

Investor CDP 2014 Information Request MTN Group

- 1 Module: Introduction
- 2 Page: Introduction

3 CC0.1

Introduction

Please give a general description and introduction to your organization.

Launched in 1994, 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 transactions, as well as numerous other mobile services (including mHealth, mEducation and mInsurance). The MTN Group, which has its headquarters in South Africa, is listed on the JSE Securities Exchange under the share code: "MTN", and is included in the JSE Socially Responsible Index (SRI). At 31 December 2013, MTN had 207,3 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.

4 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

Tue 01 Jan 2013 - Tue 31 Dec 2013

5 CC0.3

6 Country list configuration

7 Please select the countries for which you will be supplying data. This selection will be carried forward to assist you in completing your response.

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

8 CC0.4

9 Currency selection

10 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)

11 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 sectors, companies in the oil and gas industry, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco sectors should complete supplementary questions in addition to the main questionnaire. If you are in these sectors (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 <u>respond@cdp.net</u>. 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 <u>https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx</u>.

12 Further Information

13 Module: Management

14 Page: CC1. Governance

15 CC1.1

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

Individual/Sub-set of the Board or other committee appointed by the Board

17 CC1.1a

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

Responsibility is with Group Board, which has delegated responsibility to Group Risk Management, Compliance and Corporate Governance Committee (overall sustainability). Overall environmental considerations are also defined in the terms of reference of the Group Social and Ethics Committee, a function of the Group Board. The Group President and CEO has delegated executive responsibility to Paul Norman, MTN Group Executive: Human Resources and Corporate Affairs, to whom Group Sustainability reports through the Corporate Affairs Function.

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 www.mtn.com/sustainability (More on Sustainability: Sustainability Governance) section for more information

19 CC1.2

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

No

21 Further Information

ZZ = raye. UUZ. Silaley	22	Page:	CC2 .	Strateg	IV
-------------------------	----	-------	--------------	---------	----

23 CC2.1

24 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

25 CC2.1a

26 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	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 (Principle) risks at Group level, climate change is explicitly considered as part of Principle risk 21. This is the potential threats to continuity of operations as a result of political, environmental and macro-economic events

27 CC2.1b

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

MTN has implemented an integrated risk and opportunity assessment process for assessing company risks. As recommended in the King III Code environmental risks are considered and we have included these in our top 23 risks. One of MTN's most material areas of environmental impact relates to the use of energy for operations, and the associated greenhouse gas impact. The results of the integrated assessment are reviewed and approved by the management and a summary published in the Group's Integrated Business Report for 2013, while more detailed information is presented in the MTN Group Sustainability Report for 2013.

Assessment of asset-level risks are the responsibility of business risk managers in each MTN operation, who consider the 23 principle "top down" risks in their specific contexts, develop response strategies based on the nature and materiality of the risks, and report these to both the local operations' executive, audit and risk compliance committees as appropriate. This process is driven through the provision of carbon and energy training to 45 Energy and Carbon champions and other individuals within each country; a requirement to consider and describe the physical, regulatory and other climate change risks, opportunities and mitigation actions and to report on these to Group; and consolidation and reporting of these internally to senior management as well as externally through the CDP and sustainability report. This process must be further embedded in the existing business risk management processes and therefore MTN is embarking on a process to improve sustainability risk guidelines to all country operations, as part of enterprise risk management for the 2014-2015 period. The intention is to assist the operations in being more systematic in their identification and management of sustainability risks, including climate change.

28 CC2.1c

How do you prioritize the risks and opportunities identified?

To determine materiality of climate change risks and opportunities, we take the following sources into account:

- Feedback from internal and external stakeholders that review the annual sustainability report (which includes climate change under "Eco-Responsibility")
- Engagement with external stakeholders
- Communications with media organisations, civil society and community-based organisations, our customers, and general members of the public

• Feedback and engagement with the JSE SRI, the CDP, and MTN's investors who 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

• 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 in an internal materiality review. Material issues are prioritised according to the scale and nature of impact on business operations, economic performance and specific stakeholder groups. These material issues are reviewed by the executive, and the Group business risk management and/or Group social and ethics committees.

29	CC2.2
30	Is climate change integrated into your business strategy?

No

31 CC2.2b

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

Partial integration is underway through energy efficiency and e-waste initiatives in the business, through innovation and product development, and integrated risk reporting. We are embedding sustainability in our organisation by establishing links with core risks, networks and technology, and opportunities for innovation, driving efficiency and related revenue generation.

However, complete integration from a business planning perspective and strategic intervention design and implementation remains work in progress. 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. Possibly setting executive-level Group targets will help gather the necessary resources to address this in a more climate-focused manner internally (as compared to the current cost-focused manner which plays some role in helping reduce the energy consumption and associated GHG impact of operations. This will accelerate the positive results of efforts to reduce emissions, and improve supplier engagements on the upstream and downstream management of their climate impacts as it materially impacts MTN.

The Group also needs to accelerate the 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. Due to these and planned efforts, MTN Group expects to have climate change integrated into the core business strategy in the near future.

