efficiency drive as described previously are the key methods by which this risk is being mitigated.	In 2014, the Group invested R25,4 billion in CAPEX alone, and similarly has been

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	increasing grid power, gas and diesel costs. Some of these costs are due to national energy landscapes, while other costs are due to evolving international energy demand-supply dynamics. These impact MTN operations in various ways e.g. in Nigeria, fuel subsidies were removed in 2011; in Iran the Energy Subsidies Elimination program						significant variances in this risk element across its 22 countries of operation. However, an overall Group and detailed country operating cost reduction target has been set, and energy cost reduction is a key element of this target.		extensively investing in infrastructure CAPEX programs since 2009.

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	has been active for the past 3 years; in Ghana, electricity tariffs increased in 2014; and in Cyprus, peak hour power usage pricing was introduced. Given the contribution of energy costs to the overall operating cost of the Group, improving energy use and efficiency is a key component of the Company's overall cost-efficiency drive.								

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Emission reporting obligations	Increasing climate change regulation in general presents a risk. This includes the implementation of the domestic climate change policies in the countries where we operate (e.g. the implementation of the National Climate Change Response Policy in South Africa includes mandatory reporting and the establishment of Desired	Increased operational cost	1 to 3 years	Direct	Very likely	Low	Uncertain but not expected to be material.	The risk is managed through the following measures: •The Group Sustainability Manager engages with policy makers and business sector organisations to ensure that all operations are aware of the latest requirements. •We have been reporting on GHG emissions and activities to mitigate emissions since 2010, and use this as an internal mechanism to identify risks and improve business practices. • All operations maintain technical and disaster recovery plans. The Group's crisis management toolkit, updated in 2014, sets out the basic principles and frameworks to deal with abnormal or unstable situations which will include the risk of extreme weather events which can disrupt critical, technical and other infrastructure •We continue to respond publicly to the CDP request for information, on an annual basis, and hold direct investor discussions in this respect. •We continue to monitor and improve our sustainable and responsible business practices as indicated at https://www.mtn.com/Sustainability/Ecoresponsibility/Pages/Energy-and-climate.aspx - see risks section.	Uncertain

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Emission Reduction Outcomes (DEROs) that could impact our ability to do business). Mandatory reporting of emissions data is expected in South Africa for companies emitting more than 100 000 tCO2e per year or who consume more than 100 000 MWh of electricity per annum. This will place a compliance burden on MTN South Africa coupled								

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	with related additional costs for reporting and verification while non-compliance could be met with penalties.								

CC5.1b

Please describe your inherent risks that are driven by change in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other physical climate drivers	All MTN countries of operation are included in this section. The risk is an increased incidence of lightning strikes and high winds	Reduction/disruption in production capacity	Up to 1 year	Direct	Very likely	Medium-high	An increase in events coupled with rising repair prices and/ or insurance costs could have a financial	All operations maintain technical and disaster recovery plans. The Group's crisis management toolkit, updated in 2014, sets out	Costs associated with creating a database of infrastructure have yet to be fully realised as the process is still in its

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	during storms as a result of increased storm intensity linked to climate change. The risk and associated financial costs will be greater for BTS sites, switches and data centres than for other infrastructure.						impact on MTN.	the basic principles and frameworks to deal with abnormal or unstable situations which will include the risk of extreme weather events with the potential to disrupt critical technical and other infrastructure. MTN manages existing weather related risks by ensuring that sites are developed in a manner which reduces the risk e.g. raising the level of the site or key equipment and ensuring adequate drainage to reduce the risk of flooding. For example, in Nigeria, at risk sites are designed with flood water risks in mind, ensuring	infancy. Costs associated with managing how sites are built and the technology and materials used form part of CAPEX costs that cannot be isolated.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								sites are backfilled and suitably located. In Cyprus, sites are designed to withstand higher wind load levels in response to increasing and higher intensity wind gusts, and in Cote d'Ivoire provisions are in place to increase the resilience of sites to storms (for example, major cables are buried underground and fire extinguishers are installed). These actions do not necessarily give rise to significant costs if done in the planning stages.	
Change in precipitation extremes and droughts	All MTN countries of operation are included in this section. The risk is a risk of increased precipitation	Increased operational cost	Up to 1 year	Direct	Virtually certain	Medium	An increase in events coupled with rising repair prices and/ or insurance costs could have a	Operating equipment, such as generators, have been raised above the flood level in some MTN countries/ regions most at	These costs have not been quantified.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	and/or increased precipitation intensity and flooding as are result of climate change. The risk and associated financial costs will be greater for BTS sites than for other infrastructure. The floods brought about by the rainy season in certain areas threaten access to power. In all countries in which MTN operates the power grid is unstable/ insufficient/ unreliable and backup generators are necessary for between 10%-70% of the time. Increased flooding due to increasing precipitation intensity has the potential to reduce						financial impact on MTN.	risk. In addition, future site planning has adopted the lessons learned about defending against floods. In Swaziland, there is a project underway to install 8 hours of back-up power for 40 BTS sites to improve site availability when grid power is not available, and budget is set aside each year to pave access roads to remote sites to help ensure that the sites are accessible during / following severe weather events. In Zambia, equipment has been procured to help extract flood water from buildings.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	accessibility to sites, requiring diesel and infrastructure maintenance. Specific examples of previous impacts include extensive flooding that affected MTN Nigeria's operations in FY12. In Iran, severe storms have resulted in grid power supply failures, with diesel generators being used to provide back-up power. Zambia has also reported increased flooding as a result of heavy rainfall which has resulted in more power failures and increased fuel consumption and costs associated with the use of back-up generators.								

