Welcome to your CDP Climate Change Questionnaire 2019

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Mediclinic International (“the Group”) was founded in 1983 and is a private healthcare group with three geographical business platforms - Mediclinic Southern Africa (MCSA), Mediclinic Middle East (MCME) and Mediclinic Switzerland (MCCH). It has been listed on the JSE, the South African securities exchange, since 1986. The Group's head office is based in Stellenbosch, South Africa.

Mediclinic is focused on providing acute care, specialist-orientated, multi-disciplinary healthcare services. The Group’s core purpose is to enhance the quality of life of patients by providing comprehensive, high-quality healthcare services in such a way that the Group will be regarded as the most respected and trusted provider of healthcare services by patients, doctors and funders of healthcare in each of its markets.

In June 2015 Mediclinic acquired a 29.9% interest in Spire Healthcare, a London Stock Exchange listed and UK-based private healthcare group.

During February 2016 a combination of Mediclinic International Limited and Al Noor Hospitals Group plc by way of a reverse takeover was successfully completed. The combination resulted in the enlarged Mediclinic group with a continued primary listing on the London Stock Exchange and a secondary listing of the Company on the Johannesburg Stock Exchange and the Namibian Stock Exchange.

In 2018 Mediclinic Southern Africa operated 50 hospitals and 2 day clinics throughout South Africa and 3 hospitals in Namibia with more than 8 000 inpatient beds in total; Hirslanden operates 16 private acute care facilities and 4 clinics in Switzerland with more than 1 600 inpatient beds; and Mediclinic Middle East (including the Al Noor facilities) operates 6 hospitals and 31 clinics with more than 700 inpatient beds in the United Arab Emirates.

In line with the CDP questionnaire being targeted at the top 100 companies in South Africa, this report only deals with Mediclinic Southern Africa (South Africa and Namibia). 78% of the operational beds of Mediclinic International are located in Mediclinic Southern Africa.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Row 1	January 1, 2018	December 31, 2018	No

C0.3

(C0.3) Select the countries/regions for which you will be supplying data.

Namibia
South Africa

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

ZAR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.

Operational control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board Chair	The Chairperson of the Board's Clinical Performance and Sustainability Committee, which has oversight of environmental sustainability issues facing the organisation, reports to the main Board on all climate-related issues and, thus, ultimate responsibility for climate-related issues rests with the Chairperson of the Board.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives	The Clinical Performance and Sustainability Committee assists the Board in ensuring that the Group is, and remains, a good and responsible corporate citizen by monitoring the sustainable development performance of the Group, with oversight and management of the issues indicated. This includes, for example, overseeing major capital expenditures such as the installation of PV solar installations at a number of our hospitals, and borehole and water treatment plants at our Western Cape hospitals in response to the drought and potential water shortage conditions of 2017 and 2018.

	Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Other C-Suite Officer, please specify Chief Corporate Services Officer	Both assessing and managing climate-related risks and opportunities	Half-yearly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The Chief Corporate Services Officer (CCSO) sits on the Executive of Mediclinic International and reports directly to the Chief Executive Officer (CEO) who, in turn, sits on the Board's Clinical Performance Sustainability Committee and through this mechanism reports all climate-related issues to the Board.

The Board's Clinical Performance Sustainability Committee monitors the sustainable development performance of Mediclinic, inclusive of climate-related issues, while the CEO develops and oversees the implementation of Board-approved actions and the strategic direction of Mediclinic. Hence, there is direct communication and direction between the CCSO, CEO and the Board. It is in the interests then of the CCSO to report directly to the CEO on climate-related issues in order for such issues to be escalated to Board level consideration. The CCSO is informed and engaged on all

climate-related issues including carbon tax; greenhouse gas reporting regulations; energy and water scenarios; supply chain engagement; and, communication with customers.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

Yes

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Who is entitled to benefit from these incentives?

Management group

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction target

Comment

The Mediclinic Management Incentive Scheme depends on the level of achievement of the EBITDA targets, which in turn is achieved through costs savings. A reduction in fuel and electricity consumption and costs make a contribution to EBITDA as well as managing natural resources responsibly. Reducing carbon emissions from reduced electricity consumption is therefore a strong incentive for management. Electricity and water makes 2% of the operational cost of Mediclinic Southern Africa.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Monetary reward

Activity incentivized

Efficiency target

Comment

Employee bonuses depend on the level of achievement of the EBITDA targets which in turn is achieved through costs savings. A reduction in fuel and electricity consumption and costs make a substantial contribution to EBITDA as well as managing natural resources responsibly. Reducing carbon emissions from reduced electricity consumption is therefore a strong incentive for all employees. Electricity and water makes 2% of the operational cost of Mediclinic Southern Africa.

C2. Risks and opportunities

C2.1

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

	From (years)	To (years)	Comment
Short-term	0	5	
Medium-term	5	10	
Long-term	10	20	

C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Annually	>6 years	

C2.2b

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

At the Group level, the objective of risk management is to establish an integrated and effective risk management framework within which important risks are identified, quantified, prioritised and managed in order to achieve an optimal risk/reward profile. This is inclusive of climate-related risks.