33 CC2.3

34 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)

Direct engagement with policy makers Trade associations Other

35 CC2.3a

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

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Carbon tax	Support with minor exceptions	MTN engages on this matter through the National Business Institute (NBI) and Business Unity South Africa (BUSA) research processes and engagement opportunities.	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 in careful consultation with stakeholders and based on the best available information.
	Support		

37 CC2.3b

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

Yes

39 CC2.3c

40 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	GSMA's Mobile's second Green Manifesto (2012) outlines the positive impact of the operator initiatives in energy and carbon management. An update on the 2009 report, it highlights the initial results from the GSMA's Mobile Energy Efficiency (MEE) initiative as well as progress around mobile's enabling role. Highlights from the report include that ICT has the potential to enable much greater emissions savings of at least 900 million tonnes CO2e in 2020 which is 1.7% of the global 2020 GHG emissions forecast by the International Energy Agency in its "business-as-usual" scenario and five times the mobile industry's emissions. Analysis of 34 mobile networks worldwide shows total network energy consumption increased only slightly from 2009 to 2010, despite considerable growth in mobile connections and traffic. Total energy per unit traffic declined by approximately 20 per cent and energy per connection declined by five per cent, from 2009 to 2010. Currently 26 million	Sifiso Dabengwa, MTN's Group President and CEO, is on the 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?
		mobile M2M connections worldwide are enabling greenhouse gas emission savings estimated to be about three million tonnes of CO2e annually.	

41 CC2.3g

42 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 member they 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. 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

43 CC2.3h

44 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.

45 Further Information

With regards to climate change risk assessment, MTN undertook a review of the 2013 World Economic Forum (WEF)'s Global Risk Assessment and compared this to MTNidentified trends (risks and opportunities) and the ability of the organisation to manage these risks and opportunities. The assessment of the Group's Principle Risk 21 (Potential threats to continuity of operations as a result of political, environmental and macro-economic events), shows that there is some gap in terms of how MTN generally describes and manages climate-related risks. Furthermore climate change risks, especially at the asset level, are not well embedded in the risk registry. This has led to a new plan to be implemented in 2014. Group BRM has tasked all country operations to assess sustainability risks for the period 2014-2015 more extensively. Guidelines for reporting risks and mitigation actions taken are being developed.

46	Page: CC3. Targets and Initiatives
47 48 No	CC3.1 Did you have an emissions reduction target that was active (ongoing or reached completion) in the reporting year?
49	CC3.1e

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

The executive committee elected not to set a direct baseline for GHG emissions independently of MTN's broader focus of reducing network costs and improving energy efficiency. (Network energy use contributes upwards of 90% of MTN's GHG profile on a country-by-country basis, and is the largest energy cost component for the company). MTN has found the cost-driver to be a more appropriate internal lever to addressing this issue, ensuring true sustainability-business integration by working with and enhancing existing KPIs wherever possible. This approach works well on MTN's internal understanding of the issue of GHG emissions and is helping drive operational work towards reductions.

MTN has been undertaking an annual carbon disclosure project assessment for the past five years. This process has highlighted the importance of investing in engineering and design efficiencies in order to reduce energy costs and actual consumption, and to positively impact the company's GHG emissions' profile. MTN is confident that using 'actual consumption' and 'cost' targets will have the appropriate positive correlation on its emissions' reductions. MTN is currently undertaking interim reporting to test the impact of its efforts. While our 2013 reported actual increased (due to reasons explained in the emissions section of this response), the company is focused on ensuring a relative reduction in emissions due to its implementation efforts. These include solutions such as free cooling, improved radio and data centre equipment efficiency, equipment swap-out and upgrades, increased use of deep cycle batteries, hybrid diesel generator and battery solutions, infrastructure consolidation, virtualisation, and investment in alternative energy sources such as solar, and to a lesser degree wind, hydro, waste heat and waste-to-energy power solutions. More information is found in the eco-responsibility and case studies' sections of MTN's website, and in its CDP report.

Future emissions are likely to increase over the next five years but the relative contribution to those emissions is uncertain and likely to change, For example, the Group is in the process of selling some of its network tower infrastructure in some of the countries in which it operates. In these cases Scope 1 and 2 emissions will decrease while Scope 3 emissions increase. An overall approach to reducing energy consumption is also resulting in some absolute reduction in Scope 1 and 2 emissions. The total quantitative impact of these two activities has not been determined.

51 CC3.2

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

Yes

53 CC3.2a

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

MTN is aware that ICT products already do, and increasingly will, contribute to reducing third party emissions. ICT has significant potential to transform markets, particularly emerging markets where the technology can allow countries to leapfrog to desired development paths. MTN's products can contribute to enabling development that does not rely as much on traditional, fossil-fuel-based pathways. This is important in the types of countries where MTN operates, as these are some of the most economically-marginalised and environmentally-vulnerable in the world. Some of these countries may prioritise development over mitigation but, in many instances have large fossil fuel and mineral reserves, which with rapidly growing economies, could lead to significant GHG emissions in the future. Developing in a way that avoids these potential emissions is therefore important in the global fight against climate change while also ensuring these emerging economies are to remain competitive in an increasingly carbon constrained global economy.