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in mean (average) temperature	All MTN countries of operation are included in this section. The risk is an increased mean surface temperature. The risk and associated financial costs will be greater for BTS sites, switches and data centres than for other infrastructure due to the required optimal operating temperatures of the equipment used at these sites. Operating countries in the Middle East are especially at risk to this change in surface temperature. However, other countries will be affected: MTN Nigeria has identified risks relating to poor performance of	Increased operational cost	>6 years	Direct	More likely than not	Low-medium		A number of MTN operations have implemented measures to improve the energy efficiency of cooling at their operations. Measures include the deployment of outdoor BTS sites, use of free cooling, and investment in more energy efficient air-conditioning units, and technical equipment that has already been designed to be as energy-efficient as possible. This will help to reduce energy consumption for cooling and associated costs. In addition, a number of MTN operations are designing BTS sites such that	MTN Namibia invested NAD $15 000 in two new energy efficient AC units for their Head Office, helping to generate annual electricity savings of 13 800 kWh. Costs associated with the deployment of extractor fans in MTN Nigeria are N189 505 per site.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	voice and data equipment as a result of high temperatures. By 2100, temperature could have risen by up to 5 degrees Celsius, adding increased cost to management of BTS sites. The increased costs are particularly around increasing energy costs for cooling.							they are able to withstand higher temperatures. For example, MTN Nigeria has invested in extractor fans at Indoor BTS sites in order to help manage the direct impact of high temperatures on equipment.	
Other physical climate drivers	Increased precipitation, storms and flooding may affect the power supply. Power outages and subsequent revenue losses would result.	Reduction/disruption in production capacity		Direct	More likely than not	Medium-high	Uncertain	We actively focus on improving the efficiencies we extract from the use of energy, and we invest in alternative and less carbon-intensive forms of energy to power our operations, improve our resilience and ultimately reduce our impact on	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								the environment and the communities in which we operate. For example, hybrid battery-diesel, gas, wind, and solar power systems are being rolled out at various locations. Energy security is maintained for all operations through primary or back-up diesel power. These investments mitigate unstable power supply at network sites. Across MTN's operations globally, there are now 205 solar and solar-hybrid sites, in addition to over 600 diesel hybrid BTS sites.	

CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	Investor pressure and perceived or real inadequate environmental and climate change performance poses a reputational risk to MTN. The number and scope of regulatory requirements impacting MTN's operations are increasing, and while the operations are currently operating in accordance with these voluntary and regulatory standards; stakeholder and client expectations are constantly evolving and generally becoming more rigorous. As a result, in addition to compliance costs, MTN may be exposed to increased insurance costs and unforeseen environmental expenses. The perceived failure to act in a socially	Reduced stock price (market valuation)		Direct	Likely	Low	MTN could face reputational risks with Socially Responsible Investors (SRI) Index of the JSE if performance and policy commitments fall short of expectations for a leading and diverse company, creating a negative impression with stakeholders and investors.	We have retained our listing on the JSE's SRI index and are committed to understanding and reporting on its sustainability performance and GHG emissions and responding to the CDP survey annually. To date, MTN has participated in and met the requirements of the JSE SRI for the past 10 years. In order to manage overall sustainability performance MTN regularly engages with stakeholders and produces an annual integrated sustainability report.	The potential financial impacts of this risk are difficult to quantify

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	responsible manner could impact MTN's score on for the Environmental component of JSE Socially Responsible Index (SRI) assessment.								

CC5.1d

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1e

Please explain why you do not consider your company to be exposed to inherent risks driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1f

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Page: CC6. Climate Change Opportunities

CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Opportunities driven by changes in regulation
Opportunities driven by changes in physical climate parameters
Opportunities driven by changes in other climate-related developments

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
International agreements	MTN has operations across Africa, the Middle	Reduced capital costs	Unknown	Direct	Virtually certain	Medium	CDM projects generated 15 292	The annual carbon footprint enables us to determine the consumption patterns of various sites (including the tri-generation facility) and to identify cost and GHG emission reduction opportunities. It also helps us identify the effectiveness of projects that fall under the scope of CDM or	TriGeneration plant CAPEX: R22

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	East, and southern Europe, a number of which are LDCs. The most recent COP (COP20) indicated that carbon credits from LDC countries will still be in demand and as such represents a potential opportunity for MTN. Moreover there was progress with regard to securing finance for non-Annex 1 countries. Although not a LDC, South						saleable certified emission reduction (CER) credits. The credits were sold in May 2012, on a forward-sale basis over 5 years starting 2013, at 94% of the spot price. Other cost reductions associated with international regulatio	related mechanisms.	million.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Africa's 2-megawatt (MW), methane-driven tri-generation power plant at the 14th Avenue Head Office is the first of its kind on the African continent and resulted in a new methodology approved by the United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism (CDM)						ns are likely to accrue in the future.		