An Enterprise-wide Risk Management ("ERM") policy defines the risk management objectives, risk appetite and tolerance, methodology, process and the responsibilities of the various risk management role players in the Group and is subject to annual review. With regards to climate-related risks, the ERM takes into consideration both the Sustainable Development Policy and the Environmental Policy of the Group, and this is also reviewed annually. At asset or operational level (individual hospitals) the Group has an environmental policy to identify aspects of business that could have a significant impact on the environment. All business divisions within the Group are required to implement environmental management systems such as the ISO 14001 standard and have it certified by an internationally recognised body.
The Group Environmental Policy requires each operation to:
- identify and comply with relevant environmental legislation and regulations;
- identify and manage all risks and opportunities relating to the Group's impact on the environment with regard to water use and recycling, energy use and conservation, emissions and climate change, and waste management and recycling;
- define environmental management programmes to achieve continual improvement and create an environmental awareness among all employees;
- set objectives and targets to prevent pollution and minimise the Group's environmental impact.
- encourage reduction, re-use and re-cycling of general waste;

- manage healthcare risk waste; and
- nurse the use of resources.
A generic aspect register with baselines for healthcare risk waste, water, electricity, paper, hazardous waste, gases and climate change is captured in the Group's CURA risk management software at the individual asset (hospital) level.

These aspect registers consist of analysing risks relating to all environmental aspects that can be controlled or influenced and their associated impacts. A significance rating is allocated to each risk based on the likelihood of occurrence, severity as well as the extent of exposure. Risks with a very high rating will be addressed first and then the others.
Each hospital completes an online aspect survey on the CURA risk management software on a monthly basis. Risk ratings are automatically calculated depending on the answer given in the CURA survey. High risks will be flagged when the exception report is drawn. All risks must be addressed in the environmental management programme with action plans on how to mitigate the risk. High risks will automatically be flagged inside CURA and a corrective action request will be issued to the hospital to be completed in the CURA risk management system.

High risks will also be those that are deemed to have a "substantive financial impact", being anything with a potential financial risk of over R250 000.

A condition status is also assigned to each risk, i.e. controlled condition: everyday occurrence or uncontrolled condition: sporadic or emergency situation. The risk or aspect identification is used for the setting of environmental objectives intended to result in meaningful improvements in the organisation's environmental performance.
Where necessary, specific environmental risks are elevated to the Clinical Performance and Sustainability Sub-Committee of the Board for due consideration, response and guidance. The Clinical Performance and Sustainability Committee meets on a semi-annual basis.

C2.2c

(C2.2c) Which of the following risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	The Group Environmental Policy requires each operation to: - identify and comply with all existing and relevant climate legislation and regulations.

		In South Africa this is dominated by the National Environmental Management Act and its sub-acts, as well as various provincial and local government by-laws that might affect consumption of energy, water and the disposal of waste. It is the responsibility of each operation to ensure it is meeting and in compliance with all current legislation, and to report this back to the Group via the online Aspect Registry.
Emerging regulation	Relevant, always included	Emerging climate-related regulation such as carbon taxes, national greenhouse gas reporting regulations and draft bills on climate change to enable a transition to a low carbon economy; water regulation in response to physical drought or flooding situations; , pollution and waste standards, etc. will have an impact on our business operations. It is the responsibility of the Board, executive and individual hospital management to be kept abreast of such emerging regulation in their risk assessment activities. These pieces of legislation are addressed at a Group level through Mediclinic's Safety Health and Environment department and are listed on the CURA enterprise risk management system as ongoing risks to be managed.
Technology	Relevant, sometimes included	Evaluation of current technology and choice of new technology adopted by Mediclinic considers climate-related risks where relevant. This is particularly in the case of procuring new technologies that are evaluated from a climate-risk perspective. Recent examples include the assessments and then adoption and installation of boreholes and water treatment plants in all hospitals in the Western Cape. These technologies will now be rolled out nationally as a preventative initiative in case of times of drought-enforced water restrictions and/or infrastructure damage due to flooding. The Western Cape drought crisis prompted a group Water Resilience Committee to be implemented at Mediclinic to address all water-related risks, including technologies. This was mandated by the Clinical Performance and Sustainability Committee. While in operation during the reporting period, this Committee met on a monthly basis and reported into the group executive.
Legal	Relevant, sometimes	Compliance with existing and proposed climate-related legislation is always assessed through active industry participation across all operations; company secretarial and/orlegal departments support to operational management, monitor

	included	regulatory developments and, where necessary, obtain expert legal advice for the e ective implementation of compliance initiatives; compliance risks identified and assessed as part of compliance management processes. There is both an executive and board level (Audit and Risk Committee) oversight of these issues. Potential legal ramifications of non-compliance with the proposed carbon tax, national greenhouse gas reporting regulations and the draft bill on climate change include monetary fines and/or prison sentences for those responsible of such oversight at Mediclinic.
Market	Relevant, always included	Climate change can and will alter consumer behavior and choice of service provider, according to their determination of being a climate-responsible organisation. Mediclinic could loose market share if it does not respond appropriately to climate change. Similarly, market-share could be lost if any Mediclinic hospital is forced out of commission for a period of time due to climate-related events such as flooding or water shortages. This risk is assessed by the Clinical Performance and Sustainability Committee of the Board and also by each hospital as part of their monthly risk management activities and reporting into the Aspect Registry.
Reputation	Relevant, always included	Climate change can and will alter consumer behavior and choice of service provider, according to their determination of being a climate-responsible organisation. Mediclinic could loose market share if it does not respond appropriately to climate change and be seen as an environmentally responsible organization. This risk is assessed by the Clinical Performance and Sustainability Committee of the Board and when necessary, such as during the recent Western Cape water crisis, separate focused management committees are established.
Acute physical	Relevant, always included	In recent years our operations have experienced various acute physical events that make this a relevant risk. Examples include flood storms in Gauteng province during 2016, and severe drought in the Western Cape Province during 2017 and 2018. The risk is assessed by the Clinical Performance and Sustainability Committee of the Board and, where necessary, focussed management committees established to respond to such events.