The SMARTer 2020 study considered how ICT can play in GHG abatement by considering recent trends, incorporating updated data, and looking a broader use of ICT in other industries. Through technologies and products such as cloud computing, smart mobile devices, remote services / systems and access to information without requiring significant investments in infrastructure, ICT can reduce the need for travel; improve labour productivity (increasing the economic output per unit of GHG emitted); enable a more dynamic power market facilitating decentralised renewable energy integration into the power supply; provide information to more efficiently use fuels, products and processes that emit GHGs (for example in the application of fertilizers in agriculture); support smart design systems that improve energy efficiency in buildings and manufacturing applications, for example; and enable customers to access services more efficiently.

The study found that ICT-enabled solutions offer the potential to reduce annual emissions by an estimated 9.1 GtCO2e by 2020, representing 16.5 % of the projected total in that year, an abatement potential more than 16% higher than previously calculated in the SMART 2020 report. It also found a potential yield of USD 1.9 trillion in savings for consumers and businesses, and 29.5 million jobs globally.

MTN is aware the ICT solutions such as Cloud Computing, SMART and Machine-2-Machine devices enable dematerialisation, virtualisation, consolidation, efficiency and other benefits and is an important part of the Company's strategy. MTN Cloud services are aimed at satisfying the growing appetite of businesses for ICT solutions that are relevant, customised and affordable, and that centralise access to services to ease the administrative burden on businesses and provide a more energy and materials efficient solution that reduces emissions. By 2017, the Middle East and Africa are expected to have the highest cloud traffic growth at 57%. To date,

could computing services have been rolled out in eight MTN countries of operation. MTN is continuously developing its M2M offering, and recently implemented its first smart metering for utility service for the City of Johannesburg. This complements MTN's fleet monitoring and mobility solution which helps freight and transport companies achieve scope 1 and scope 3 greenhouse gas emissions (and cost) reductions, the smart electricity metering solution eliminates human errors, improves data quality and security, and helps monitor tampering of energy generation or use operations, MTN's Air Quality Reader, which is fully compliant with local air quality legislation, captures ambient air quality readings 24 hours a day, within a 50km radius, and MTN Water Monitoring to monitors business' water usage, leakage and wastage.

Avoided emissions from the deployment of these solutions by MTN's customers is not calculated by MTN. Indications from studies (associated with GeSI) and in the SMARTer 2020 report indicate that the avoided emissions from ICT products such as ours are significant. GeSI has an Assessment Methodology using Defra emission conversion factors. MTN is not currently considering generating CERs or ERUs associated with avoided emissions.

55 CC3.3

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

Yes

57 CC3.3a

58 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	1	
To be implemented*	13	24354260.00
Implementation commenced*	5	5728.00
Implemented*	13	43472.00
Not to be implemented	1	10.00

59 60

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)	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, years	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, network modernisation and capacity upgrade, and energy cost and utilisation reduction: energy-efficient battery banks and cabinets with free cooling, energy usage sub- metering, free cooling, outdoor site installation, power factor correction, pico cells, remote radio units, hybrid diesel-deep cycle batteries to reduce diesel use, lithium bromide and sodium metal chloride batteries, weather monitors, standby power. This will reduce Scope 1 and 2 emissions and is undertaken on a voluntary basis. Specific examples include the installation of heat exchange fans and more efficient air conditioning systems were installed at two pilot projects in Cyprus and investment in battery cabinets with active cooling, sodium metal chloride batteries and free cooling in BTS sites in South Africa	54587			1-3 years	All initiatives are intended to extend MTN's service delivery, capacity and sustainability, and are therefore intended for a period of at a minimum 3 years, or longer	The investment required is included in CAPEX and other initiatives: not available separately for this report

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	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, years	Comment
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 modernisation and capacity upgrade, and energy cost and utilisation reduction: energy-efficient data centre products and physical architecture, chillers, power factor correction, heat-wheel exchangers, energy-efficient lighting/ smart lighting, HVAC optimisation, waste heat capture, LEED certification. This will reduce Scope 1 and 2 emissions and is undertaken on a voluntary basis. Specific examples include the installation of 35 generators and accumulator systems (batteries) working alternatively in Guinea Bissau and a high capacity energy solution in Nigeria.				1-3 years	All initiatives are intended to extend MTN's service delivery, capacity and sustainability, and are therefore intended for a period of at a minimum 3 years, or longer	Savings are included in the 54 587tCO2e reported earlier. The investment required is included in CAPEX and other initiatives: not available separately for this report
Low carbon energy installation	Alternative energy investments in MTN Group networks include 139 solar (and some wind) hybrid network sites have been implemented. There are also a few wind- powered hybrid network sites, and natural gas is used at a few large test/ switch/ data centre facilities. This will reduce Scope 1 and 2 emissions and is undertaken on a voluntary basis. Specific examples include investments in solar powered BTS systems at 83 in Cameroon and an additional 2 sites in Zambia.				1-3 years	All initiatives are intended to extend MTN's service delivery, capacity and sustainability, and are therefore intended for a period of at a minimum 3 years, or longer	Savings are included in the 54 587tCO2e reported earlier. The investment required is included in CAPEX and other initiatives: not available separately for this report

61 CC3.3c

62 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.
Other	As part of the Group's Climate Management strategy to be 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 operations' specific operating conditions.