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Executive Board. The success of this project has led to further investigations of the potential for three other similarly powered switch centres in South Africa. MTN is considering ways of benefiting from similar opportunities in other non-Annex 1 countries.								
Other regulatory drivers	There are a number of tax incentives, research and developme	Increase in capital availability	Up to 1 year	Direct	About as likely as not	Low	MTN is currently saving in excess of 11 904	As energy consumption and the management thereof is so important, tax incentives, research and development incentives and government grants will be looked into in order to aid the occurrence of energy efficiency measures at MTN South African and then look at opportunities to scale up to other MTN countries of operation. A decision has yet to be determined around whether the cost of monitoring and	The cost associated with Monitoring & Verification can

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	nt incentives and government grants in the area of energy and climate change which MTN could take advantage of. These are mainly available in South Africa, but other MTN countries of operation review if similar regulatory incentives are available locally as well. South African incentives being explored by MTN						MWh of electricity per year in South Africa from energy efficiency and low carbon energy initiatives. A portion of this saving is therefore available for an income tax allowance in terms of Section12L of the Income Tax Act. This could	verification is worth the savings that will be achieved through Section 12L of the Income Tax Act.	be substantial. However, we have not undertaken detailed costing assessment for this activity.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	include: Income Tax Act, Section 12.k: Carbon credits generated by Clean Development Mechanism projects will be exempt from normal tax. Section 12.l: An income tax allowance is available for energy efficiency savings. In addition, because MTN South Africa earns carbon credits from the CDM project						result in a potential saving for MTN annually, excluding the cost required for measurement and verification.		

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	there is the potential for tax related savings. MTN South Africa is participating in the Private Sector Energy Efficiency (PSEE) programme, and is reviewing its energy policy identifying further opportunities for energy efficiency investments, and assessing the financial penalties and incentives available from local								

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	regulatory authorities for energy efficiency investments.								
Fuel/energy taxes and regulations	Regulations are affecting the cost of energy for customers. Demand for ICT solutions offered by MTN that enable clients to reduce their energy consumption/GHG emissions is likely to increase. This could include contributions to smart systems (smart	Increased demand for existing products/services	Unknown	Indirect (Client)	Virtually certain	Low	Unknown (and isolating the increase in demand associated with climate change regulation-related drivers is not feasible).	MTN's investments in M2M and Cloud Computing solutions to help other companies and sectors reduce their GHG emissions are relatively small but growing rapidly. Services include: cloud computing for virtualisation and other efficiencies; and machine-to-machine products to reduce water leakage, report on air quality composition, and encourage energy-efficient driving using our fleet management solution. MTN's M2M offering includes fleet management, fuel management, utilities management, smart home services and security solutions. MTN's Cloud Computing services are now available in 10 countries (up from 8 in 2013). More information is provided at https://www.mtn.com/Sustainability/sustainableEconomicValue/Pages/EnterpriseServices.aspx#.	Not available (isolating the component of the investment in innovative products that relate specifically to climate change drivers is not feasible).

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	grids, smart transport, smart logistics etc.) or 'smart working' (working remotely).								

CC6.1b

Please describe the inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other physical climate opportunities	MTN has the opportunity to develop innovative products that can provide customers with access to information that could contribute towards greater resilience in the face of changing climatic conditions. These could include up-to-date	New products/business services	Unknown	Indirect (Client)	About as likely as not	Unknown	This opportunity is yet to prove material. The Group is not seeing material demand for products at	We are actively developing new products and partners in with value—add service providers to address the	None

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	information on weather and access to the latest planting/growing/harvesting information for farmers; early warning systems for communities; group communication platforms in times of disasters, etc.						this stage and has therefore not estimated financial implications.	requirement for climate-centric ICT solutions. For example, in 2014, our partnership with Ignitia Ghana Limited allowed us to introduce the world's ISKA Weather, a tropical weather forecast system which is so extensively customised and specific to locations that neighbouring farmers may receive different forecasts as a result of geographical differences.	

CC6.1c

Please describe the inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Changing consumer behaviour	Closing the digital divide provides an indirect opportunity associated with efforts to grow economies, reduce poverty and inequality and provide communities with access to services and opportunities in a way that would contribute to more climate resilient societies.	Increased demand for existing products/services	3 to 6 years	Direct	Likely	Medium-high	Not Available	MTN is actively working towards enabling connectivity by offering affordable and low-cost smart handsets, which can both help close the digital divide, and help reduce environmental impacts. For instance, MTN Uganda and MTN Rwanda, and our business partner, Fenix International, were awarded the 2014 Sustainable Business Trade and Services category award for our ReadyPay solar-powered charging and lighting solution. The ReadyPay solution charged mobile handsets more than 800 000 times, provided lighting for over 18 600 students, generated additional revenues of up to US$45 per month for small businesses and dealers offering ReadyPay services, and helped communities avoid creating approximately 12,3 tonnes of GHG emissions.	Costs are considered business development costs and are therefore difficult to estimate.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	For example more people have access to mobile technology than to electricity and to water globally. Our products can help educate, inform, change habits, and improve access to opportunities.								
Other drivers	Electronic and electrical waste (e-waste) results in significant amounts	Wider social benefits	>6 years	Indirect (Supply chain)	Virtually certain	Medium	Not Available	MTN has partnered with GIZ for the past three years to develop e-waste solutions in South Africa, and in the improving knowledge of proper environmental and regulatory compliance, and access to e-waste for recycling to small and medium e-waste handlers in the country. In 2014, 326 tonnes of e-waste (down from 469 tonnes in 2013) was handed over. This included cellular and network e-waste (predominantly air-conditioning units, batteries and mixed-waste packages) and	Between 2011 and 2014 , R4,6million was jointly invested by MTN

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	of wasted materials if not re-used or recycled. Reuse of materials reduces the energy input to make future products reducing the overall energy intensities of electronic life cycles.							IT equipment at the end of useful life. Sixteen permanent jobs were also created.	South Africa and GIZ
Reputation	MTN recognises the reputational benefits that arise from proactively managing and mitigating	Investment opportunities	3 to 6 years	Indirect (Client)	Likely	Low-medium	Not Available	MTN Group has invested extensively in energy efficiency and alternative energy solutions across its operations. In 2014, MTN avoided a total 29 034 tCO2e relative to what we would have emitted as a result of initiatives implemented across operations over time. MTN is also proactive in engaging with its stakeholders on sustainability issues and performance, for example through its annual Sustainability Report, dedicated pages on its website, and through its CDP response. Various MTN operations are engaging with stakeholders on climate change issues; for example, MTN Sudan is a member of the Supreme Committee for Environmental Affairs, MTN Cameroon has been proactive in conducting environmental	Not quantifiable