		Each hospital is also required to report risk associated with any acute physical impact through its monthly Aspect Registry.
Chronic physical	Relevant, always included	Chronic physical climate risks are evaluated at a group level by the Clinical Performance and Sustainability Committee (and when necessary through the establishment of focused management committees) and also an operational level by each hospital's risk management processes. Both of these are supported and informed by the group Safety, Health, Environment and Quality department. Part of this risk management is to assess the potential disease burden and change in geographical occurrences as a result of climate change, e.g occurrences of malaria are expected to increase in the eastern and northern regions of South Africa as a result of increased rainfall and flooding events.
Upstream	Relevant, sometimes included	Where any of the above risks might materially apply to our upstream supply chain, we will analyze the risk at the appropriate level. An example includes the potential increase in input costs to fossil fuel supplies (electricity, diesel, petrol and LPG) when a carbon tax is implemented in South Africa in 2019. This risk is currently being assessed by our Safety Health Environment and Quality department.
Downstream	Relevant, sometimes included	Where any of the above risks might materially apply to our downstream supply chain, we will analyse the risk at the appropriate level. An existing example includes the use of water by our outsourced laundry services in the Western Cape. If these services are affected by water restrictions, we need to understand and respond to how the risk affects our own operations. Currently this risk is being managed by the newly-established Water Reslience Committee in our Western Cape Region. This Committee is made up of group engineers, hospital managers, procurement officers and the Safety Health Environment and Quality department.

C2.2d

(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

At Group level the Board mandated both the Audit and Risk Committee and the Clinical Performance and Sustainability Committee to monitor the risk management process and systems of internal control of the Group, and to identify any risks or opportunities that might occur due to climate change. The objective of Group risk management is to establish an integrated and effective risk management framework within which important risks are identified, quantified, prioritised and managed in order to achieve an optimal risk/reward profile.

At a Group level, a transitional risk that affects the whole Group is the introduction of a carbon tax in South Africa during 2019. It is the responsibility of the Board, executive and individual hospital management to be kept abreast of this emerging regulation in their risk management activities, and this is informed through Mediclinic's Legal and SHERQ departments and the Audit and Risk Committee of the Board.
The Enterprise-wide Risk Management ("ERM") policy defines the risk management objectives, risk appetite and tolerance, methodology, process and the responsibilities of the various risk management role players in the Group and is subject to annual review. The Clinical Performance and Sustainability Committee has the role to evaluate whether any risks or climate-related issues provide opportunities for the Group.
At asset or operational (hospital) level the Group has an environmental policy to identify aspects of business that could have a significant impact on the environment. All business divisions within the Group are required to implement environmental management systems such as the ISO 14001 standard and have it certified by an internationally recognised body.
A generic aspect register with baselines for healthcare risk waste, water, electricity, paper, hazardous waste, gases and climate change is captured in the Group's CURA risk management software and is used to evaluate the management of a climate-related risk or opportunity.

A significance rating is allocated to each risk/opportunity based on the likelihood of occurrence, severity as well as the extent of exposure.
All risks and opportunities must be addressed in the environmental management programme with action plans on how to mitigate the risk. High risks will automatically be flagged inside CURA and a corrective action request will be issued to the hospital to be completed in the CURA risk management system.

A condition status is also assigned to each risk/opportunity, i.e. controlled condition: everyday occurrence or uncontrolled condition: sporadic or emergency situation. The risk/opportunity or aspect identification is used for the setting of environmental objectives intended to result in meaningful improvements in the organisation's environmental performance.

A physical climate risk case study includes the response to the 2017-2018 drought and impending water crisis in the Western Cape, where 11 Mediclinic hospitals are located. a Water Response Committee was established and mandated by the Clinical Performance and Sustainability Committee (of the Board) to implement and manage and appropriate response to ensure that these hospitals were able to continue operations regardless of potential municipal water cut-offs.
The Audit and Risk Committee regularly receives reports on and considers the activities of the Mediclinic Southern Africa as well as the risks captured in the risk management system, CURA, when it meets three times a year and report its findings to the Board.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Increased pricing of GHG emissions

Type of financial impact

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

The South African carbon tax will be implemented during 2019 at a rate of R120 per ton of CO2e above a basic tax-free threshold of 60 per cent during the first phase of implementation - until December 2020. Offsets of between 5% to 10% will allow emission-intensive and trade-exposed industries to invest in projects outside their normal operations to help reduce their carbon tax liabilities. From 2021, the five-year phase 2 will be applied. According to the latest draft Carbon Tax Bill released in November 2017 only scope 1 emissions are expected to be liable to tax, suggesting the direct impact on Mediclinic will be minimal. However, Eskom might be taxed in future phases of the tax and will most likely pass on the costs, which will increase operational costs (electricity bills). Further, the carbon tax may prompt an increase in prices generally, leading to reductions in the disposable income of consumers.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

0

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

It is anticipated that only companies with Scope 1 emissions of more than 100 000 tCO2e per annum will be subjected to the carbon tax on stationary combustion. Further, diesel and petrol-related greenhouse gas emissions will be included in the fuel tax regime. It is therefore anticipated that Mediclinic will have a nil liability in terms of carbon tax due to its small amount of Scope 1 emissions, in this first phase of the carbon tax.

