Module: Introduction

Page: Introduction

0.1

Introduction
Please give a general description and introduction to your organization

Launched in 1994, the MTN Group is a multinational telecommunications group, operating in 21 countries in Africa and the Middle East and offering cellular network and fixed line access, as well as business solutions. 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). MTN recorded more than 141.6 million subscribers across its operations by 31 December 2010. The Group operates in Afghanistan, Benin, Botswana, Cameroon, Cote d'Ivoire, Congo Brazzaville, Cyprus, Ghana, Guinea Bissau, Guinea Conakry, Iran, Liberia, Nigeria, Rwanda, South Africa, Swaziland, Sudan, Syria, Uganda, Yemen and Zambia.

0.2

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
Fri 01 Jan 2010 - Fri 31 Dec 2010

0.3

Country list configuration

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
South Africa
Cameroon
Ghana
Iran, Islamic Republic of
Nigeria
Swaziland
Syrian Arab Republic
Uganda
Zambia

0.4

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)

0.5

Please select if you wish to complete a shorter information request

0.6

Modules
As part of the Investor CDP information request, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sectors and companies in the oil and gas industry 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 be marked as default options to your information request. If you want to query your classification, please email respond@cdproject.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.cdproject.net/en-US/Programmes/Pages/More-questionnaires.aspx.

Further Information

MTN accepts global evidence that human activities are a key contributor to climate change, and that it will impact both lives and economies The state of the environment is a material concern for us. Operating in developing countries, where some of the most vulnerable and indigent communities live, the importance of addressing environmental matters to the best of the Group's ability is self-evident. Environmental matters have a direct impact across the Group's footprint. However, we also know that those with social and economic vulnerability are also most vulnerable to environmental change and volatility. The measured and anticipated impacts of climate change on economies and livelihoods where we operate in Africa and the Middle East are potentially devastating. For MTN, environmental concerns are therefore also macro socio-economic concerns.
In addition, MTN acknowledges that there is significant evidence that climate change can result in physical risks such as extreme weather conditions (floods, hurricanes and cyclones), which will damage property and equipment and disrupt MTN's business services.
In line with above, MTN has undertaken the following: (a) Implemented a governance structure ultimately overseen by the Group Board, to ensure the Group is in a better position to realise its sustainability vision. (b) Appointed a Group Sustainability Manager, who is responsible for managing the Group's sustainability initiatives including climate change. (c) Subscribed to both Social Responsibility and Sustainability reporting requirements, and for the last six years has submitted annual reports, which have been made available to the public on MTN's corporate web site (www.mtn.com). (d) The Group has maintained its JSE SRI listing fo 2010, and the 2010 Group Sustainability Report and Integrated Report due for release in Quarter 2 of 2011 is both responsive to the requirements of the King III Code of Corporate Goverance, and is aligned to the reporting requirements of the Global Reporting Initiative. (e) Ensured that the Environmental Policy, which is approved by the Group President and the CEO of the MTN Group clearly indicates the business position to "use energy efficiently, re-use and recycle whenever possible, use environmentally preferred materials and work co-operatively with others to enhance common environmental objectives". The Group's Environmental Management

Policy is supported by an Environmental Management System (EMS), which extends to waste minimisation, prevention of pollution, and management of land, unique flora, forests, water and wildlife during planning, construction, operations and maintenance of its network and infrastructure.
MTN has examined its business and identified key environmental impacts and areas where it has the leverage necessary to have a significant positive impact. Given these criteria, it has focused on two areas:
• Developing an environmentally responsible network in response to greenhouse gases and climate change, and energy constraints, while responding to the business need for cost management and efficiency. Over 2010 it improved the scale and scope of its carbon footprint assessment in order to determine business opportunities, risks, and areas for efficiency improvements. It also accelerated investment in less carbon-intensive and renewable energy power sources for operations
• Exploring its role in managing the global challenge of electronic waste (e-waste). It has responded to this challenge by forming a bridge between the generators of e-waste (consumers) and organisations with capacity to facilitate responsible management and disposal. MTN has developed the scope and committed just under R 9 million in resources through a Pilot Partnership programme with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH for 3 years in South Africa starting 2011. MTN's intention is to ensure that in addition to reduced e-waste to landfill, consumer awareness and local green jobs' creation, that e- waste is processed locally as far as possible, thereby reducing carbon emissions associated with long-distance or international shipping of e-waste for processing. Success of the South African pilot, including lessons learnt, could see MTN rolling out the programme across its African and Middle Eastern footprint over a number of years.

Module: Management [Investor]

Page: 1. Governance

1.1

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

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

1.1a

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 Committee (overall sustainability). The Group President and CEO has delegated responsibility to the Group Business Risk Management Executive

MEMBERS: Mr. J van Rooyen (Non-Executive Chairman)
Mr. J N Njeke (Non-Executive)
Ms M L D Marole (Non-Executive)

Mr. J Strydom (Non-Executive)
Ms K P Kaylan (Non-Executive)

BY INVITATION:
Mr. N I Patel
Mr. R Wessels
Mr. A van Biljon
Ms Z Rehman
Mr. R S Dabengwa
Ms D Millar
Mr. S Fakie
Ms J Desai
Mr. Z Masiza

Ms. Z 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 through strategic forecasting and backcasting, Group Sustainability seeks to integrate material economic, environmental and social requirements, opportunities and risk management in core business strategic planning, implementation and performance management.

1.2

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

No

1.2a

Please complete the table

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

Further Information

The issue of climate change is increasingly receiving attention by MTN, and is now indicated in the top list opportunities and sustainability risks facing the Group. The Group completed its Phase 2 CO2 footprint calculation in April 2011. MTN has determined that this is the first step in developing a climate change strategy. Once a thorough analysis has been done of the carbon footprint (which will require subsequent phases), MTN will decide on the next course of action, which may also include incentives for the management of climate change in the future. Nevertheless, where possible activities are also fast-tracked in order to avoid the time lag caused by linear planning processes. For example while this report relates to the financial year 2010, ending December 2010, in early 2011 further progress was made that warrants mention in response to climate management leadership within MTN. The executive performance scorecard, and key balanced scorecard and key performance indicators now reflects the requirement to ensure that an energy consumption/ cost and greenhouse gas emissions baseline is set by the end of the 2011 financial year. A second KPI relates to the imperative to deploy improved engineering and design, and/ or alternative energy solutions based on draft targets to be determined during the 2011 strategic planning cycle. The KPIs impact the bonuses received by the executive. These requirements have been set for the Group Chief Technology and Information Officer, and the Group Human Resources Manager. Please also refer to MTN's efforts with respect to alternative energy sources already implemented by MTN later in this report.

Page: 2. Strategy

2.1

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

2.1a

Please provide further details (see guidance)

MTN bases its sustainable business approach on the Forum for the Future's Five Capitals' Model. This model is useful to MTN as it allows the company to view how its economic performance is subject to a reliance on natural, human and social capitals, and therefore helps it focus efforts, and maintain awareness of the macro-operating context. The continue to take a two-pronged approach to integrating sustainability in our business:
• Setting the platform or foundations for sustainable business performance (strategic planning, opportunities, innovation and risk, governance and management, internal education and capacity building, and performance management via reporting) ; and
• Focusing on no more than two to three areas of implementation, aligned to the Group's vision, using the rule of materiality and impact. The top two multi-year programmes are climate-change related (energy and greenhouse gases, and electronic waste).