63 Further Information

64 Page: CC4. Communication

65 CC4.1

66 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	Page/Section reference	Attach the document
In mainstream financial reports (complete)	See pages 5, 13, 72, 76	https://www.cdp.net/sites/2014/46/12546/Investor CDP 2014/Shared Documents/Attachments/CC4.1/MTN ar_integrated_report_2013.pdf
In voluntary communications (complete)	Group President and CEO statement (P1), Eco-Responsibility (P14), Annual Sustainability Value-Add Statement (P23), Assurance Statement (P45), UN GRI Report (P27), UN Global Compact Communication of Progress. www.mtn.com/sustainability	https://www.cdp.net/sites/2014/46/12546/Investor CDP 2014/Shared Documents/Attachments/CC4.1/MTN_Group_Sustainabilty_Report_2013.pdf

67 Further Information

68 Module: Risks and Opportunities

69 Page: CC5. Climate Change Risks

70 CC5.1

71 Have you identified any 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

72 CC5.1a

73 Please describe your risks 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; however MTN Cyprus and MTN Zambia also report increasing legislative 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. The detailed application of this tax to industries, sectors, company activities and scopes of	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/t CO2e), which would result in a potential liability of between R0.5m and R1.0m. Some of this could potentially be offset (but the mechanisms around offsets are still to be determined in line with existing and evolving tax regimes (penalties and incentives) in this respect.	MTN is reducing the impact of a potential Carbon Tax by optimizing 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 where MTN operates. MTN South Africa invested in a heat wheel, and had ongoing efforts to reduce energy associated with energy storage at their BTS sites through investment in battery cabinets with active cooling, sodium metal chloride batteries and free cooling in BTS sites and temperatures	MTN invested R22million in the tri-gen project. Recent efforts (including the tri- gen investment) have resulted in annual emission reductions of 46 207tCO2e. The cost of other investments have not been quantified

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	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.							setting adjustment. Solar, wind and fuel cell energy is used at 28 off-grid sites in South Africa and tri-generation power is used at the head office. This risk is managed by country Networks, Technology and Facilities planning departments. 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 and MTN Zambia are also monitoring national developments, and continue to invest extensively in improving efficiency of energy use to position these operations to mitigate this risk	
Cap and trade schemes	Uncertainty in the international carbon market is regarded as a regulatory climate change risk to MTN. This relates specifically to the price of carbon credits generated through the CDMIn 2011 MTN South Africa	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. Without a	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	sold 15,284 of CERs from its first tri- generation plant to an EU-based company, but given the current status of international pricing, and the value of MTN's saved or avoided emissions toin terms of mitigating our carbon taxes liability or leveraging other national tax benefits.							clear and definable risk at this stage, MTN Group focuses on efforts to reduce emissions where possible (as described in CC3.3)	
Fuel/energy taxes and regulations	Rising energy costs are a material concern. The risks MTN experiences include 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. Nigeria, fuel subsidies were removed in 2011, 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	Increased operational cost	1 to 3 years	Direct	Virtually certain	Medium	The Group has not quantified the financial impact of this, due to the significant variances in this risk element across its 22 countries of operation. However, an overall Group and detailed country cost reduction target has been set, and energy cost reduction is a key element of this target.	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 2013, the Group invested R 30 164m (await annual report Friday 7 March) in CAPEX alone, and similarly has been extensively investing in infrastructure CAPEX programmes since 2009

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Company's overall cost- efficiency drive.								
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 Emission Reduction Outcomes (DEROs) that could impact our ability to do business). Mandatory reporting of emissions data is expected 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 with related additional costs for reporting and verification while non- compliance could be met with penalties.	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 MTN sustainability manager engages with policy makers and business sector organisations to ensure MTN South Africa is aware of the latest requirements. •MTN has been reporting on GHG emissions and activities to mitigate emissions since 2010•MTN continues to respond publicly to the CDP request for information, on an annual basis.•MTN continues monitor and improve sustainability processes. •Continued monitoring and improving of Sustainable Development processes;	Uncertain

74 75

CC5.1b Please describe your 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 during storms. The risk and associated financial costs will be greater for BTS sites, switches and data centres than for other infrastructure.	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 impact on MTN.	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. These actions do not necessarily give rise to significant costs if done in the planning stages. MTN is currently in the early phase of managing climate change across the group. The next phase in this process will involve creating databases of all infrastructure and associated geographical positions in all operations. MTN then intends to understand how a changing climate will impact its most material assets, and apply a	Costs associated with creating a database of infrastructure have yet to be fully realised as the process is still in its 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
								quantitative analysis to this. This process is expected to span the medium term/ multiple reporting processes.	
Change in precipitation extremes and droughts	All MTN countries of operation are included in this section. The risk is an increased risk of precipitation and/or flooding. The risk and associated financial costs will be greater for BTS sites than for other infrastructure. The rainy season in certain areas threatens the 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 precipitation reduces accessibility to sites requiring diesel and infrastructure maintenance. Specific examples include extensive flooding that affected MTN Nigeria's	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 financial impact on MTN.	Operating equipment, such as generators, have been raised above the flood level in some MTN countries/ regions most at risk. In addition, future site planning has adopted the lessons learned about defending against floods.	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
	operations in FY12. FY13 is expected to have more flooding based on the findings reported in the annual flood outlook the Nigeria Hydrological Services Agency (NIHSA). The Swaziland operating unit reported the need to refit the transmission units for the BTS sites if rainfall rates increase								
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. By 2100, temperature	Increased operational cost	>6 years	Direct	More likely than not	Low- medium			