Management method

Mediclinic is managing the carbon tax risk as it gave input to research and studies done by the South African National Treasury on the carbon tax. It provided its comments to the SA National Treasury Carbon Tax Policy Paper as well as gave input to the Carbon Offsets Paper. Mediclinic closed down four of its five operational incinerators due to environmental and financial reasons, hence significantly reducing its Scope 1 emissions. The Group's healthcare risk waste is now treated by means of electro thermal deactivation or autoclaving and only anatomical waste is treated by incineration. The remainder of waste to incinerate has been outsourced to Healthcare Risk Waste (HCRW) service providers resulting in an increase in kilometres travelled by third parties and Scope 3 emissions. R22 HCFC refrigerant gas is captured through contractors or capturing plants thereby preventing the air-conditioning gas being released into the atmosphere.

Cost of management

0

Comment

No direct costs are associated with government liaison other than staff salaries, travel and accommodation expenses.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Enhanced emissions-reporting obligations

Type of financial impact

Increased costs and/or reduced demand for products and services resulting from fines and judgments

Company- specific description

The Department of Environmental Affairs (DEA) on 3 April 2017 gazetted regulations for mandatory reporting of greenhouse gas emissions under the National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004). The purpose of the regulations is to introduce a single national system for annual greenhouse gas emissions reporting. The South African Revenue Service (SARS) will be the main implementing administrative authority on the tax liability assessment while the DEA will lead the monitoring, reporting and verifying emissions process, which will form the tax base. DEA will directly collect the process emissions information while the Department of Energy (DOE) will supply the energy combustion data. All information will feed into the National Atmospheric Emissions Inventory System (NAEIS). According to the draft Carbon Tax Bill, companies will self assess and submit their emissions to SARS and if found to be incorrect, could be penalized. In order to assess the carbon tax accurately, reporting of GHG emissions will be required together with verification of the reported emissions. This will place a compliance burden on Mediclinic coupled with related additional costs for reporting and verification while non-compliance could be met with penalties. Further, emission reporting could lead to more stringent licence to operate criteria, e.g. for inclusion in the FTSE/JSE Responsible Investment Index.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

0

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

It is estimated that penalties for non-compliance to submit GHG inventories and data would be capped at R5 000 000 for a first offence. However, there is no potential financial impact for Mediclinic as current resources would be able to cope with the emissions reporting obligation.

Management method

Mediclinic appointed external consultants to determine its organizational carbon footprint. This process is very time consuming and spreadsheets and processes to obtain the required data have been refined over the past few years. During CY2016 Mediclinic had its Carbon Footprint Inventory verified by an independent third party to ensure it is free of material misstatements. TravelIT software is used to record all flight bookings resulting in more accurate calculation of Scope 3 emissions. In future consideration will be given to acquire carbon management software to integrate carbon management reporting with current operating systems. These actions are not expected to affect the likelihood or magnitude of the risk.

Cost of management

250,000

Comment

Costs of about R250 000 per annum has been incurred relating to the appointment of external consultants to compile the carbon footprint and disclosure thereof as well as the external verification of the carbon inventory.

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact

Reduced revenue from decreased production capacity (e.g., delayed planning approvals, supply chain interruptions)

Company- specific description

Any climate-related impact that affects water supply - such as extreme drought or disruption of water infrastructure due to flooding - is a risk to Mediclinic. Water plays a critical role in the effective functioning of any hospital - without continuous water supply, hospitals cannot ensure hygiene with an increase in infection control risk. Water shortages, no or limited supply, could cause the shutdown of strategic equipment resulting in limited services in the kitchen and laundry at hospitals in Southern Africa. Without water, there can be no hospital.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

As the full implications of this climate-related risk are unknown, so the potential financial impact is unknown.

Management method

Bulk water storage facilities have been installed at hospitals and boreholes were sunk for strategic sustainability. Planned maintenance procedures have been implemented for the measurement and control of water quality. We have instituted initiatives to reduce water consumption, which include employee awareness training and monitoring of uncontrolled leakages. Further, we have installed efficient technologies such as water saving instrument washers; water saving washing machines for laundry; water saving autoclaves and waste maceraters

Cost of management

24,000,000

Comment

R24m has been spent in the recent past to implement various water resilient initiatives at our Western Cape hospitals in response to the drought and associated water crisis in this area.

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Acute: Other

Type of financial impact

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

Electricity consumption accounts for about 73% of Mediclinic Southern Africa's carbon emissions. About 55% of electricity is consumed by air conditioning units. A change in the mean average temperature will have an impact on the energy consumption and carbon emissions from air conditioning units of Mediclinic Southern Africa.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

2,000,000

Potential financial impact figure – maximum (currency)

3,500,000

Explanation of financial impact figure

Of the annual electricity bill of approximately R192 million air conditioning accounts for about R104 million. An increase in temperature resulting in a 2% energy consumption increase could cost Mediclinic approximately R2.1 million per year extra.

Management method

Energy is a key risk across the Group and various energy conservation and cost-efficient initiatives are implemented. To mitigate the risk of changing temperatures Mediclinic is looking to replace and upgrade inefficient air conditioning plants at the Group's largest electricity-consuming facilities.

These actions will reduce the magnitude of the risk.

Cost of management

0

Comment

Management costs are currently unknown.