Integrated Risk Management process: Group Business Risk Management is responsible for all risks in terms of the Group framework and methodology. Risks are continually identified and evaluated by Business Risk Managers located in each operation. Response strategies are developed based on the nature of the risk to the business. Risk reports are compiled and presented to the operating country CEO, who then submits these to the Operating Country's Audit and Risk Committee

(ARC), as well as the Vice President of the pertinent region (three VPs are responsible for the three regions comprising our 21 operating territories. The CEO of each operation also submits a consolidated report to the MTN Group EXCO and Group Risk and Compliance Committee. MTN recognises that there are both opportunities and risks associated with climate change, and as such conducted a qualitative assessment of potential risks. This was achieved through a brainstorming session with key MTN employees, which was led by external expert assistance.

During 2010, the Group undertook a sustainability risk and opportunity identification and assessment processes across operations from a 'bottom-up' perspective, sourced from key operations representative of the Group (by material economic contribution). Top opportunities and risks are detailed for action and results reported at the Group level. In early 2011 the Group followed an integrated risk assessment process as recommended in the King III Code. Group Investor Relations, Stakeholder Management, Company Secretarial, Human Resources, Business Risk Management, and Sustainability jointly assessed the top 20 risks faced by MTN, and ensured that appropriate material group-level environmental and social risks were also integrated and responses to risks formulated. This integrated risk assessment was reviewed and approved by the Group Executive and Group Board. A more detailed top-down assessment was also undertaken between Group Business Risk Management, and Group Sustainability. A quarterly risk management and review process is under discussion, including the extension and amendment of the new risk management system to account for sustainability risks (existing and new), and mitigation and management. The second detailed integrated risk report will be presented to the Group Risk Committee in the latter half of 2011. Currently the intended audience for the above mentioned process includes the MTN Group Risk and Compliance Committee, and by representation, to EXCO and the Group Board. The intention is to transparently communicate these risks and opportunities to a wider audience, and this process is facilitated as part of the annual Integrated and Group Sustainability reports.

Integrated Opportunity Management process: The power-balance between mobile operators and consumers is changing. impetus for innovation comes from our social and natural environment. There is increasing global awareness around society's environmental impact, particularly energy and water resources. There also remains the need to address the digital communications divide, and the opportunity to offer solutions such as access to finance, health, commercial and other services through mobile technology. The potential of global ICT and telecommunications to support social and environmental requirements is globally acknowledged by organisations such as the United Nations and the International Telecommunications Union. Innovation of a pillar of MTN's strategy and one of its five business values. MTN revamped its innovation programme through the creation of a dedicated innovation function under the offices of a Senior Vice President for Commercial and Innovation. However, MTN is very clear that innovation is not the sole responsibility of a single function: everyone is an agent of change. It has therefore started developing communication channels for all employees to share their ideas. A quick response and evaluation mechanism will be used to determine potential ideas that should be developed further. MTN has also started a process of identifying an innovation champion in every operation, and plans to use incentives to recognise and reward innovation. The implementation of the refreshed innovation approach includes developing partnerships including with 'non-traditional' competitors, manufacturers, academic institutions and strategic partners in both the ICT industry and beyond. MTN is also developing applications relevant to the needs of its markets. MTN is congniscant of the Global e-Sustainability Initiative's Smart 2020 report which indicates that opportunity for the ICT sector to fulfil a positive role with respect to de-carbonisation and smart solution provision, and has started to offer these solutions. Group Sustainability has started working more closely with the Group Innovation function (albeit that the process requires further rigour and structure as it matures), and product development areas such as MTN Business, to ensure environmental opportunities are taken into consideration in product planning and development. Examples of one of MTN's most recent solution is an air quality monitoring solution. Further opportunities are also addressed through the increased provision of broadband across the continent of Africa at lower cost and increased reliability, in order for such smart and data-driven solutions to be offered by both MTN and by the industrial and commercial sectors in all countries. Please refer to the pertinent sections later in this report for more detail in this respect, and further review the Group's 2010 Sustainability Report on www.mtn.com/sustainability

Is climate change integrated into your business strategy?

Yes

2.2a

Please describe the process and outcomes (see guidance)

We are embedding sustainability in our organisation by establishing links with core risks, networks and technology, and opportunities for innovation, realising efficiency and generating revenue. Our sustainability agenda encompasses environmental, social and governance issues that are of importance to stakeholders, and that have a potential or realised material impact MTN's economic position.
STRATEGIC PLANNING AND BUSINESS INTEGRATION: The Group Sustainability Plan detailed to the end of 2011 identifies the required strategic, governance, resource, project and performance management processes required to ensure alignment and integration to the group's strategy. The plan will be updated by quarter 3, 2011. The Group 2011 - 2015 Business Plan pack, distributed to operations in June 2010, also contained templates and supporting information on sustainability matters for consideration and inclusion in the strategic planning process.
CLIMATE CHANGE AND RISK: Through the process of conducting the carbon footprint, and through the high level discussion of climate risk, it is evident that there are definite elements of the Group business strategy which relate to climate change, and which will be individually listed and linked in the future (currently some climate change risks such as business continuity and broad environmental trends are already listed in the Group's risk universe under classifications other than environmental/ climate change). Listing these in a special environmental/ climate change category and expanding on the critical risks will help gather the necessary resources to address this in a more conscious manner internally. Similarly, the Group's planning processes through the annual Leadership Conference, strategy planning and budgetary processes will need to take this into account. MTN's sustainability imperative seeks to mainstream such practices into the business at both the strategic and operational level through strategic direction, technical input and collaboration with core and support business functions such as networks and technology, risk, etc.
CLIMATE CHANGE AND OPPORTUNITIES: See 6.1a and 6.1e for specific opportunity strategies or plans as appropriate.
TARGETS AND ACHIEVEMENTS: The Group currently reports its plans and achievements in detail internally through operational reports. Executive KPIs with respect to data centre energy efficiency, virtualisation of IT services, cloud computing, as well as targets for the increased use of energy efficiency solutions such as hybrid power and free cooling, amongst others, are in place. Although targets such as energy efficiency are set for projects, activities or operations, an overall Group target/s for the top variables of climate change within MTN's business will be determined following the completion of a relative baseline assessment in 2011. Externally achievements are reported in the MTN Integrated Report (formerly the MTN Annual Financial Report) and the supporting detailed MTN Sustainability Report. Please see www.mtn.com/sustainability/performance for a quantitative report of achievements and performance (also) with respect to environmental performance, and for upcoming commitments and targets. Targets and achievements will be reviewed and enhanced annually as performance management and reporting mature, and is expected to be accelerated as part of the development of the Group's Climate Change strategy starting 2011. Please also refer to the answer to question 1.2a with respect to targets and achievements.

2.2b

Please explain why not

2.3

Do you engage with policy makers to encourage further action on mitigation and/or adaptation?

Yes

2.3a

Please explain (i) the engagement process and (ii) actions you are advocating

MTN participated in the first climate change and business conference held in South Africa November 2009, arranged by the National Business Institute. MTN also understands that Business Unity South Africa (BUSA) are the mechanism by which business will interact with government on climate change issues. In 2010, MTN became among the first companies in our markets to sign the Cancun Communiqué on Climate Change declaration, affirming our commitment to addressing climate change.