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	would have risen by 5 degrees Celsius, adding increased cost to management of BTS sites. The increased costs are particularly around increasing energy costs for cooling.								
Other physical climate drivers	Increased precipitation, storms and flooding may affect the power supply. Power outages and subsequent revenue losses would result. Countries such as Swaziland, Zambia are predicted to be affected	Reduction/disruption in production capacity		Direct	More likely than not	Medium- high	Uncertain	Hybrid power systems are being rolled out at various locations. Solar power trials are being conducted as well (at OPEX sites). These power systems will mitigate unstable power supply at network sites. In Zambia 111+ systems have been installed.	

76 77

CC5.1c Please describe your 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	Reduced stock price (market valuation)	Unknown	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	MTN have retained their listing on the JSE's SRI index and is committed to understanding and reporting on its sustainability performance and GHG emissions and responding to the CDP survey annually. To date,	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
	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 responsible manner could impact MTN's score on for the Environmental component of JSE Socially Responsible Index (SRI) assessment.						expectations for a leading and diverse company; creating a negative impression with stakeholders and investors.	MTN has participated in and met the requirements of the JSE SRI for the past 09 years. In order to manage overall sustainability performance MTN regularly engages with stakeholders and produces an annual integrated sustainability report.	

78 Further Information

79 Page: CC6. Climate Change Opportunities

80 CC6.1

81 Have you identified any 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

82 CC6.1a

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 the continent of Africa, a number of which are in the LDC zones. The most recent COP (COP19) indicated that carbon credits from LDC countries will still be very much 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 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) Executive Board. The	Reduced capital costs	Unknown	Direct	Virtually certain	Medium	CDM projects generated 15,292 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 (still to be updated). Other cost reductions associated with international regulations are likely to accrue in the future	The annual carbon footprint will enable MTN to plot the consumption patterns of various sites (including the tri- generation facility) and will enable MTN to identify savings made in terms of carbon emissions and cost. This will in turn identify the effectiveness of projects that fall under the scope of CDM or related mechanisms. MTN Group undertakes to make decisions that reduce energy consumption and lower emissions as well as costs. CDM opportunities fall within the scope of quantifiable opportunities that MTN can take advantage of and these will be	The cost of the TriGen facility was R22 million.

83 Please describe your 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
	success of this project has led to further investigations of the potential for similarly powered switch centres in South Africa. MTN is considering ways of benefiting from similar opportunities in other non-Annex 1 countries.							identified in the climate change strategy.	
Other regulatory drivers	There are a number of tax incentives, research and development incentives and government grants in the area of energy and climate change which MTN could take advantage of. These are mainly in South Africa, but the Group will review if similar regulatory incentives are available in other markets, South African incentives being explored by MTN include Income Tax Act: - Section 12.k: Carbon credits generated by Clean Development Mechanism projects will be exempt from normal tax Section 12.I: An income tax	Increase in capital availability	Up to 1 year	Direct	About as likely as not	Low	MTN is currently saving in excess of 46 486 174Kwh 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 result in a potential saving for MTN annually, excluding the cost required for measurement and verification.	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 be substantial; however, MTN has not carried out a full investigation into the full costs of this type of project.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	allowance is available for energy efficiency savings Section II.D: Research and Development grants of 150% of expenditure incurred are available for work on clean technology. In addition, because MTN South Africa earns carbon credits from the CDM project there is the potential for tax related savings. MTN is also considering participation in the Private Sector Energy Efficiency (PSEE) programme for large corporates							verification is worth the savings that will be achieved through Section 12L of the Income Tax Act.	
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 grids, smart transport, smart logistics etc.) or 'smart working' (working	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 has continued to focus on the development and marketing of cloud computing, M2M and other products that reduce or avoid emissions on behalf of our customers. MTN already offers fleet management, water and air quality	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
	remotely).							management M2M solutions which also enable energy efficiency and environmental monitoring in other sectors, and recently implemented the first Smart Utility Metering product for the City of Johannesburg	
		Other:							

84 CC6.1b

85 Please describe the 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
Change in mean (average) temperature	Changes in mean temperature puts extra pressure on the Group's cooling requirements and associated energy costs. This has catalysed the investment in new technologies that allow MTN the opportunity to save money and reduce GHG emissions associated with increasing energy for cooling costs. These technologies / innovations include and investment in free cooling and outdoor site installation (in particular).	Reduced operational costs	Up to 1 year	Direct	More likely than not	Low	The overall BTS energy reduction programme being implemented widely across thousands of sites relies on a combination of solutions, and the financial implications of the use of free cooling alone	As part of the energy efficiency and carbon management program opportunity identification for low cost / not cost and scalable opportunities such as free air cooling programme are identified and taken through the pre-feasibility, feasibility and	By identifying and implementing the necessary refits, modernisation, upgrades and swap-outs, network equipment and improving cooling efficiency we estimate savings of up to 40% of the BTS