Identifier

Risk 6

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Reputation: Increased stakeholder concern or negative stakeholder feedback

Type of financial impact

Reduced revenue from decreased demand for goods/services

Company- specific description

Even though, as a hospital group, we are an essential service to society, if we are seen to be acting in an environmentally insensitive manner (such as needlessly wasting water), we will be viewed in a negative light by all our stakeholders including doctors, employees and customers. This could result in a decreased demand for our hospitals and associated services.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

100,000,000

Potential financial impact figure – maximum (currency)

150,000,000

Explanation of financial impact figure

The potential financial implication of reputational risk will depend on the environmental incident and the severity of the issue resulting in a loss of stakeholder confidence and support. Mediclinic's 2017 brand value is estimated at R11 663 million - according to Brand Finance South Africa. An estimated 1% loss in reputation could result in a loss of brand value of approx. R116.6 million together with actual revenue. http://brandfinance.com/images/upload/brandfinance_sa_2017.pdf

Management method

Mediclinic Southern Africa is committed to ensuring that its environmental management systems and practices are aligned with international best practices to safeguard its reputation and provide assurance about the environmental quality, safety and reliability of Mediclinic's processes and services. The ISO 14001:2015 Specification for Environmental Management Systems is an environmental management system that encourages good management practices that limit the impact of industry on the environment. The purpose of the system is to conserve resources, use them effectively and to minimise waste. Categories managed in the environmental aspect register are the utilisation of resources and waste management, which include electricity, water, gases, paper, healthcare risk waste, hazardous waste and normal waste. 42 of Mediclinic's 53 hospitals are ISO 14001 certified by an external assurance provider (the National Quality Assurance London), as accredited by the United Kingdom Accreditation Services. All the group's hospitals are ISO 14001 trained, follow the same environmental management practices and are subject to annual internal audits.

Adhering to the system procedures and processes is expected to reduce the likelihood and magnitude of the risk.

Cost of management

2,300,000

Comment

The ISO 14001:2015 Environmental Management System and certification costs Mediclinic Southern Africa approximately R2.3 million per annum.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

A weak El Nino weather affect has been forecasted by the South African Weather Services for late Spring and Summer (September - December) 2019. This will potentially have an affect on water availability at some of our hospitals. We have undertaken a priority risk assessment to evaluate which of our hospitals are most at risk and what water augmentation actions need to be put in place.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

16,500,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

This is a worst case financial scenario to implement adequate boreholes and water filtration plants at those hospitals identified at most of need for additional water augmentation methods to withstand the effects of a weak El Nino drought situation in South Africa in late 2019.

Management method

We have undertaken a priority risk assessment to evaluate which of our hospitals are most at risk and what water augmentation actions need to be put in place. Criteria used to understand the risks included: financial impact; drought cycle impact; dam levels impact; local authority impact; history impact; and, hospital infrastructure condition.
These risks were weighted as follows:
financial impact - 50%;
drought cycle impact - 10%;
dam levels impact - 5%;
local authority impact- 25%;
history impact - 5%;
hospital infrastructure condition - 5%.
Out of this, seven of our hospitals were identified as requiring additional borehole and water treatment infrastructure, including Mediclinic Limpopo; Mediclinic Gariep; Mediclinic Welkom; Mediclinic Vereeniging; Mediclinic Bloemfontein; Mediclinic Pietermaritzburg; Mediclinic Tzaneen.

Cost of management

0

Comment

The priority action plans to understand this risk is a core part of tMediclinic's risk management strategy and, as such, the financial costs do not represent a material additional cost to existing management costs.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Type of financial impact

Reduced operational costs (e.g., through use of lowest cost abatement)

Company-specific description

Anticipated increases in energy taxes or levies are likely to substantially increase the operational costs in South Africa. However, with energy efficiency savings, Mediclinic can unlock large operational cost savings and benefit from potential tax allowances for energy-efficient equipment and renewable energy technologies.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1,500,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The potential financial implications will emanate from energy cost savings and tax allowances that can be claimed on the equipment. The renewable energy initiatives, once operational, will produce cost savings of approximately R1.5 million per annum and reduce carbon emissions by approximately 1 158 tCO2e per annum.

Strategy to realize opportunity

In order to benefit from tax and regulatory opportunities while at the same time combat the above inflation increases experienced in energy tariffs, Mediclinic's Energy Initiative Committee measures the energy use within the group to determine where savings can be achieved and evaluates various new energy-efficient and renewable technologies.
During 2018 Mediclinic Southern Africa generated 795 015 kWh in renewable energy. This is an increase of 81.61%. from 2017's total of 437 765 kWh. These kWh generated is included in the total electricity consumption figures.
Renewable energy is generated by photovoltaic installations. Mediclinic installed altogether 8 PV plants. (MediclinicThabazimbi 106kWp, Mediclinic Lephalale 119 kWp, Mediclinic Heart 145, Mediclinic Constantiaberg 677 kWp, Mediclinic Sandton 211 kWp, Wits Donald Gordon Medical Centre 119 kWp, Mediclinic Hoogland 251 kWp and Mediclinic Welkom 435 kWp) Sandton installed additional solar panels to pre-heat water going to the heat pump while Mediclinic Durbanville replaced 1 x heat pump with a 35kW high efficiency heat pump.

Cost to realize opportunity

22,290,000

Comment

Mediclinic invested capital of about R23million in the 8 solar PV plants constructed during the reported year (Thabazimbi - R1.3m; Lephalale - R1.5m: Constantiaberg - R7m; Heart Pretoria - R1.5m; Sandton - R2.4m; Wits Donald Gordon R1.6m; Hoogland - R1.8m; Welkom - R4.8m).