MTN responded to the green paper on climate change that was released by the Department of Environment during the middle of 2010. MTN operations in all countries maintain both scheduled ongoing and ad hoc supportive engagements with environmental authorities and national ministries, and important stakeholder groups in their countries of operation on matters of national imperative. Examples of engagement, advisory and advocacy occur across all operations, and most recently include demonstrating and sharing with the Kenya Association of Manufacturer's Centre for Energy Efficiency and Conservation how a 2MW urban area offgrid (gas and waste heat capture and cooling) solution operates, in support of their plans to develop an energy efficiency accord for Kenya, conducting at a minimum one offgrid plant site tour, education and advisory on energy efficiency to local universities, high school students, MBA students from South African, European and American business schools, investors (MTN and non-MTN), executive and board members (MTN and non-MTN), competitors and non-competitors within South Africa wishing to implement similar GHG-efficient energy plants at similar scale , etc. in Zambia and Cameroon, MTN works with government agencies and NGOs to create awareness, educate and potentially alternative income streams related to reducing logging and deforestation for primary fuel needs. In Yemen MTN has worked with NGOs to implement an awareress campaign regarding the dangers and impact of plastic bags on the environment, particularly in rural areas. In South Africa and Germany, MTN has presented to government, advocacy and industrial leadership on the nature and need of partnerships to address large scale environmental matters, and what roles various stakeholder groups can play to address this.

MTN operations are voluntarily participating the GSMA Mobile Energy Efficiency (MEE) Benchmarking for Mobile Networks' project to determine opportunities for reducing energy consumption, costs and emissions. GMSA hope to use this process to develop a network energy efficiency methodology that can be adopted as a global ICT industry standard, and MTN is pleased at the opportunity to contribute to this worthwhile study.

MTN's partnership with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on e-waste management has been formed to increase national awareness around e-waste and the need to be responsible during disposal amongs consumers, businesses and other stakeholders, enable enterprise development due to manual processing of waste, rather than reliance on automation, create income sources and job security at a small scale within partner enterprises; and make a small contribution to the Millenium Development Goals' objectives. MTN is aware that solutions to environmental challenges may require a different approach in developing countries compared to industrialised and developed countries, and is therefore taking this consideration into account. As the issue of e-waste is a significant challenge requiring the response of all telecommunications and ICT companies, MTN is maintaining an open-source type of approach, working in collaboration with customers and community stakeholders, competitors, suppliers, other interested companies, and and electrical waste value chain partners. The South African Department of Environmental Affairs has also indicated it would approach MTN to take discussions further in this respect when ready.

A discussion paper on carbon tax options and potential liability for South Africa was recently released by the National Treasury. MTN SA submitted commentary on this discussion paper to the National Treasury. MTN is also making efforts to support COP 17 climate change negotiations in South Africa later this year in two ways: a. Considering opportunities for sponsorship of specific climate-change related topics at official side events (subject to final discussions with partners), and providing support services to the Department of Environmental Affairs.

Page: 3. Targets and Initiatives

3.1

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

No

3.1a

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

3.1b

Please provide details of your intensity target

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

3.1c

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	Comments

3.1d

Please provide details on your progress against this target made in the reporting year

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

3.1e

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

(i) In 2009 the MTN Group undertook its first detailed and wide-scale CO2e footprinting exercise (previous years' reports were of a more limited scope). Although 2009's carbon footprint study meaningfully represented 62.2% of the business by subscriber numbers, the Group extended the scope and detail of the carbon

footprint in 2010 to include 4 more OPCO's. This meant that 95% of the business subscriber and revenue numbers were represented in 2010's footprint analysis, a significant proportion of MTN's business. There was an increased effort to improve the quality of data management processes, in order to more fully understand and determine its current and future impact, taking into account potential network and business growth projections to the best of its ability. This improved data collection led to a more representative carbon emissions value for MTN Group and as such, will potentially become the baseline for MTN Group going forward. Now that a more extensive determination of its carbon footprint has been carried out by MTN, a climate change strategy can be developed which will include baselined emissions, and a realistic management, reduction and mitigation plan for the business. This is intended for development within the short term.
(ii) In terms of a forecast of emissions, MTN considers that the FY 2010 carbon footprint study represents a significant material and representative proportion of the business and therefore it is in a stronger position to make emission forecasts. However, forecasts depend on a number of factors relating to operational management including outsourcing of Base Transceiver Sites (BTS) and switch sites, increasing site sharing with other ICT sector companies, and investments in alternative and engineered solutions. The forecast will be published after completion of the Group's climate management strategy, which will be developed over 2011 and 2012.

3.2

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

Yes

3.2a

Please provide details (see guidance)

As an ICT company, MTN's role in reducing the impact of other sectors through de-materialisation (substituting high carbon or physical products with electronic solutions eg, e-commerce, video conferencing and teleworking) will help the global economy reduce emissions by helping other sectors optimise how they operate, and improving how society works and lives.
MTN is currently driving machine to machine (m2m) technology solutions to enable energy efficiency and environmental monitoring in other sectors. M2M uses a device (sensor, meter, etc.) to capture an 'event' (temperature, inventory level, energy use, etc.), which is relayed through a network (wireless, wired or hybrid) to an application (software program), that translates the captured event into meaningful information (e.g., temperature trends/spikes). By using this technology, other sectors will have up-to-date data at their finger-tips at all times, enabling them to make informed decisions on ways forward and possible solutions. The benefits of this technology and other similar technologies will start to be recognised in the medium to long term. Please see further details in MTN's response to question 6.1e

3.3

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

3.3a

Please provide details in the table below

Activity type	Description of activity	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
Low carbon energy installation	The following are the countries and types of solutions MTN has deployed to reduce consumption of grid power and/ or diesel to power critical and power-hungry sites: - Iran: hybrid, solar, and wind - Guinea Conakry: hybrid solar - Liberia: hybrid solar - Cote d'Ivoire: hybrid solar - Benin: Hybrid solar, solar - Nigeria: hybrid solar - Benin: Hybrid solar, solar - Cameroon: Hybrid solar, solar - Sudan: Hybrid solar, solar - Uganda: hydrogen fuel cell - Rwanda: hybrid solar, hydrogen fuel cell - Zambia: hybrid solar, hydrogen fuel cell - Swaziland: hybrid solar - South Africa: hybrid solar, solar, dairy bio-gas, natural gas, wind We do where possible in some of our West African operations attempt to power base stations through the use of gas. However, the requirement for the base station to be physically situated in close proximity to gas lines limits this opportunity. The aim of this activity is to decrease the dependence on diesel use at base station sites, thereby targeting Scope 1 emissions. This is a voluntary activity and is currently in the trial phase due to the limited supply of gas to the necessary areas. Examples of some recent site implementations in some of our countries of operations are indicated below: Riemvasmaak, South Africa: In the remote village of Riemvasmaak in South Africa, MTN built two off-grid wind- and solarpowered base stations for this community that has,until now, lacked any telephony connectivity. The Riemvasmaak community were co-opted in the building of the sites, thus contributing to their economic well-being. This new-found link with the outside world has gone a long way towards reviving the local economy. Zambia: MTN has deployed hybrid solutions across almost 20% of its network.This has helped reduce fuel consumption and related costs by 37% across the entire network. MTN has also reduced associated greenhouse gas emissions from diesel-based power consumption. Power generators now operate under 40% of previous configurations.			>3 years
Energy efficiency:	The following are the countries and types of solutions MTN has deployed to reduce consumption of grid power and/ or diesel to power critical and power-hungry sites: - Iran: fuel site management, deep cycle/			>3 years