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	climate change impacts and demonstrating good corporate citizenship. By proactively managing our climate change impacts, and communicating this to stakeholders, MTN has an opportunity to improve the brand's image with regulators, customers, and the							audits to ensure compliance with local regulations. In addition, MTN Benin has held introductory conversations with the Environmental Ministry.	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	wider public.								
Other drivers	MTN Group has recognised various potential energy efficiency and management opportunities that could be implemented across MTN operations in the future. The main drivers to implementing these measures are cost savings, energy efficiency, and energy security	Reduced operational costs	1 to 3 years	Direct	Very likely	High	Not available	MTN Group continues to implement various strategies to achieve cost savings from opportunities in energy efficiency enhancement and energy management. These are extensively described at https://www.mtn.com/Sustainability/Documents/Reducing_Greenhouse_Gases_2014.pdf and include, for example: our tower sharing and BTS outsourcing strategy; public-private and independent power producer partnerships for investment in alternative energy; the use of virtualisation, consolidation and other solutions; technologies to reduce energy costs; implementing ISO14001 and Leadership in Energy and Environmental Design standards in one large building; and many more. See https://www.mtn.com/Sustainability/Ecoresponsibility/Pages/Energy-and-climate.aspx for more information.	Not available

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	for business continuity and customer service provision.								

CC6.1d

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1e

Please explain why you do not consider your company to be exposed to inherent opportunities driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1f

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

N/A

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Tue 01 Jan 2013 - Tue 31 Dec 2013	769471
Scope 2	Tue 01 Jan 2013 - Tue 31 Dec 2013	636184

CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
ISO 14064-1

CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

N/A

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CH4	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	IPCC Fourth Assessment Report (AR4 - 100 year)
PFCs	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: R22	Other: GHG Protocol
Other: R502	Other: GHG Protocol
Other: Fire Suppression Equipment	Other: Business Commentary
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)

CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
Motor gasoline	69.3	Other: kg/CO2/GJ	N/A
Motor gasoline	0.033	Other: kg CH4/GJ	N/A
Motor gasoline	0.003	Other: kg N20/GJ	N/A
Diesel/Gas oil	20.20	Other: kg C/GJ	N/A
Diesel/Gas oil	0.003	Other: Tonnes CH4/GJ	N/A
Diesel/Gas oil	0.0006	Other: Tonnes N20/GJ	N/A
Diesel/Gas oil	43	Other: MJ/kg	N/A
Liquefied petroleum gas (LPG)	47.30	Other: MJ/GJ	N/A
Liquefied petroleum gas (LPG)	17.20	Other: C/GJ	N/A
Liquefied petroleum gas (LPG)	0.001	Other: kg CH4/GJ	N/A
Liquefied petroleum gas (LPG)	0.0001	Other: kg N20/GJ	N/A
Natural gas	48	Other: MJ/kg	N/A
Natural gas	15.30	Other: C/GJ	N/A
Natural gas	0.001	Other: kg CH4/GJ	N/A
Natural gas	0.0001	Other: kg N20/GJ	N/A

Further Information

N/A

Page: CC8. Emissions Data - (1 Jan 2014 - 31 Dec 2014)

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Financial control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

793098

CC8.3

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

595177

CC8.4

Are there are any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of Scope 2 emissions excluded from this source	Explain why the source is excluded
Scope 1, 2 and 3 emissions from the following operating countries are not included: MTN Syria, Mascom Botswana; MTN Ethiopia; MTN Dubai Head Office; MTN South Sudan	Emissions are not relevant	Emissions are not relevant	• MTN South Sudan (operations have only commenced recently) • MTN Syria (challenges associated with network management in the context of the broader macro-political situation) • MTN Group Head in UAE, Dubai (MTN does not offer ICT services directly in the UAE) • Mascom Botswana and MTN Ethiopia have been excluded on the basis of indirect ownership holding and recent acquisitions, respectively

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 5% but less than or equal to 10%	Data Gaps Metering/ Measurement Constraints Other: Constraints by the largest operating units and non-reporting of less material operating units	The uncertainty will continue to decrease as the carbon footprint data collection process becomes more institutionalised. The increased training and awareness will ensure that more MTN operations report each year. Overall the uncertainty has decreased compared to 2013. In 2014, PwC undertook a limited assurance engagement on MTN Nigeria's energy data to ensure greater confidence in the reported energy and associated GHG emissions. MTN Nigeria was selected for assurance as it is the most material contributor to the Group's energy consumption and GHG profile. A Management Review will be undertaken on data centre, switch and remote hub energy and emissions for a selection of MTN operations in 2015. Depending on the outcomes of this review some of the MTN operations may undergo a formal audit. The intention is to move towards auditing data centres, switches and remote hubs across the group.
Scope 2	More than 5% but less than or equal	Data Gaps Metering/ Measurement	The uncertainty continues to decrease as the carbon footprint data collection process becomes more institutionalised. The increased training and awareness will ensure that more MTN

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
	to 10%	Constraints Other: : Constraints by the largest operating units and non-reporting of less material operating units	operations report each year. Overall the uncertainty has decreased compared to 2013. In 2014, PwC undertook a limited assurance review on MTN Nigeria's energy data to ensure greater confidence in the reported energy and associated GHG emissions. MTN Nigeria was selected for assurance as it is the most material contributor to the Group's energy consumption and GHG profile. A Management Review will be undertaken on data centre, switch and remote hub energy and emissions for a selection of MTN operations in 2015. Depending on the outcomes of this review some of the MTN operations may undergo a formal audit.