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Type of financial impact

Returns on investment in low-emission technology

Company-specific description

Incentives or subsidies available for energy efficient equipment will reduce the capital costs of installing new energy efficient equipment to save energy consumption and add to Mediclinic's bottom line.

Time horizon

Current

Likelihood

Likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

4,300,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The potential financial implication from registering as an Esco results from the Eskom subsidies receivable on the energy equipment to be installed for energy consumption savings. Over the years Mediclinic received about R4.3 million in subsidies from Eskom. This makes a substantial contribution to the capital cost of the new equipment and makes financial calculations viable.

Strategy to realize opportunity

In order to make use of the available incentives, subsidies and rebates from Eskom to defray capital costs, Mediclinic registered as an Energy Services Company (Esco) and is listed on the Eskom-DSM database as such as part of the Eskom Demand Side Management (DSM) and Energy Efficiency Programme.

To be able to register as an Esco Mediclinic had to demonstrate that it possesses the required technical competency, experience and expertise on energy management as well as project management expertise.

During CY2018 Mediclinic collaborated with the NBI's Private Sector Energy Efficiency Project (PSEE) to identify energy waste in all hospitals. The audit recommendations will be reviewed before implementing the changes.

Cost to realize opportunity

650,000

Comment

Mediclinic paid a once off fee of R83 000 to register as an Esco with Eskom. Mediclinic paid R550 000 for the audit to be done by the PSEE.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of more efficient production and distribution processes

Type of financial impact

Reduced operating costs (e.g., through efficiency gains and cost reductions)

Company-specific description

Changes in the availability of waste landfill sites, a continued increase in the cost of such sites, and the associated greenhouse gas emissions of landfill sites (Scope 3 emission) has focused Mediclinic's operations on waste management and increased the amount of waste that is recycled or recyclable. This should affect Mediclinic's cost of operation and competitiveness in Southern Africa, as well as reduce our emissions associated with sending waste to landfill sites.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

480,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The potential financial impact will emanate from reducing the number of third party waste deliveries to landfill sites while service providers can use recycled materials in their production processes which is cheaper than using virgin materials. Incinerator gas and carbon emissions generated will also be reduced.

During the year Mediclinic received income of about R480 000 from recycling activities based on the type of waste material recycled.

Strategy to realize opportunity

Mediclinic makes use of ISO 14001:2004 to manage and minimise waste that includes all waste streams. Each hospital also has a waste management plan.

Mediclinic is also part of the Healthcare Waste Reduction Forum of the National Department of Environmental Affairs, and has also engaged with the Department's Environmental Affairs' Hazardous Waste Management Support, Chemicals and Waste Branch.

A research study is in progress to evaluate what other non-contaminated plastic waste can be diverted from landfill sites.

Cost to realize opportunity

3,700,000

Comment

The 18 waste management companies used on site cost Mediclinic about R2.2 million per annum after taking the recycling income into account. This includes all transportation, employees on site to do the sorting and a management fee. Not all hospitals make use of waste management companies as some use private recyclers that collect. The recycling bin projects at hospitals was implemented at a cost of about R194 000. The bins to recycle medical PVC (e.g. drip bags) are supplied for free by Adcock Ingram. The Newster NW10 Sterilisation System was purchased for a capital cost of about R1.26 million.

Identifier

Opp4

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Reduced water usage and consumption

Type of financial impact

Reduced operating costs (e.g., through efficiency gains and cost reductions)

Company-specific description

Mediclinic recognises water as a valuable resource where some 84% of South Africa's freshwater systems are threatened and more than 40% are in a critical condition. It is envisaged that the amount of safe water at our disposal could drop by up to 40% in the next 15 years if we do not change the way we use water. The Western Cape region is experiencing its worst drought in recorded history . As a result, some of the hospitals are experiencing daily and sometimes weekly periods without water. By managing water consumption as well as the recycling thereof the water supply and costs are managed.

In addition, there is the potential for a weak El Nino weather effect to occur in Southern Africa during the latter part of 2019, resulting in drought conditions in parts of the region.

Off-grid water collection and treatment plants have been put in place in our hospitals that have been, or are expected, to be affected by potential

water shortages. This has resulted in greater resilience and independence of municipal water supplies, thereby ensuring we are not adversely affected by water shortages, cut-offs or tariff increases.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Potential financial impact is unknown, but will be directly related to increased water tariff costs.

Strategy to realize opportunity

A Corporate Sustainable Water Management Strategy was adopted in 2016. The strategy includes actions to mitigate and address various water risks, including water augmentation and water efficiency actions, including employee behavior change. Mediclinic has introduced a group-wide water reduction target of 450 liters/bed-day sold.

In the Western Cape, specific augmentation actions have been implemented including the drilling of boreholes at all hospitals, implementation of water treatment plants at all hospitals and the implementation of reverse osmosis plants at those hospitals that require them.

In seven of our other hospitals, we have implemented additional borehole and water treatment facilities. These include: Mediclinic Limpopo; Mediclinic Gariep; Mediclinic Welkom; Mediclinic Vereeniging; Mediclinic Bloemfontein; Mediclinic Pietermaritzburg and Mediclinic Tazaneen.

Cost to realize opportunity

40,500,000

Comment

R24m was budgeted in the reporting for water resilience and augmentation strategies in our Western Cape hospitals in response to the drought and water crisis in the that region.
R16,5m was spent on borehole and water treatment augmentation in our hospitals in other parts of the country.