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							cannot be isolated.	implementation process for projects. Other efforts to reduce energy use (with direct and indirect impacts on the risk of increased temperatures) include MTN's strategy is to implement to provide providing energy-efficient battery banks and cabinets with free cooling, energy usage sub- metering, power factor correction, pico cells, remote radio units, hybrid diesel-deep cycle batteries to reduce diesel use, lithium bromide and sodium metal chloride batteries and weather monitors	energy consumption is achievable
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 information	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 ast	MTN sees this as a potential opportunity but one that has not yet materialised. As such we have not developed a strategy with regard to specific	None

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	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 is a priority, particularly for African countries- for example at the Climate and Development Africa conference in Ethiopia ain 2013- the need for early warning systems was identified as a key priority for the continent. This offers opportunities to sell new products to a growing market.						this stage and has therefore not estimated financial implications	products that support resilience in the face of climate change but we are actively innovating and developing new products based on customer needs and will monitor the potential demand for such products going forward.	

CC6.1c Please describe the 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	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 in 12 of our markets. MTN has invested over US\$230 million since 2008.	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
	societies. For example, In 2009, the World Bank found that every 10% broadband penetration in low- and middle- income countries accelerates economic growth by 1,38%. As a result there will be increased growth of broadband users throughout Africa, Middle East and Southern Europe (extending to some parts of Asia) including all socio-economic levels. This will increase the potential market of broadband users as MTN meets the expansion of broadband with affordable smartphones and relevant technologies, e.g. solar-charging for handsets, such as those offered by MTN in Ghana, Uganda and Rwanda								
Other drivers	Electronic and electrical waste (e-waste) results in significant amounts of wasted materials if not re-used or recycled. Reuse of materials reduces the energy input to make future products reducing the	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	R4.6million

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	overall energy intensities of electronic life cycles.							to e-waste for recycling to small and medium e- waste handlers in the country. In 2013 half a ton of e-waste was handed over to three handlers in Johannesburg.	

88 Further Information

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

- 90 Page: CC7. Emissions Methodology
- 91 CC7.1
- 92 Please provide your base year and base year emissions (Scopes 1 and 2)

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

93 CC7.2

94 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

95 CC7.2a

96 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

97 CC7.3

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

Gas	Reference
CH4	IPCC Fourth Assessment Report (AR4 - 50 year)
N2O	IPCC Fourth Assessment Report (AR4 - 50 year)
CO2	IPCC Fourth Assessment Report (AR4 - 50 year)
HFCs	IPCC Fourth Assessment Report (AR4 - 50 year)
PFCs	IPCC Fourth Assessment Report (AR4 - 50 year)
Other: R502	Other: GHG Protocol
Other: R22	Other: GHG Protocol
Other: Fire suppression equipment	Other: Business commentary

99 CC7.4

100 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	
Motor gasoline	0.033	Other: kg CH4/GJ	
Motor gasoline	0.003	Other: kg N2O/GJ	
Diesel/Gas oil	20.20	Other: kg C/GJ	
Diesel/Gas oil	0.003	Other: Tonnes CH4/GJ	
Diesel/Gas oil	0.00006	Other: Tonnes N2O /GJ	
Diesel/Gas oil	43.00	Other: MJ/kg	
Liquefied petroleum gas (LPG)	47.30	Other: MJ/kg	
Liquefied petroleum gas (LPG)	17.20	Other: C/GJ	
Liquefied petroleum gas (LPG)	0.001	Other: kg N2O/GJ	
Liquefied petroleum gas (LPG)	0.0001	Other: kg N2O/GJ	
Natural gas	48.00	Other: MJ/kg	
Natural gas	15.30	Other: C/GJ	
Natural gas	0.001	Other: kg CH4/GJ	
Natural gas	0.0001	Other: kg N2O/GJ	

101 Further Information

102 Page: CC8. Emissions Data - (1 Jan 2013 - 31 Dec 2013)

103 CC8.1

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

Financial control

105 CC	8.2
--------	-----

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

769471

107	CC8.3
107	- CC0.3

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

636184

109 CC8.4

110 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

111 CC8.4a

112 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, MTN Benin; MTN Dubai Head Office, MTN South Sudan	Emissions are relevant but not yet calculated	Emissions are relevant but not yet calculated	• 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)• MTN Benin (to be included in 2014)

113 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 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
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 OpCos report each year. Overall the uncertainty has decreased compared to 2012. Nigeria (the group's biggest energy consumer) has been through a more rigorous process and has, for the first time, undergone external auditing	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 OpCos report each year. Overall the uncertainty has decreased compared to 2012. Nigeria (the group's biggest energy consumer) has been through a more rigorous process and has, for the first time, undergone external auditing.