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance complete

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Limited	https://www.cdp.net/sites/2015/46/12546/Climate Change 2015/Shared	Please refer to pages 52, 53	ISAE3000	66

Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
assurance	Documents/Attachments/CC8.6a/MtnGroupIntegrated_Report2014.pdf	and inside back cover of the Group's 2014 Integrated Report for the assurance statement.		

CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emissions Monitoring Systems (CEMS)

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission

CC8.7

Please indicate the verification/assurance status that applies to your reported Scope 2 emissions

Third party verification or assurance complete

CC8.7a

Please provide further details of the verification/assurance undertaken for your Scope 2 emissions, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Limited assurance	https://www.cdp.net/sites/2015/46/12546/Climate Change 2015/Shared Documents/Attachments/CC8.7a/MtnGroupIntegrated_Report2014.pdf	Please refer to pages 52, 53 and inside back cover of the Group's 2014 Integrated Report for the assurance statement.	ISAE3000	7

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
Other:	In addition to MTN Nigeria's energy costs, consumption and greenhouse gas emissions, a number of additional indicators were verified, but these do not relate to energy and carbon emissions. (Please refer to pages 52, 53 and inside back cover of the Group's 2014 Integrated Report for the assurance statement).

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

Further Information

N/A

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2014 - 31 Dec 2014)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

Yes

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e
Afghanistan	65427
Benin	11733
Cameroon	2430
Congo, Republic of the	15611
Cote d Ivoire	2907
Cyprus	1962
Ghana	5863

Country/Region	Scope 1 metric tonnes CO2e
Guinea-Bissau	4586
Guinea	24009
Iran, Islamic Republic of	6145
Kenya	139
Liberia	11134
Namibia	1
Nigeria	524893
Rwanda	4095
South Africa	18262
Sudan	41509
Swaziland	736
Uganda	5158
Yemen	42236
Zambia	4264

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By activity

CC9.2a

Please break down your total gross global Scope 1 emissions by business division

Business division	Scope 1 emissions (metric tonnes CO2e)

CC9.2b

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude

CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)

CC9.2d

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)
Mobile combustion	33675
Stationary combustion(Diesel)	730363
Stationary combustion(LPG)	133
Stationary combustion(natural gas)	7831
Refrigerant Use	21096

CC9.2e

Please break down your total gross global Scope 1 emissions by legal structure

Legal structure	Scope 1 emissions (metric tonnes CO2e)

Further Information

N/A

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2014 - 31 Dec 2014)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

Yes

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted for in CC8.3 (MWh)
Afghanistan	13717	18387	0
Benin	11813	16406	0
Cameroon	2616	13081	0
Congo, Republic of the	918	3990	0
Cote d Ivoire	4318	9881	0
Cyprus	6995	9556	0
Ghana	4574	21274	0
Guinea-Bissau	0	0	0
Guinea	978	1855	0
Iran, Islamic Republic of	109345	189178	0
Kenya	195	663	0
Liberia	0	0	0
Namibia	33	138	0
Nigeria	39619	91498	0
Rwanda	4603	9206	0
South Africa	362893	365084	0
Sudan	9838	48224	0
Swaziland	2844	8366	0
Uganda	8136	15439	0
Yemen	11687	18463	0
Zambia	55	18495	0

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By facility

CC10.2a

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2 emissions (metric tonnes CO2e)

CC10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2 emissions (metric tonnes CO2e)
BTS Sites	435491
Offices (Head Regional & Technical) & warehouses	37581
Data Call and Service Centres	23502
Switches	98603

CC10.2c

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2 emissions (metric tonnes CO2e)

CC10.2d

Please break down your total gross global Scope 2 emissions by legal structure

Legal structure	Scope 2 emissions (metric tonnes CO2e)

Further Information

N/A

Page: CC11. Energy

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

More than 5% but less than or equal to 10%

CC11.2

Please state how much fuel, electricity, heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	MWh
Fuel	2894283

Energy type	MWh
Electricity	859182
Heat	0
Steam	0
Cooling	0

CC11.3

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Diesel/Gas oil	2795826
Motor gasoline	57827
Liquefied petroleum gas (LPG)	605
Natural gas	40026

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the Scope 2 figure reported in CC8.3

Basis for applying a low carbon emission factor	MWh associated with low carbon electricity, heat, steam or cooling	Comment

Further Information

N/A

Page: CC12. Emissions Performance

CC12.1

How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Decreased

CC12.1a

Please identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions reduction activities	0.99	Decrease	Emission reduction initiatives implemented during 2014 resulted in a saving of 13 862 tCO2e, equivalent to 1% of MTN's 2013 combined Scope 1 and 2 emissions.
Divestment	2.36	Decrease	As a result of the outsourcing of BTS sites to TowerCos in Zambia and Rwanda for the first time in 2014, in addition to continued outsourcing of BTS sites to TowerCos in Uganda, Cameroon, and Cote d'Ivoire, a total 33 116 tCO2e shifted from MTN's Scope 1 + 2 emissions to Scope 3 emissions. This represents 2.36% of MTN's 2013 Scope 1 + 2 emissions.
Acquisitions	0	No change	
Mergers	0	No change	
Change in output	0.43	No change	In 2014, MTN's subscriber numbers increased by 7.5%. In total, Scope 1 and 2 emissions in 2014 decreased by 17 380 tCO2e. The change in emissions as a result of emission reduction initiatives, the change in boundary, and divestment of BTS sites is -23 433 tCO2e. The remaining 6 053tCO2e (to bring the overall change in emissions in 2014 up to the total -17 380) is attributed to the increased subscribers in 2014. This 6 053 tCO2e represents 0.43% of MTN's 2013 Scope 1 + 2 emissions.
Change in methodology	0	No change	
Change in boundary	1.68	No change	In 2014, MTN Benin was included in the inventory for the first time. Scope 1 and 2 emissions from MTN Benin in 2014 totalled 23 545 tCO2e, representing 1.68% of MTN's 2013 Scope 1 + 2 emissions.