Identifier

Opp5

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Type of financial impact

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

Company-specific description

Mediclinic Southern Africa is committed to managing the resources consumed and the associated environmental impacts and would like to be seen as a leader in environmental issues in the healthcare industry. The reputational benefits of being a sustainable brand and responsible corporate citizen will result in market growth and opportunities for expansion in Southern Africa.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

70,000,000

Potential financial impact figure – maximum (currency)

140,000,000

Explanation of financial impact figure

The potential financial implications from being a sustainable brand and responsible corporate citizen will be impacted by an influx of patients due to greater customer confidence and loyalty and reduced operational costs for electricity, water, waste and resources. An estimated 0.5% gain in reputational benefits could result in an increase of revenue of approximately R72 million per annum based on current revenue levels.

Strategy to realize opportunity

In order to enhance Mediclinic's reputation as a sustainable brand and responsible corporate citizen it is annually measuring, assessing and verifying its carbon footprint and is publicly disclosing its practices and performance through the Carbon Disclosure Project. Mediclinic has set a target to reduce energy consumption on bed days sold by 3.09% per year.

During CY2016 Mediclinic expanded the Energy Initiative Committee function to the Natural Resources Committee to include all natural resources. Mediclinic believes that by managing and containing operating costs and by managing its impact on the environment while providing

quality of care and facilities it will be regarded as a respected and trusted provider of hospital services by patients, doctors, and funders of healthcare.

Cost to realize opportunity

225,000

Comment

Mediclinic has spent about R225 000 per annum to appoint external consultants to compile the carbon footprint and disclosure thereof as well as the external verification of the carbon inventory.

C2.5

(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description
Products and services	Impacted	Contraints on natural resource availability will affect some of Mediclinic's products and services. Any form of water shortages incurred by severs drought and/or electricity outages will severely impact our ability to provide our products and services. Both water and electricity shortages have already been experienced - electricity load shedding in 2017; the Western Cape drought crisis in 2017 and the potential for an El Nino drought situation throughout Southern Africa in the latter part of 2019 - forcing us to implement electricity and water augmentation actions at many of our hospitals. The magnitude is high, as there are both operational and capital expenditure considerations, and the impact is current.
Supply chain and/or value chain	Impacted for some suppliers, facilities, or product lines	Increase in energy costs - either through regulation such as increased fossil fuel taxes/levies or market forces - will impact suppliers in the cost of their products and services to Mediclinic. This includes pharmaceutical distribution. The magnitude of the impact is medium, and the timeframe is within the near future as a carbon tax on liquid fuels will be applied as a levy on the cost of petrol, diesel and LPG. The introduction of a carbon tax has taken place in June 2019 in South Africa.

Adaptation and mitigation activities	Impacted	Contraints on natural resource availability is demanding adaptation and mitigation responses by Mediclinic. A recent example was the Western Cape drought where the threat of water availability impacted Mediclinic's facilities and where water augmentation actions were implemented. This included the drilling of boreholes at all our hospitals in the region and installation of water treatment facilities at these hospitals. At those hospitals demanding even more stringent treatment, reverse osmosis facilities have been installed. The current magnitude of the impact is high.
Investment in R&D	Not yet impacted	As a hospital group, Mediclinic responds to its customers needs in a manner that does not require research and development. Hence, climate change has not impacted on any R&D activity of the Group. It is uncertain whether it will in the future or not. If such requirement is demanded of Mediclinic, then this will be factored into the financial planning of the Group. Time horizon is unknown.
Operations	Impacted	Increase in energy costs - either through regulation such as increased fossil fuel taxes/levies or market forces - will impact suppliers in the cost of their products and services to Mediclinic, and hence in the cost of operations to the hospitals. This includes pharmaceutical distribution and electricity costs. The magnitude of the impact is expected to be medium, with the timeframe being the near future as a carbon tax is expected to be passed on in the cost of electricity and on liquid fuels such as petrol, diesel and LPG.
Other, please specify	Not yet impacted	Climate change poses both a reputational risk, and opportunity, depending on how the marketplace perceives Mediclinic's response to the environmental issues posed by climate change. Time horizon is expected within the next five years.

C2.6

(C2.6) Describe where and how the identified risks and opportunities have been factored into your financial planning process.

	Relevance	Description
Revenues	Not evaluated	While Mediclinic expects climate change risks and opportunities to impact its projected revenues, for example increased demands for healthcare services in the events of climate-related pandemics or natural disasters such as floods, such revenue impacts are still to be evaluated, including the magnitude and timeframe of the impact.
Operating costs	Impacted	Increased costs in energy, water and waste disposal services have all impacted the operations costs of Mediclinic. During 2017, electricity costs increased xx , water costs xx and waste disposal costs xx. It is anticipated that further costs relating to a carbon tax will affect energy costs going forward as will increased water costs being implemented in the Western Cape as a means to curb regional water consumption. Viewed as an opportunity, any energy, water or waste efficiency action will result in both total operating cost savings and operating costs per bed-day sold. Impact is currently low, but expected to increase to medium.
Capital expenditures / capital allocation	Impacted	Energy saving infrastructure such as the installation of PV plants on three hospitals has incurred direct and current capital expenditure of R7 million. Other energy efficiency expenditure has totaled some R710 000. Planned and future PV installations are budgeted for in the region of R32m and will provide over 3MW of power to an additional 9 hospitals. Water saving and augmentation measures in the Western Cape during 2017, in response to the drought has been allocated a current budget of R24 million. It is anticipated that further capital expenditure in response to climate change effects will be required and ongoing. The impact is high.
Acquisitions and divestments	Not evaluated	While climate change is expected to impact the financial evaluation of future acquisitions and divestments (e.g. location of hospitals due to physical risks such as flooding or sea-level surge), such evaluations have not yet been undertaken.
Access to capital	Not yet impacted	While climate change is expected to impact access to capital as capital providers implement increasingly stringent conditions relating to their own perceptions of climate change risk (e.g. not providing loans for