115 CC8.6

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

Third party verification or assurance complete

117 CC8.6a

118 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 assurance	https://www.cdp.net/sites/2014/46/12546/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/MTN_Group_Sustainabilty_Report_2013.pdf	The assurance statement can be located on page 44 of our MTN Group Sustainability Report	ASAE3000	64

119 CC8.7

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

Third party verification or assurance complete

121 CC8.7a

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

Type of verificat ion or assuran ce	Attach the statement	Page/Section reference	Relev ant stand ard	Proport ion of Scope 2 emissio ns verified (%)
Limited assuran ce	https://www.cdp.net/sites/2014/46/12546/Investor CDP 2014/Shared Documents/Attachments/CC8.7a/MTN_Group_Sustainab ilty_Report_2013.pdf	The assurance statement can be located as a downloadable document at this link https://www.mtn.com/Sustainability/PerformanceHighlight/Pages/FullView_PH_Ann ualSustainableStatement.aspx		7

123 CC8.8

Please identify if any data points other than emissions figures have been verified as part of the third party verification work undertaken

Additional data points verified	Comment
Other:	The following selected sustainable development information in the Reports was selected for an expression of limited assurance: a) Quality of service in MTN South Africa, Nigeria and Ghana Operating Companies (OPCOs), measured by: • call setup success rate - % • dropped call rate - % • network availability - % b) MTN Group Risk Fraud Management Framework (FRM) implementation - number of Operating Companies (OPCOs) that have implemented the proactive and reactive reporting requirements of MTN Group Limited in their audit committee packs during the course of the 2013 reporting period c) MTN Group whistle-blower hotline data - number of incidents reported d) MTN Group Employee culture survey result - overall performance, % e) MTN Group Foundation spend (ZAR) f) Energy spend (ZAR) in MTN Nigeria g) Energy use (kWh for electricity and KL for diesel) in MTN Nigeria h) Carbon emissions – scope 1 and 2 (tCO2e) in MTN Nigeria

124 CC8.9

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

No

126 Further Information

127 Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2013 - 31 Dec 2013)

128 CC9.1

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

Yes

130 CC9.1a

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

Country/Region	Scope 1 metric tonnes CO2e
Afghanistan	56948
Cameroon	6197
Congo, Republic of the	17916
Cote d Ivoire	2557
Cyprus	1936
Ghana	15874
Guinea-Bissau	7844
Guinea	27652
Iran, Islamic Republic of	5303
Liberia	12583
Kenya	157
Sudan	25081
Nigeria	492271
Rwanda	11010
South Africa	21386
Swaziland	569
Uganda	7836
Yemen	45356
Zambia	10995

132 CC9.2

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

By activity

134 CC9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
Mobile combustion	39647
Stationary combustion (diesel)	671836
Stationary combustion (LPG)	175
Stationary combustion (natural gas)	11069
Refrigerant use	46744
Fugitive emissions	1

136 Further Information

137 Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2013 - 31 Dec 2013)

138 CC10.1

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

Yes

140 CC10.1a

141 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 CC8.3 (MWh)
Afghanistan	12182	16330	
Cameroon	2563	11892	
Congo, Republic of the	0		
Cote d Ivoire	2505	5732	
Cyprus	6870	9386	
Ghana	6488	15560	
Guinea-Bissau	0	0	
Guinea	772	1466	
Iran, Islamic Republic of	113618	192833	
Liberia	51	97	
Kenya	189	639	

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 CC8.3 (MWh)
Namibia	26	111	
Nigeria	46115	106502	
Rwanda	7262	13429	
South Africa	405213	407659	30771
Sudan	3461	16967	
Swaziland	2973	8744	
Uganda	11284	19943	
Yemen	14541	22972	
Zambia	70	23305	

142 CC10.2

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

By facility

144 CC10.2b

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

Facility	Scope 2 emissions (metric tonnes CO2e)
BTS sites	602285
Offices (Head, Regional & Technical) & warehouses	183286
Data, Call and Service Centres	47433
Switches	47081

146 Further Information

147 Page: CC11. Energy

148 CC11.1

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

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

150 CC11.2

151 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	2633615.00
Electricity	873567.00
Heat	0.00
Steam	0.00
Cooling	0.00

152 CC11.3

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

Fuels	MWh
Diesel/Gas oil	2557747
Motor gasoline	75868
Natural gas	

154 CC11.4

155 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

156 Further Information

157 Page: CC12. Emissions Performance

158 CC12.1

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

Increased

160 CC12.1a

161 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	5.26	Decrease	Combined emission reduction initiatives resulted in a saving of 54 587 tCO2e, equivalent to 5.26% of MTN's 2013 combined Scope 1 and 2 emissions
Divestment	0.00	No change	
Acquisitions	0.00		
Mergers	0.00	No change	
Change in output	0.00	No change	
Change in methodology	0.00	No change	
Change in boundary	0.00	No change	
Change in physical operating conditions	0.00	No change	
Unidentified	0.00	No change	
Other	40.00	Increase	The inclusion of data from an additional 11 operations including MTN Enterprise services in South Africa, Namibia and Kenya; The inclusion for the first time of data from MTN Enterprise services in South Africa, Namibia and Kenya.