Activity type	Description of activity	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
processes	high energy density batteries - Guinea Conakry: fuel site management. fuel leakage pipe technology - Liberia: fuel site management - Cote d'Ivoire: Iran: deep cycle/ high energy intensity batteries - Nigeria: fuel site management - Uganda: fuel site management - South Africa: fuel site management, diesel combustion enhancer, deep cycle/ high energy density batteries, site monitoring for energy consumption, battery performance and consumption, and weather variable impact, waste heat capture and re-use/ combined heating and cooling (CHP) Sites are also engineered to leverage free cooling, thereby reducing energy consumption. Some operations have deployed Hybrid Genset (HGS) solutions consisting of technology working in cycling mode from 12 hours on gensets to 12 hours - 24 hours on batteries depending on the power load. As a result, sites save about 50% on fuel and 50% in maintenance fees. CO2 output is also reduced by about 50%. The aim of this activity is to decrease the dependence on diesel at base station sites, thereby targeting Scope 1 emissions. This is a voluntary activity and is currently in being executed with measurable success. The modernisation of the radio network base stations will be key to driving down MTN's energy consumption as well as carbon footprint. MTN anticipates it can achieve as much as 40% reduction in consumption on the modernised base station. Some of these savings will only be realised and have an during 2011.			
Energy efficiency: building services	Following the results of an ASHRAE level 1 and 2 audit and a LEED audit of MTN's 14th Avenue Head Office in South Africa, various elements to improve the efficiency of the building (including energy consumption and efficiency, water consumption and efficiency, policies and indoor environmental quality) are under consideration, and prioritisation for implementation based on various criteria, is applied. Opportunities to specifically improve energy use and efficiency and reduce consumption include the following, in no particular order: energy metering, reduction of printers, policy development, awareness programme, use of timer switches, phase 1 building kitchen gas conversion, use of LED lamps, use of protective window film to reduce solar radiation and cooling requirements, fluorescent lamp replacement, task lighting, solar energy for exterior lighting, irrigation control and geyser water heating, lighting automation, green roofing, and traffic light synchronisation around complex entrance and exit facilities in conjunction with local authorities. Initiatives across other South African facilities in 2010 include replacement of fixed generators, air-conditioners and uninterrupted power supplies across regions and, investment in audio-visual equipment for video and teleconferencing. Implementation and reporting will span multiple reporting periods. The aim of this activity is to decrease the use of electricity at Head Office buildings by implementing various energy efficient measures. This would target Scope 2 emissions and is a voluntary activity. Various elements of this phase are currently in the implementation phase while others have been executed successfully.	1440000		>3 years
Low carbon energy installation	2 Megawatt Tri Generation with Methane Gas (the first Tri-Generation Plant with absorption cooling) completed at the 14th Avenue Head Office site. MTN 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. The energy generated is used to power some of MTN South Africa's data and switching centre's and	1550000	22000000	>3 years

Activity type	Description of activity	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
	server rooms. The heat that is generated as a by-product of the process is sent through lithium bromide absorption chillers to cool water, which is then used for the cooling air for electronic equipment, as well as for office air-conditioning needs. The tri-gen project enabled MTN to be the first telecoms company in Africa to have a new Methodology approved by the United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism (CDM) Executive Board, for such an installation to claim carbon credits.The aim of this activity is to decrease the use of electricity. This would target Scope 2 emissions and is a voluntary activity. This initiative is currently in operation with measurable success. Savings are as follows: - A minimum of ZAR 1,500,000 in Year 1 (August 2010 – August 2011); ZAR 3,200,000 in Year 2, and ZAR 5,300,000 in year 3. Higher savings can be expected based on the national annual electricity price increase of 25.8% in 2011/2012 alone. - Based on a proposed carbon tax rate of ZAR75/tonne CO2 emissions in Year 1, a saving of ZAR 1,314,000 is expected in Year 1 (of legislation)			

3.3b

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, MTN plans to enhance business case development through calculation of emissions as part of financial trade-off decision-making, and in the case of South African operations, calculations will also include potential carbon tax liability implications of infrastructure investments.

3.3c

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

Page: 4. Communication

4.1

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

Publication	Page/Section Reference	Identify the attachment
In annual reports (underway) – previous year attached	Page 81	Annual Report
In voluntary communications (underway) – previous year attached	Page 27 & 28	The MTN Group's CDP report is published on its website www.mtn.com at the end of May of each year. The report is also publicly available on www.cdproject.net

Module: Risks and Opportunities [Investor]

Page: 5. Climate Change Risks

5.1

Have you identified any climate change risks (current or future) that have 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

5.1a

Please describe your risks driven by changes in regulation

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1	Carbon taxes	With respect to Carbon Taxes and Cap and Trade Schemes risks, South Africa has already implemented a 2c/kWh carbon tax on the cost of electricity. Government has indicated that additional carbon tax may be used as a means to reduce emissions. Towards the end of 2010, the South African National Treasury published a Carbon Tax Discussion Paper to aid the regulatory efforts of the South African government in addressing environmental challenges. An initial tax of R75 per ton of CO2 was proposed with an increase to around R200 per ton CO2 (at 2005 prices) seen as feasible and appropriate to achieve the desired behavioural changes and emission reduction targets. The anticipated risk includes the fact that a carbon tax or even an emission trading system, will result in an increase to the cost of fossil fuel based energy, and in particular coal based electricity in South Africa. This will directly impact MTN's cost of operations at all sites not powered fully by alternative technology, and includes switches, data centres, call centres and offices and stores.	Increased operational cost	Unknown	Direct	More likely than not	Medium-high
2	Fuel/energy taxes and regulations	In South Africa the finance minister announced a 10c per litre increase in the levy on petrol and diesel with effect from April 2011. There will also be an 18c per litre increase in the Road Accident Fund levy on petrol and diesel, included in an increase of 40c per litre of petrol expected on the 6th of April. This means fuel expenses will increase for MTN's South Africa operations.	Increased operational cost	Current	Direct	Virtually certain	Medium-high
3	Fuel/energy taxes and regulations	Eskom grid electricity price hike. The National Energy Regulator of South Africa (Nersa) has approved a nominal Eskom power tariff increase of 25,8% for 2011/12 and 25,9% for 2012/13. This regulation will have an effect on running costs for the MTN sites throughout South Africa.	Increased operational cost	Current	Direct	Virtually certain	Medium-high
4	Other regulatory drivers	Emerging countries where MTN operates, including Nigeria, Uganda, Ghana, and Cameroon amongst others appear to be increasing legislation with respect to environmental impact and liability. MTN's regulatory function continues to monitor legislative developments.	Increased operational cost	1-5 years	Direct	About as likely as not	Medium-high

5.1b

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions

1.) (i) As a risk mitigation measure and in the interest of good disclosure, MTN has calculated its carbon footprint. The costs of this exercise are not significant.