Reason	Emissions value (percentage)	Direction of change	Comment
Change in physical operating conditions	0	No change	
Unidentified	0	No change	
Other	0	No change	

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.0000095	metric tonnes CO2e	unit total revenue	7.24	Decrease	In 2014, Scope 1 + 2 emissions decreased (for the reasons described above) whilst total revenue increased compared to 2013. This has resulted in a 7.24% decrease in emissions per unit revenue. Emissions intensity (emissions unit total revenue) would have been greater were it not for the emission reduction activities successfully implemented across the Group.

CC12.3

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
62.52	metric tonnes CO2e	FTE employee	8.64	Increase	Whilst the Group's Scope 1 and 2 emissions decreased in 2014 from 2013 (-1.24%), there was a proportionally larger decrease in the number of employees (-9% in 2014). As a result, this intensity metric has increased since 2014. Emissions intensity (emissions per FTE employee) would have been greater were it not for the emission reduction activities successfully implemented across the group.

CC12.4

Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.006	metric tonnes CO2e	Other: subscriber	8.13	Decrease	In 2014, emissions decreased by 1.24% while subscribers increased by 7.5 %. Consequently, emissions per subscriber decreased in 2014. Emissions intensity (emissions per subscriber) would have been greater were it not for the emission reduction activities successfully implemented across the group.

Further Information

N/A

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

No, and we do not currently anticipate doing so in the next 2 years

CC13.1a

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership

CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

No

CC13.2a

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance

Further Information

Page: CC14. Scope 3 Emissions

CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, calculated	137697	Following the sale of MTN's towers in Cameroon, Ivory Coast, Ghana, Rwanda, Zambia and Uganda, some of our reported Scope 1 and Scope 2 emissions have now been moved to Scope 3 reports, as MTN is neither the majority shareholder nor maintains operational control of these assets. These emissions are material and are therefore prioritised in the Group's management of Scope 3 emissions. Emissions	100.00%	MTN neither owns nor controls these assets any longer (although in some cases may have minority shareholding in some tower management companies). MTN is looking to further sell some of its network sites in other countries, as part of the overall Group strategy. This will impact the Scope in which emissions are reported (Scope 1 and 2 likely to decrease; Scope 3 likely to increase).

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			include emissions from petrol, diesel and gas (previously reported under MTN's Scope 1 emissions) and electricity (previously reported under MTN's Scope 2 emissions) associated with operating BTS towers in Cameroon, Ivory, Coast, Ghana, Rwanda, Uganda and Zambia. Operators in these countries were required to provide data in the same way as MTN MTN operations: via carbon footprint calculators. The methodology for calculation is the same as the process described in Question 7. Methodology: The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised edition); ISO 14064-1. GWPs: Source- IPCC Fourth Assessment Report (AR4 – 50 year) Emission Factors: see Question 7.4. Grid emission factors are taken from the IEA Statistics, 2013. CO2 emissions from fuel combustion highlights.		
Capital goods	Not relevant, explanation provided				This category, in accordance with WRI/GHG Protocol guidance, has been excluded due to lack of available data and the insignificance in size of emissions relative to the other categories.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, not yet calculated				
Upstream transportation and	Relevant, not yet				

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
distribution	calculated				
Waste generated in operations	Relevant, not yet calculated				
Business travel	Relevant, calculated	5555	Business travel includes both flights (local and international) for business purposes as well as kilometres travelled in hire cars and taxis. The methodology followed to estimate the emissions involved multiplying activity data for mode of transport (e.g. distance travelled) by an applicable emission factor for that mode of transport (e.g. t CO2/km). Flights were categorized as being either long- (> 1600km) or short-(<1600 km) haul flights. DEFRA default factors were used for all emission factors (0.11 for short haul, and 0.12 kg CO2/km for long haul).	80.00%	
Employee commuting	Relevant, not yet calculated				
Upstream leased assets	Relevant, not yet calculated				
Downstream transportation and distribution	Relevant, not yet calculated				
Processing of sold products	Relevant, not yet calculated				

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Use of sold products	Relevant, not yet calculated				
End of life treatment of sold products	Relevant, not yet calculated				
Downstream leased assets	Relevant, not yet calculated				
Franchises	Relevant, not yet calculated				
Investments	Relevant, not yet calculated				
Other (upstream)	Relevant, not yet calculated				
Other (downstream)	Relevant, not yet calculated				

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

No third party verification or assurance

CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of Scope 3 emissions verified (%)

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Purchased	Other: Outsourcing of BTS sites to	32	Increase	The outsourcing of BTS sites to TowerCos in Zambia and Rwanda for the

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
goods & services	TowerCos in Zambia and Rwanda in 2014, and continued outsourcing of BTS sites in Uganda, Cameroon and Cote d'Ivoire			first time in 2014, and the continued outsourcing of BTS sites in Uganda, Cameroon and Cote d'Ivoire in 2014, resulted in an additional 33 116 tCO2 Scope 3 emissions in 2014. This has resulted in a 32% increase in Scope 3 emissions from purchased goods and services.
Business travel	Other: There has been a reduction in car rentals.	25	Decrease	Air travel emissions were similar compared to 2013. The main driver for the reduction was reduced emissions associated with car rentals (the other category in business travel).