162 CC12.2

163 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
0.00001	metric tonnes CO2e	unit total revenue	27	Increase	Both emissions (42% increase) and revenue (12% increase) increased but emissions increased relatively more. This is due in part to the increased scope of reporting (including additional MTN operating countries) and improved data collection. This figure would have been higher were it not for the emission reduction activities successfully implemented across the group

164 CC12.3

165 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
57.55	metric tonnes CO2e	FTE employee	35	Increase	Emissions increased. This is due in part to the increased scope of reporting (including additional MTN operating countries) and improved data collection. This figure would have been higher were it not for the emission reduction activities successfully implemented across the group

166 CC12.4

167 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
0.0067	metric tonnes CO2e	Other: subscriber	30	Increase	Both emissions (42% increase) and subscribers (10% increase) increased but emissions increased relatively more. This is due in part to the increased scope of reporting (including additional MTN operating countries) and improved data collection. This figure would have been higher were it not for the emission reduction activities successfully implemented across the group

168 Further Information

169 Page: CC13. Emissions Trading

170 CC13.1

171 Do you participate in any emissions trading schemes?

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

- 172 CC13.2
- 173 Has your organization originated any project-based carbon credits or purchased any within the reporting period?

No

174 Further Information

175 Page: CC14. Scope 3 Emissions

176 177

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 primary data	Explanation
Purchased goods and services	Relevant, calculated	104582.00	Following the sale of MTN's towers in Cameroon, Ivory Coast, Ghana and Rwanda, 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 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 towers in Cameroon, Ivory, Coast, Ghana and Rwanda. Operators in these countries were required to provide data in the same way as MTN OpCos: 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.	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)
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-	Relevant, not				

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using primary data	Explanation
related activities (not included in Scope 1 or 2)	yet calculated				
Upstream transportation and distribution	Relevant, not yet calculated				
Waste generated in operations	Relevant, not yet calculated				
Business travel	Relevant, calculated	10658.00	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). DEFRA default factors were used for all vehicle hire and taxi hire emission factors (0.202 kg CO2/km). It was assumed that standard sedan vehicles were used on all hiring occasions.	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				
Use of sold products	Relevant, not yet calculated				
End of life treatment of sold	Relevant, not yet calculated				

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using primary data	Explanation
products					
Downstream leased assets	Relevant, not yet calculated				
Franchises	Relevant, not yet calculated				
Investments	Relevant, not yet calculated				
Other (upstream)					
Other (downstream)					

178 CC14.2

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

No third party verification or assurance

180 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

181 CC14.3a

182 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 goods & services	Divestment		Increase	Emissions value (percentage) not provided as this source was not reported in 2012. Following the sale of MTN's towers in Cameroon, Ivory Coast, Ghana and Rwanda, 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.
Business travel	Acquisitions	130	Increase	The inclusion of data from 11 additional operations including MTN Enterprise services in South Africa,

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
				Namibia and Kenya

183 CC14.4

184 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

185 CC14.4a

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

Following the sale of MTN's towers in Cameroon, Ivory Coast, Ghana and Rwanda, 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.

We engage directly with these suppliers, requiring them to provide information (using the same climate change data request forms as our OpCos). 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.

187 CC14.4b

188 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
4		Exact spend data is not available

189 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	We will share our experience and expertise gained from successful emission reduction activities in our other OpCos. We will also monitor the

data	Please give details
prioritize for reduction data and actions order to	d information on climate change management as part of the integrated risk management process that we are currently developing, in ensure that these material emissions do not pose material risks to the Group.

190 Further Information

191 Module: Sign Off

192 Page: CC15. Sign Off

193 CC15.1

194 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

195 Further Information

196 Module: ICT

	197	Page:	ICT1.	Data	center	activitie
--	-----	-------	-------	------	--------	-----------

198 ICT0.1a

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

Yes

200 ICT1.1

201 Please provide a description of the parts of your business that fall under "data centers"

The Scope of emissions is less than 3% of total scope, 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

202 ICT1.2

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

Business	Scope 1 emissions (metric tonnes	Scope 2 emissions (metric tonnes	Annual electricity consumption	Electricity data collection
activity	CO2e)	CO2e)	(MWh)	method
Data centers		16069	35517.32	

204 ICT1.3

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

Percentage	Comment
	Unavailable

206 ICT1.4

207 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)

208 ICT1.5

209 Please provide details of how you have calculated your PUE value

210 ICT1.6

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

212 ICT1.7

213 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

214 ICT1.8

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

Yes

216 ICT1.8a

217 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)	

218 ICT1.9

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

No

220 ICT1.10

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

Yes

- 222 ICT1.10a
- 223 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.

224 ICT1.11

225 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

226 Further Information

227 Page: ICT2. Provision of network/connectivity services

228 ICT0.1b

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

Yes

230 ICT2.1

231 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.

232 ICT2.2

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

234 ICT2.3

235 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

236 ICT2.4

- 237 Please explain how you calculated the intensity figures given in response to Question ICT2.3
- 238 ICT2.5
- 239 Do you provide carbon emissions data to your clients regarding the network/connectivity services they procure?
- No

240 Further Information

241 Page: ICT3. Manufacture or assembly of hardware/components

242 ICT0.1c

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

No

244 Further Information

245 Page: ICT4. Manufacture of software

246 ICT0.1d

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

248	Further Information
240	Page: ICTE Rusiness services (office based activities)
249	rage. ICTS. Business services (office based activities)
250	ICT0.1e
251	Please identify whether "business services (office based activities)" comprise a significant component of your business within your reporting boundary
No	
252	Further Information

Page: ICT6. Other activities ICT0.1f Please identify whether "other activities" comprise a significant component of your business within your reporting boundary

No

No

256 Further Information

CDP