Once there is certainty around the proposed greenhouse gas regulation, MTN will quantify the risk in detail. However, MTN has quantified that a carbon tax of R75 per tonne imposed initially increasing to R200 per tonne on their Scope 2 emissions (for example) (approximately 180,000 tonnes of CO2e) in South Africa will result in a financial liability of R13.5 million increasing to R36 million. A carbon tax will almost certainly result in an increase in electricity costs as energy utilities will pass this additional cost onto their consumers. A R75 per tonne carbon tax will result in an increase of 6c/kWh while a R200 per tonne carbon will result in an increase of 20c/kWh, which will be passed on to the consumer by Eskom South Africa. This is in addition to the annual increases that are already going to happen in the next 3 years.

(ii)MTN SA submitted commentary on this discussion paper to the National Treasury recently and is awaiting feedback.

(iii)The costs associated with actions incorporated to manage this risk are not yet quantifiable.

2.)
(i)An increase in fuel prices increases MTN's financial risk, especially to those operations where diesel is used extensively. Even though details are only available for increases in South Africa, which is a small consumer of petrol and diesel fuel, there is still a financial implication of the price increase. Where similar trends appear to also occur in countries where fuel use is high, for instance Nigeria or Ugandathen the risk to MTN is even greater. An increase of R0.68/litre increases results in an increase in fuel cost for MTN South Africa of 10% - 12% or roughly R300 000 per annum.

(ii)MTN is currently investigation fuel additive programmes which are still very much in a trial phase and

(iii) are not yet quantifiable.

3.)

(i)The Eskom grid electricity price hikes will increase the cost of electricity for MTN South Africa. This OPCO is responsible for one third of money spent on electricity. A price increase of roughly 25% will result in MTN South Africa spending an extra R45 million at current consumption rates.

(ii)Through various initiatives including the 2MW TriGen Plant at MTN Head Office, a similar 4MW tri-generation plant that will be live in latter 2011, and using renewables to power base stations throughout South Africa, MTN is looking to decrease it dependency on grid electricity in South Africa.

(iii) MTN is also actively driving operational cost savings, and the cost of diesel to power infrastructure is a matter of concern. It is for this reason, amongst others, that operations across the MTN footprint are investing in alternative and efficiently engineered sites as indicated in response 3.3a.

4.

(i) The financial impacts of this risk have not yet been quantified

(ii) The Sustainability Team at MTN contintues to monitor legislative developments in emerging countries where MTN currently operates

(iii) The cost of these actions have not been quantified

5.1c

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

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1	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	Unknown	Direct	Very likely	Medium-high
2	Other physical climate drivers	All MTN countries of operation are included in this section. The risk is increased incidence of coastal flooding and inland flooding. The risk and associated financial costs of coastal flooding will be greater for BTS sites than for other infrastructure, except for fibre optic links. Iran's coastal area in the Persian Gulf is especially exposed to coastal flooding. Further coastal and flooding risks are predicted to increase in frequency and intensity for the eastern coast of Africa. Some of MTN Nigeria's key sites are also located in flood-prone areas. In South Africa, the city of Cape Town has undertaken a coastal risk flooding assessment. Overall by the year 2100, there is the possibility of a 20m rise is sea level in that specific area. The risk and associated financial costs of increased inland flooding will be greater for BTS sites and switches than for other infrastructure, except for fibre optic links. Ghana, Nigeria and Cameroon are especially at risk to change in precipitation patterns, with an expected rise in	Reduction/disruption in production capacity	Unknown	Direct	Very likely	Medium-high

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		rainfall of between 20% and 30% up to 2100. On the other hand, much of Cameroon's grid is driven by hydro power, and the possible impact of drought or reduced water levels in some areas could impact grid reliability. Countries operating in the Middle East are also at risk, as precipitation patterns are expected to decrease by up to 50% by 2100					
3	Induced changes in natural resources	All MTN countries of operation are included in this section. The risk is an increased mean surface temperature. The risk and associated financial costs of 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 would have risen by 5 degrees celcius, adding increased cost to management of BTS sites. The increased costs are particularly around increasing energy costs for cooling.	Increased operational cost	>10 years	Direct	More likely than not	Medium-high
4	Uncertainty of physical risks	All MTN countries of operation are included in this section. The risk is the uncertainty surrounding the magnitude and timescale of potential physical risks and the ability to plan more effectively as a result.	Inability to do business	Unknown	Direct	More likely than not	Medium-high

5.1d

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions

All encompassing of points 1 - 4:

(i) MTN's operations are susceptible to the forces of extreme weather events which can interrupt business continuity and damage infrastructure. In particular, the sites may be located in areas which are affected by lightning and storms. MTN is not in a position to quantify infrastructural risks from lighning and storms. Costs associated with flooding incidents have historically been much lower and few incidents have been reported. Damage to a service centre recently due to flooding is estimated to have cost ZAR 463,008. An increase in events coupled with rising repair prices and/ or insurance costs could have a financial impact on MTN.

(ii) MTN understands that the effect of climate change may exacerbate these effects, potentially impacting the business further. As such MTN realises the need to quantify the effects of these possible changes in the climate on physical assets, and ensure that these risks are mitigated. 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 quantitative analysis to this. This process is expected to span the medium term/ multiple reporting processes.

As part of the carbon footprint development, training on climate change, carbon footprint methods, as well as the associated climate risks and opportunities has taken place. Future plans include training to an increasing number of operations across MTN's footprint.

(iii) Costs associated with creating a database of infrastructure have yet to be fully realised as the process is still in its infancy. The current carbon footprint study that is carried out annually helps identify areas that require increased efficiency to decrease operational costs. Carrying out quantitative analysis of the impacts of climate change will fall under the broader scope of a holistic climate change strategy. This strategy will be complete in the medium term and will drive future climate decisions and targets for MTN Group. MTN has started development of internal training material with respect to carbon footprinting, encompassing energy efficiency (for rollout starting Q3 2011). A budget of up to R200,000 has been set aside for this process.

5.1e

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

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact

5.1f

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; (iii) the costs associated with these actions

5.1g

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

5.1h

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

5.1i

Please explain why you do not consider your company to be exposed to 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

Market or reputational risk arise as consumers exercise their prerogatives. As the world moves towards a low carbon economy, MTN believes that consumers are increasing making choices based on the environmental impact of products and services. MTN is also seeing increased instances of consumer demands on other environmental (non-carbon) performance expectations, and therefore expects consumers to similarly demand the same of the Group's greenhouse gas emissions. MTN has also seen an increase in the number and nature of investor queries in this respect, although off a very low base. However, given the nature of MTN's operations, and sustainability vision, the company does not believe that this poses a significant material risk to the Group. This position may change if associated environmental legislation to complement climate change legislation, such as e-waste legislation and carbon caps, are implemented or extended in the countries in which MTN operates.

Further Information

MTN believes that the first step in any emission legislation will be the mandatory reporting of GHGs emissions, and as such has calculated its carbon footprint. This process will be done annually and will become embedded in the organisation over the medium term on a quarterly or semi-annual internal management reporting

basis. The intention is for operations to collate the required data on a monthly basis as part of operational reporting, in order to track energy consumption and emissions.