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our suppliers
Yes, our customers

CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success

Following the sale of MTN's BTS towers in Cameroon, Ivory Coast, Ghana, Zambia, Uganda and Rwanda some of our reported Scope 1 and Scope 2 emissions have now been moved to Scope 3, as MTN is neither the majority shareholder nor maintains operational control of these assets.
These emissions are material and are therefore prioritised in the Group's management of Scope 3 emissions.
We engage directly with these suppliers, requiring them to provide information (using the same climate change data request forms as our MTN operations). We will also provide training and include these businesses in our efforts to gather better data and improve the management of climate related risks and opportunities with respect to the towers being managed by these businesses.
We engage directly with customers through the review the annual sustainability report, communications with media organisations and our customers directly, Information from third-party questionnaires and assessments of our publicly reported performance by university organisations and other third parties not commissioned by MTN and our own internal review and research processes including industry, peer and global developments, and our risk and audit management processes. We are constantly evolving to meet client needs.

CC14.4b

To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Number of suppliers	% of total spend	Comment
2	12.9%	The total energy costs from our outsourced BTS operations in Rwanda, Zambia, Cote d'Ivoire, Cameroon, Ghana and Uganda was 593 million ZAR in 2014. This represents 12,9% of MTN's total energy spend.

CC14.4c

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

How you make use of the data	Please give details
Identifying GHG sources to prioritize for reduction actions	We will share our experience and expertise gained from successful emission reduction activities in our other MTN operations. We will also monitor the data and information on climate change management as part of the integrated risk management process that we are currently developing, in order to ensure that these material emissions do not pose material risks to the Group.

CC14.4d

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

Further Information

N/A

Module: Sign Off

Page: CC15. Sign Off

CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
Zakhiya Rehman	Group Sustainability Manager	Environment/Sustainability manager

Further Information

Module: ICT

Page: ICT1. Data center activities

ICT0.1a

Please identify whether "data centers" comprise a significant component of your business within your reporting boundary

Yes

ICT1.1

Please provide a description of the parts of your business that fall under “data centers”

Emissions from data centres account for less than 4% of our total scope 1 + 2 emissions, although data centres are a key component of MTN’s business. MTN is an ICT operator, offering services in over 22 countries in Africa and the Middle East, including cloud computing services. These services are enabled through data centres.

ICT1.2

Please provide your absolute Scope 1 and 2 emissions and electricity consumption for the data centers component of your business

Business activity	Scope 1 emissions (metric tonnes CO2e)	Scope 2 emissions (metric tonnes CO2e)	Annual electricity consumption (MWh)	Electricity data collection method
Data centers	22649	24547	42869	

ICT1.3

What percentage of your ICT population sits in data centers where Power Usage Effectiveness (PUE) is measured on a regular basis?

Percentage	Comment
	Unavailable

ICT1.4

Please provide a Power Usage Effectiveness (PUE) value for your data center(s). You can provide this information as (a) an average, (b) a range or (c) by individual data center - please tick the data you wish to provide (tick all that apply)

ICT1.4a

Please provide your average PUE across your data centers

Number of data centers	Average PUE	% change from previous year	Direction of change	Comment

ICT1.4b

Please provide the range of PUE values across your data centers

Number of data centers	PUE Minimum Value	% change of PUE Minimum Value from previous year	PUE Maximum Value	% change of PUE Maximum Value from previous year	Direction of change	Comment

ICT1.4c

Please provide your PUE values of all your data centers

Data center reference	PUE value	% change from previous year	Direction of change	Comment

ICT1.5

Please provide details of how you have calculated your PUE value

ICT1.6

Do you use any alternative intensity metrics to assess the energy or emissions performance of your data center(s)?

ICT1.6a

Please provide details on the alternative intensity metrics you use to assess the energy or the emissions performance of your data center(s)

ICT1.7

Please identify the measures you are planning or have undertaken in the reporting year to increase the energy efficiency of your data center(s)

Status in reporting year	Energy efficiency measure	Comment
		Measures are included in CC3.3b

ICT1.8

Do you participate in any other data center efficiency schemes or have buildings that are sustainably certified or rated?

Yes

ICT1.8a

Please provide details on the data center efficiency schemes you participate in or the buildings that are sustainably certified or rated

Scheme name	Level/certification (or equivalent) achieved in the reporting year	Percentage of your overall facilities to which the scheme applies
LEED	Silver (for MTN South Africa's main premises)	

ICT1.9

Do you measure the utilization rate of your data center(s)?

No

ICT1.9a

What methodology do you use to calculate the utilization rate of your data center(s)?

ICT1.10

Do you provide carbon emissions data to your clients regarding the data center services they procure?

Yes

ICT1.10a

How do you provide carbon emissions data to your clients regarding the data center services they procure?

Most clients do not request this information, but for tenders or sales processes, information on MTN's energy/ climate/ sustainability efforts is shared.

ICT1.11

Please describe any efforts you have made to incorporate renewable energy into the electricity supply to your data center(s) or to re-use waste heat

Please see CC3.3b (noting efforts relating to network sites in particular). These will include the use of gas for primary power in some sites, and the use of re-use of waste heat, as explained regarding the Tri-generation site.