Page: 6. Climate Change Opportunities

6.1

Have you identified any climate change opportunities (current or future) 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 other climate-related developments

6.1a

Please describe your opportunities that are driven by changes in regulation

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
1	International agreements	MTN 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.The tri-gen project enabled MTN to be the first telecoms company in Africa to have a new Methodology approved by the United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism (CDM) Executive Board, for such an installation to claim carbon credits. The tri-gen project has resulted in increased energy security in an energy constrained economy; avoidance of energy price increases; reduced exposure to potential carbon taxes; and a reduction of the Group carbon footprint.	Increase in capital availability	Current	Direct	Virtually certain	Medium-high
2	General	Feed-in Tariffs (FIT) are, in essence, guaranteed prices for	Increase in	1-5 years	Direct	Very likely	Medium-

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
	environmental regulations, including planning	electricity supply rather than conventional consumer tariffs. The objective of the study is to develop an appropriate regulatory framework for implementing a feed in tariff mechanism for achieving the South African government's 10 000GWh renewable energy target by 2013. If an independent power producer sells electricity to the grid, the REFIT guarantees a tariff for that electricity. MTN is in the process of implementing various renewable technologies that may create surplus electricity. When this comes about, this can be sold back to the grid for income. At this stage MTN is not aware of similar schemes in other countries in which it operates.	capital availability				high

6.1b

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

1.) International Agreements
(i) CDM projects can earn saleable certified emission reduction (CER) credits, each equivalent to one tonne of CO2, which can be counted towards meeting Kyoto targets. MTN South Africa's 2-megawatt (MW), methane-driven tri-generation power plant at the 14th Avenue Head Office MTN to be the first telecoms company in Africa to have a new Methodology approved by the UNFCCC CDM Executive Board, for such an installation to claim carbon credits. The tri-gen project has resulted in increased energy security in an energy constrained economy; avoidance of energy price increases; reduced exposure to potential carbon taxes; and a reduction of the Group carbon footprint. In 2010 MTN Head Office in South Africa spent R18,000,000 on electricity (2010 prices). The tri-generation plant has resulted in the avoidance of 17,500 tonnes per annum from carbon intensive electricity generation. This has a resultant Rand value saving of roughly R18,000,000. (ii) The annual carbon footprint, once carried out over a number of years, 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. MTN is also planning to develop its climate change management strategy starting later 2011. This strategy will identify and prioritise specific areas of concern within the organisation to support future decision-making. CDM opportunities fall within the scope of quantifiable opportunities that MTN can take advantage of and these will be identified in the climate change strategy. (iii) The cost of the TriGen facility was roughly R22 million. As no credits have been sold as yet, there is no cost associated with the management of this as it falls under the remit of MTN South Africa sustainability.
2.) General environmental regulations, including planning
(i). The South African National Energy Regulator of SA released a consultation paper in March 2011 on the Renewable Energy Feed-in Tariff (REFIT). The aim of REFIT is to stimulate the development of renewable energy in SA though improving the financial feasibility of projects. The consultation paper of 2011 looked at a tariff review so that approved tariffs from 2009 would be reflective of 2011 prices. Through investment in both renewable energy projects to power its own energy requirements with a possible off-take benefit through national grid sales, and through energy efficiency efforts, MTN South Africa could reduce operating/ energy

costs, obtain a small revenue stream from REFIT sales, and reduce its carbon footprint. A majority of the renewable technology currently used by MTN is solar PV, (followed by wind and bio- and natural gas). REFIT has put forward a price of R2.311/kWh of solar PV, although it should be noted that this price would be offered for a facility that is bigger than 1MW. (ii) The annual carbon footprint analysis is used to identify areas where savings can be made and which OPCO's are the largest emitters and energy spenders. The annual carbon footprint analysis is be able 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. MTN also has a climate change strategy in the pipeline. This strategy will identify and prioritize specific areas of concern within the organisation to support future decision-making. (iii) As many of the renewable technology retrofits are still being carried out at various BTS sites and are seen as trials, it is not possible to quantify the costs of these actions.

6.1c

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

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact

6.1d

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

6.1e

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

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1	Other	According to the Gartner Group, while the ICT sector plans to	New	1-5 years	Indirect	Very likely	Medium-

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
	drivers	significantly step up own energy efficiency, its largest influence will be by enabling energy efficiency in other sectors. The opportunity exists for MTN to develop solutions to help de-carbonise other sectors of economies through dematerialisation (e.g. replacement of physical travel through increased use of teleconferencing, or replacement of physical servers with virtual servers), efficiencies in transport and storage logistics, smart building technologies or information solutions for energy efficiency (e.g. for data centres) and improved management and monitoring of electricity grids (smart grids). ICT companies can help other sectors optimise how they operate, and how society works and lives to lower impact businesses. In so doing, ICT companies will be in a position to contribute in the fight against rising emissions and global warming . MTN is currently driving machine to machine (m2m) technology solutions to enable energy efficiency and environmental monitoring in other sectors. By using this technology, other sectors will have up-to-date data at their finger-tips at all times, enabling them to make informed decisions on ways forward and possible solutions. For example, MTN Mobility Applications uses the MTN Business network and the latest Enterprise Digital Assistant from Motorola and Microsoft to allow m2m remote control. Amongst other benefits, this enables corporate and industrial customers to improve energy efficiency. MTN's telemetry partnerships include an application for fleet management, allowing companies to track vehicle movement in real-time, monitor aspects such including fuel cap and ignition access, thereby controlling fuel management, MTN's smart office management allows clients to track work flows of mobile workers, while Mobile Surveys allows for paperless surveys. MTN has also recently released its air quality monitoring management solution, and is investigating a solution to automate meter monitoring. MTN Business offers data centre solutions to clients. By retrofitting facilities in Gallo Manor (South Africa) to become more energy efficient, MTN has helped reduce the cost of its business offering, and the Scope 3 carbon emissions (defined by the Carbon Disclosure Project) of its clients.	products/business services		(Client)		high
2	Reputation	The opportunity to enhance reputation through proactive action on climate change and management/ reduction of carbon footprints, along with embracing more responsible technologies, and helping	Wider social benefits	1-5 years	Indirect (Client)	Very likely	Medium

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		address consumer behaviour change through messages via text, billing, etc (e.g. remove chargers from sockets or use solar chargers) could result in customer and staff attraction and retention					

6.1f

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

1.) Other drivers – enabling energy efficiency in other sectors
(i) MTN is currently driving M2M technology to enable energy efficiency in other sectors. M2M uses a device (sensor, meter, etc.) to capture an 'event' (temperature, inventory level, energy use, etc.), which is relayed through a network (wireless, wired or hybrid) to an application (software program), that translates the captured event into meaningful information (e.g., temperature trends/spikes). By using this technology, other sectors will have up-to-date data at their finger-tips at all times, enabling them to make informed decisions on ways forward and possible solutions. Providing a financial benefit from this action may prove difficult as many of the technologies that MTN can offer to increase energy efficiency in other sectors will only mature in the next 6 – 10 years. However internal business cases developed and subsequently approved for the commercialisation of these innovations indicate an attractive payback period. (ii) There is a specific team within MTN's Innovation Centre that is responsible for managing this opportunity and driving M2M forward into other sectors. These sectors include consumer, energy, utilities and industrial control. (iii) Costs are considered business development costs and cannot be provided.
2.) Reputation
(i) The financial benefits gained from enhancing reputation by becoming a proactive climate change driven brand are difficult to quantify but will be represented by increased revenue driven by an increase in sales and subscribers. (ii) This opportunity would be managed through engagement with the public through the PR/marketing divisions of MTN and reporting obligations. The CDP provides a good indicator to investors and other interested parties as the initiatives that MTN are implementing to improve their environmental performance. It is important that MTN show the public what solutions have been implemented and how these solutions are resulting in a cleaner service being provided but also a more reliable service that is not exposed to the risks associated with climate change. MTN's climate change strategy would also include analysis and identification of the risks and opportunities that MTN faces by either not acting or acting on climate change and how this would affect revenue and potential subscribers. (iii) The costs associated with this would be included in the budget of the public relations and marketing departments. Reputational opportunities will also be addressed in the climate change strategy.

6.1g

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

6.1h

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

Although not significant in the short and possibly medium term, and somewhat difficult to predict, MTN anticipates the following opportunities as a result of the physical impact of climate change. (a) MTN can enable the information sharing, communication links and support services in the long term where extreme weather conditions might inhibit travel, since mobile telecommunications and infrastructure is well suited to rapid deployment to match population movements in response to climate change or restrictions on physical movement caused by carbon taxes, greater travel costs, etc. (b) Similarly, recovery from disaster events could be more easily enabled through the use of mobile information and communication technology services. Modular, complete and rapid deployment wireless solutions can enable or strengthen information sharing and communication capabilities of disaster, emergency and relief authorities in the unfortunate event of large scale emergencies e.g. flooding or fire. MTN's international industry body, the International Telecommunications Union, continues to work on and communicate the use of ICT in the event of emergency and disaster relief e.g. earthquakes in Haiti and Chile.

6.1i

Please explain why you do not consider your company to be exposed to 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

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading [Investor]

Page: 7. Emissions Methodology

7.1

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)
Fri 01 Jan 2010 - Fri 31 Dec 2010	743646	378869

7.2

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

7.2a

If you have selected "Other", please provide details below

7.3

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

Gas	Reference

Gas	Reference
Other: Methane	IPCC Second Assessment Report (SAR - 100 year)
Other: Nitrous oxide	IPCC Second Assessment Report (SAR - 100 year)
Other: R22	Other: GHG Protocol
Other: HCFC-22	Other: GHG Protocol
Other: HFC-134a	Other: GHG Protocol
Other: R502	Other: GHG Protocol
Other: Fire suppression equipment	Other: Business commentary

7.4

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

Fuel/Material/Energy	Emission Factor	Unit	Reference
Motor gasoline	0.04	Other: GJ/L	GHG Protocol/2006 IPCC Guidelines
Motor gasoline	0.07	metric tonnes CO2 per GJ	GHG Protocol/2006 IPCC Guidelines
Motor gasoline	0.00	Other: Tonnes CH4/GJ	GHG Protocol/2006 IPCC Guidelines
Motor gasoline	0.00	Other: Tonnes N2O/GJ	GHG Protocol/2006 IPCC Guidelines
Diesel/Gas oil	0.04	Other: GJ/L	GHG Protocol/2006 IPCC Guidelines
Diesel/Gas oil	0.07	metric tonnes CO2 per GJ	GHG Protocol/2006 IPCC Guidelines
Diesel/Gas oil	0.00	Other: Tonnes CH4/GJ	GHG Protocol/2006 IPCC Guidelines
Diesel/Gas oil	0.00	Other: Tonnes N2O/GJ	GHG Protocol/2006 IPCC Guidelines
Diesel/Gas oil	43.00	Other: MJ/kg	GHG Protocol/2006 IPCC Guidelines
Liquefied petroleum gas (LPG)	47.30	Other: MJ/kg	GHG Protocol/2006 IPCC Guidelines
Liquefied petroleum gas (LPG)	17.20	Other: C/GJ	GHG Protocol/2006 IPCC Guidelines
Liquefied petroleum gas (LPG)	0.01	Other: CH4/GJ	GHG Protocol/2006 IPCC Guidelines (EF is 0.001)
Liquefied petroleum gas (LPG)	0.01	Other: N2O/GJ	GHG Protocol/2006 IPCC Guidelines (EF is 0.001)

8.1

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

Financial control

8.2a

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

743646

8.2b

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

Boundary	Gross global Scope 1 emissions (metric tonnes CO2e)	Comment

8.2c

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

Gross global Scope 1 emissions (metric tonnes CO2e) - Total Part 1	Comment

8.2d

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e - Part 2

Gross global Scope 1 emissions (metric tonnes CO2e) - Other operationally controlled entities, activities or facilities	Comment

8.3a

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

378869

8.3b

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e - Part 1 breakdown

Boundary	Gross global Scope 2 emissions (metric tonnes CO2e)	Comment

8.3c

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e - Part 1 Total

Gross global Scope 2 emissions (metric tonnes CO2e) - Total Part 1	Comment

8.3d

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

Gross global Scope 2 emissions (metric tonnes CO2e) - Other operationally controlled entities, activities or facilities	Comment

8.4

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

8.4a

Please complete the table

Reporting Entity	Source	Scope	Explain why the source is excluded

8.4

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

Yes

8.4a

Please complete the table

Source	Scope	Explain why the source is excluded
Certain OPCO's not included	Scope 1 and 2	The remaining geographies that were excluded only account for 5% of MTN Group revenue and 18% of total subscriber numbers therefore it was decided that their emissions would not have a large overall impact. These OPCOs will be included in future studies.

8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and Scope 2 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 2% but less than or equal to 5%	Data Gaps Metering/ Measurement Constraints	The uncertainty found in the data will continue to decrease as the carbon footprint data collection process becomes more institutionalised in each OPCO at MTN.
Scope 2	More than 2% but less than or equal to 5%	Data Gaps Metering/ Measurement Constraints	The uncertainty found in the data will continue to decrease as the carbon footprint data collection process becomes more institutionalised in each OPCO at MTN.

8.6

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

Not verified or assured

8.6a

Please indicate the proportion of your Scope 1 emissions that are verified/assured

8.6b

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

Type of verification or assurance	Relevant standard	Relevant statement attached

8.7

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

Not verified or assured

8.7a

Please indicate the proportion of your Scope 2 emissions that are verified/assured

8.7b

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

Type of verification or assurance	Relevant standard	Relevant statement attached

8.8

Are carbon dioxide emissions from the combustion of biologically sequestered carbon (i.e. carbon dioxide emissions from burning biomass/biofuels) relevant to your company?

No

8.8a

Please provide the emissions in metric tonnes CO2e

Page: 9. Scope 1 Emissions Breakdown - (1 Jan 2010 - 31 Dec 2010)

9.1

Do you have Scope 1 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

Yes

9.1a

Please complete the table below

Country	Scope 1 metric tonnes CO2e
Nigeria	634939
Uganda	38029
Ghana	23426
Cameroon	13924
Zambia	13487

Country	Scope 1 metric tonnes CO2e
Syrian Arab Republic	10430
Iran, Islamic Republic of	5409
South Africa	3013
Other: MTN Business	610
Swaziland	379

9.2

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

By GHG type
By activity

9.2a

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

Business Division	Scope 1 metric tonnes CO2e

9.2b

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

Facility	Scope 1 metric tonnes CO2e

9.2c

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

GHG type	Scope 1 metric tonnes CO2e
CO2	729673
CH4	608
N20	2207
HFCs	11409

9.2d

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

Activity	Scope 1 metric tonnes CO2e
Mobile Combustion	30302
Stationary Combustion	701933
Fugitive Emissions	2
Refrigerant Usage	11409

Further Information

MTN OPCOs are classified according to their breakdown in geographies (countries).
MTN Business is a service provider to small and medium sized enterprises offering mobile and internet-based communications services. MTN Business data from the following countries are included: South Africa, Namibia, Botswana, Kenya and Zambia.