Further Information

N/A

Page: ICT2. Provision of network/connectivity services

ICT0.1b

Please identify whether "provision of network/connectivity services" comprises a significant component of your business within your reporting boundary

Yes

ICT2.1

Please provide a description of the parts of your business that fall under "provision of network/connectivity services"

MTN is an ICT operator, offering services in over 22 countries in Africa and the Middle East, including cloud computing services. These services are enabled through network and connectivity including a network submarine and terrestrial cables, satellite, wireless and all other forms of network connectivity.

ICT2.2

Please provide your absolute Scope 1 and 2 emissions and electricity consumption for the provision of network/connectivity services component of your business

Business activity	Scope 1 emissions (metric tonnes CO2e)	Scope 2 emissions (metric tonnes CO2e)	Annual electricity consumption (MWh)	Electricity data collection method
Provision of network/connectivity services				

ICT2.3

Please describe your gross combined Scope 1 and 2 emissions or electricity use for the provision of network/connectivity services component of your business as an intensity metric

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change

ICT2.4

Please explain how you calculated the intensity figures given in response to Question ICT2.3

ICT2.5

Do you provide carbon emissions data to your clients regarding the network/connectivity services they procure?

No

ICT2.5a

How do you provide carbon emissions data to your clients regarding the network/connectivity services they procure?

Further Information

N/A

Page: ICT3. Manufacture or assembly of hardware/components

ICT0.1c

Please identify whether "manufacture or assembly of hardware/components" comprises a significant part of your business within your reporting boundary

No

ICT3.1

Please provide a description of the parts of your business that fall under "manufacture or assembly of hardware/components"

ICT3.2

Please provide your absolute Scope 1 and 2 emissions and electricity consumption for the manufacture or assembly of hardware/components part of your business

Business activity	Scope 1 emissions (metric tonnes CO2e)	Scope 2 emissions (metric tonnes CO2e)	Annual electricity consumption (MWh)	Electricity data collection method

ICT3.3

Please identify the percentage of your products meeting recognized energy efficiency standards/specifications by sales weighted volume (full product range)

Product type	Standard (sleep mode)	Percentage of products meeting the standard by sales volume (sleep mode)	Standard (standby mode)	Percentage of products meeting the standard by sales volume (standby mode)	Standard (in use mode)	Percentage of products meeting the standard by sales volume (in use mode)	Comment

ICT3.4

Of the new products released in the reporting year, please identify the percentage (as a percentage of all new products in that product type category) that meet recognized energy efficiency standards/specifications

Product type	Standard (sleep mode)	Percentage of new products meeting the standard (sleep mode)	Standard (standby mode)	Percentage of new products meeting the standard (standby mode)	Standard (in use mode)	Percentage of new products meeting the standard (in use mode)	Comment

ICT3.5

Please describe the efforts your organization has made to improve the energy efficiency of your products

ICT3.6

Please describe the GHG emissions abatement measures you have employed specifically in your ICT manufacturing operations

ICT3.7

Do you provide carbon emissions data to your clients regarding the hardware/component products they procure?

ICT3.7a

How do you provide carbon emissions data to your clients regarding the hardware/component products they procure?

Further Information

N/A

Page: ICT4. Manufacture of software

ICT0.1d

Please identify whether "manufacture of software" comprises a significant component of your business within your reporting boundary

No

ICT4.1

Please provide a description of the parts of your business that fall under "manufacture of software"

ICT4.2

Please provide your absolute Scope 1 and 2 emissions and electricity consumption for the software manufacture component of your business

Business activity	Scope 1 emissions (metric tonnes CO2e)	Scope 2 emissions (metric tonnes CO2e)	Annual electricity consumption (MWh)	Electricity data collection method

ICT4.3

Please describe your gross combined Scope 1 and 2 emissions for the software manufacture component of your business in metric tonnes CO2e per unit of production

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change

ICT4.4

What percentage of your software sales (by volume) is in an electronic format?

ICT4.5

Do you provide carbon emissions data to your clients regarding the software products they procure?

ICT4.5a

How do you provide carbon emissions data to your clients regarding the software products they procure?

Further Information

N/A

Page: ICT5. Business services (office based activities)

ICT0.1e

Please identify whether "business services (office based activities)" comprise a significant component of your business within your reporting boundary

No

ICT5.1

Please provide a description of the parts of your business that fall under "business services (office based activities)"

ICT5.2

Please provide your absolute Scope 1 and 2 emissions and electricity consumption for the business services (office based activities) component of your business

Business activity	Scope 1 emissions (metric tonnes CO2e)	Scope 2 emissions (metric tonnes CO2e)	Annual electricity consumption (MWh)	Electricity data collection method

ICT5.3

Please describe your gross combined Scope 1 and 2 emissions for the business services (office based activities) component of your business in metric tonnes per square meter

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change

ICT5.4

Please describe your electricity use for the provision of business services (office based activities) component of your business in MWh per square meter

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change

Further Information

N/A

Page: ICT6. Other activities

ICT0.1f

Please identify whether "other activities" comprise a significant component of your business within your reporting boundary

No

ICT6.1

Please provide a description of the parts of your business that fall under "other"

ICT6.2

Please provide your absolute Scope 1 and 2 emissions and electricity consumption for the identified other activity component of your business

Activity	Scope 1 emissions (metric tonnes CO2e)	Scope 2 emissions (metric tonnes CO2e)	Annual electricity consumption (MWh)	Electricity data collection method

ICT6.3

Please describe your gross combined Scope 1 and 2 emissions for your defined additional activity using an appropriate activity based intensity metric

Activity	Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change

ICT6.4

If appropriate, please describe your electricity use for your defined additional activity using an appropriate activity based intensity metric

Activity	Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change

Further Information

N/A