Page: 10. Scope 2 Emissions Breakdown - (1 Jan 2010 - 31 Dec 2010)

10.1

Do you have Scope 2 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

Yes

10.1a

Please complete the table below

Country	Scope 2 metric tonnes CO2e
South Africa	180757
Iran, Islamic Republic of	97410
Syrian Arab Republic	27336
Other: MTN Business	24880
Ghana	22204
Nigeria	18186
Swaziland	3633
Uganda	3534
Cameroon	796
Zambia	134

10.2

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

By facility

10.2a

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

Business division	Scope 2 metric tonnes CO2e

10.2b

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

Facility	Scope 2 metric tonnes CO2e
BTS Sites	220326
Head/Regional Offices	87389
Data Centres/Switches	70154
Call Centres	1001

10.2c

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

Activity	Scope 2 metric tonnes CO2e

Further Information

MTN OPCOs are classified according to their breakdown in geographies (countries).
MTN Business is a service provider to small and medium sized enterprises offering mobile and internet-based communications services. MTN Business data from the following countries are included: South Africa, Namibia, Botswana, Kenya and Zambia

Page: 11. Emissions Scope 2 Contractual

11.1

Do you consider that the grid average factors used to report Scope 2 emissions in Question 8.3 reflect the contractual arrangements you have with electricity suppliers?

Yes

11.1a

You may report a total contractual Scope 2 figure in response to this question. Please provide your total global contractual Scope 2 GHG emissions figure in metric tonnes CO2e

11.1b

Explain the basis of the alternative figure (see guidance)

11.2

Has your organization retired any certificates, e.g. Renewable Energy Certificates, associated with zero or low carbon electricity within the reporting year or has this been done on your behalf?

No

11.2a

Please provide details including the number and type of certificates

Type of certificate	Number of certificates	Comments

Page: 12. Energy

12.1

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

More than 0% but less than or equal to 5%

12.2

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

Energy type	MWh
Fuel	2714184
Electricity	615741
Heat	
Steam	
Cooling	

12.3

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

Fuels	MWh
Diesel/Gas oil	2653470
Motor gasoline	60714

Further Information

The 2 MW South African tri-generation plant captures waste heat and uses CHP technology (heating and cooling). Consumption figures will be reported in 2012 for the 2011 CDP reporting period.

Page: 13. Emissions Performance

13.1

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

Increased

13.1a

Please complete the table

Reason	Emissions value (percentage)	Direction of change	Comment
Other: Increased number of OPCO's included in reporting	26	Increase	The 2010 carbon footprint included 4 additional OPCOs in the data collection and analysis compared to 2009. This includes MTN Business, Iran, Swaziland and Zambia. These four operations account for 13% of 2010's total carbon emissions.
Other: Improved data collection from remaining OPCO's	73	Increase	2009 was the first year that MTN carried out a comprehensive study of its carbon emissions. Therefore the data collection process had numerous gaps and was not as reflective as MTN had wished. Many of the OPCOs that took part in the study in 2009 have stated that the process was more methodical in 2010, and data was more readily accessible due to the knowledge gained in 2009. Additional training was conducted including with operations involved in the 2009 reporting period (reinforcement of 2009 training), and with more networks, technology and facility managers. This led to increased data (and improved data quality) and therefore increased carbon emissions reported.

13.2

Please describe your gross 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	Explanation
0.000009	metric tonnes CO2e	unit total revenue	80	Increase	For the 2010 carbon emission study there was an increase in the number of OPCO's reporting from 6 to 10. The OPCO's that reported in 2009 relayed that there was an increase in data collection efficiency and therefore an increase in the amount of data that could be analysed. Revenue has also increased by 14%.

13.3

Please describe your gross 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	Explanation
32	metric tonnes CO2e	FTE Employee	78	Increase	For the 2010 carbon emission study there was an increase in the number of OPCOs reporting (from 6 to 10). The OPCOs that reported in 2009 relayed that there was an increase in data collection efficiency and therefore an increase in the amount of data that could be analysed. The number of employees has also increase from 31,174 to 34,558FTE

13.4

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	Explanation
0.008	metric tonnes CO2e	Other: Number of Subscribers	62	Increase	Subscriber numbers increased from 116 million in 2009 to 141.6m in 2010. This, coupled with an increase in the carbon emissions reported due to an increase in the amount of OPCOs included and improved data scope, has resulted in the 62% increase in reported emissions.

Page: 14. Emissions Trading

14.1

Do you participate in any emission trading schemes?

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

14.1a

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

14.1b

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

14.2

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

Yes

14.2a

Please complete the following table

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 retired	Purpose e.g. compliance
Credit Origination	Energy efficiency: own generation	MTN 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. Tri-generation refers to the simultaneous production of heat, power and chilled water. MTN's tri-gen facility generates electricity using methane, a clean-burning gas with a reliable and consistent supply. This energy is used to power some of MTN South Africa's data and switching centres and server rooms. The heat that is generated as a by-product of the process is sent through lithium bromide absorption chillers to cool water, which is then used for the cooling air for electronic equipment, as well as for office air-conditioning needs. With the cooling of a data centre being one of the most expensive components of MTN's operations, the 85% efficiencies achieved have helped reduce both costs and greenhouse gas emissions. Waste water from the process is utilised in bathroom facilities and Greenhouse gas (GHG) emissions of over 17,500 tonnes per annum from carbon intensive electricity generation have also been avoided. The tri-gen project enabled MTN to be the first telecoms company in Africa to have a new Methodology approved by the United Nations Framework	CDM			No	Not applicable

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 retired	Purpose e.g. compliance
		Convention on Climate Change (UNFCCC) Clean Development Mechanism (CDM) Executive Board, for such an installation to claim carbon credits. The tri-gen project has resulted in increased energy security in an energy constrained economy; avoidance of energy price increases; reduced exposure to potential carbon taxes; and a reduction of the Group carbon footprint.					

Page: 15. Scope 3 Emissions

15.1

Please provide data on sources of Scope 3 emissions that are relevant to your organization

Sources of Scope 3 emissions	metric tonnes CO2e	Methodology	If you cannot provide a figure for emissions, please describe them
Business travel	4739	Scope 3 emissions account for other indirect emissions associated but not controlled by the company. In this case Scope 3 emissions include air travel and business mileage from rented vehicles only (provided by MTN South Africa and MTN Business only).	

15.2

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

Not verified or assured

15.2a

Please indicate the proportion of your Scope 3 emissions that are verified/assured

15.2b

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

Type of verification or assurance	Relevant standard	Relevant statement attached

15.3

How do your absolute Scope 3 emissions for the reporting year compare to the previous year?

Increased

15.3a

Please complete the table

Reason	Emissions value (percentage)	Direction of Change	Comment
Other: Number of OPCO's reporting emissions has increased	7	Increase	In 2009, 6 OPCO's were included in the carbon emission study for MTN. In 2010, an additional 4 OPCOs were included in the study. This accounts for the increase in Scope 3 emissions

Module: Sign Off

Page: Sign Off

Please enter the name of the individual that has signed off (approved) the response and their job title

This report has been reviewed by the Group Executive for Business Risk Management, and Group Networks and Technology function. It has been compiled by Zakhiya Rehman, MTN Group Sustainability Manager.