		hospitals deemed to be at risk from physical climatic risk), Mediclinic has not yet experienced such an impact on the access to capital but expects to do so in the medium term being five years or more.
Assets	Impacted	Existing assets, primarily being the hospitals owned by Mediclinic are being impacted by current risks and opportunities where climate resilient infrastructure is being implemented, e.g. PV plants to harness renewable energy and water augmentation measures to ensure uninterrupted supply of water and continuation of services. These measures are impacting the valuation of these assets beyond the immediate capital expenditure. The impact is high.
Liabilities	We have not identified any risks or opportunities	No liabilities foreseen and hence not factored into financial planning process.
Other		

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy?

Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?

No, but we anticipate doing so in the next two years

C3.1c

(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

Mediclinic International is committed to being a good corporate citizen and believes that sustainability must be integrated in its business strategy, focusing not only on its financial output, but also on managing and utilising social and environmental resources efficiently to ensure a sustainable business in the long term. This requires strategic thinking on the impacts of climate change and Mediclinic's response to it.

From a climate change perspective, the Group's business strategy is informed by the Group Sustainable Development Policy, Group Environmental Policy and the Code of Business Conduct and Ethics that codify Mediclinic's long-standing commitment to conducting business responsibly. The policies are reviewed annually by management, with recommendations to the Board's Clinical Performance and Sustainability Committee as part of the annual policy review.

The Group Environmental Policy aims to minimise Mediclinic's environmental impacts and guides the identification and management of all risks and opportunities relating to water use and recycling, energy use and conservation, emissions and climate change, and waste management and recycling. Mediclinic believes that strategic advantage can be obtained through using resources responsibly, thereby managing and containing operating costs through reducing fuel and electricity consumption and associated carbon emissions. Further, it will ensure ongoing access to water and energy supplies. By managing Mediclinic's impact on the environment while providing quality of care and facilities it will be regarded as a respected and trusted provider of hospital services by patients, doctors, and funders of healthcare.

A company specific example of our business strategy being influenced by climate change is the implementation within the strategy of a Corporate Sustainable Water Management Strategy, a water contingency plan to ensure that hospitals can continue operating smoothly, without interruption, for longer periods of time as well as a water contamination plan to mediate the low quality of municipal water from ineffective processes at purification plants. Mediclinic also expanded its Energy Initiative Committee function to the Natural Resources Committee to include all natural resources, including energy consumption and waste to landfill and recycling practices in response to the resource-affected realities of climate change.

In line with Mediclinic's strategy to reduce carbon emissions Mediclinic Southern Africa, during CY2016, started with the installation of solar PV systems at Mediclinic Hoogland, Mediclinic Welkom and Mediclinic Nelspruit to generate clean, renewable energy. A further R32m has been budgeted for the installation of PV systems into a further nine hospitals.

Other short term strategy influenced by climate change relate to the setting of targets to reduce Mediclinic's energy consumption on bed days sold by 3.09% per year to meet the South African government's target of reducing carbon emissions by 34% by 2020. Mediclinic aims to develop science-based carbon reduction targets in the next two years.

C3.1g

(C3.1g) Why does your organization not use climate-related scenario analysis to inform your business strategy?

Through our use of ISO 14001:2015 Environmental Management System, climate Change is one of our aspects where we do a risk assessment based on scenarios and put action plans into place in our environmental management plan. These scenarios are based on financial impact, drought cycle impact, dam levels impact, local authority infrastructure impact, history impact and hospital infrastructure condition.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Intensity target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Scope

Scope 1 +2 (market-based)

% emissions in Scope

100

Targeted % reduction from base year

3.09

Metric

Other, please specify

tCO2e/bed-day sold

Base year

2017

Start year

2017

Normalized base year emissions covered by target (metric tons CO2e)

0.087

Target year

2018

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

% of target achieved

100

Target status

Retired

Please explain

The target is an ongoing (rolling) annual target and was completed during the reported period. The target was achieved due to various energy efficiency measures, installation of additional renewable energy and behaviour change within Mediclinic, as well as a slightly lower emission factor for the South African electricity grid.

% change anticipated in absolute Scope 1+2 emissions

-3.09

% change anticipated in absolute Scope 3 emissions

0

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

Target

Energy usage

KPI – Metric numerator

Gigajoules (gj)

KPI – Metric denominator (intensity targets only)

Per bed-day sold

Base year

2017

Start year

2017

Target year

2018

KPI in baseline year

0.327

KPI in target year

0.318

% achieved in reporting year

Target Status

Please explain

The target is an annual target and was completed during the reported period. The target was achieved.

Part of emissions target

Int1

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	5	0
To be implemented*	0	0

Implementation commenced*	0	0
Implemented*	8	841
Not to be implemented	13	

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative type

Energy efficiency: Building services

Description of initiative

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

94

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

Investment required (unit currency – as specified in C0.4)

1,920,000

Payback period

Estimated lifetime of the initiative

6-10 years

Comment

At Mediclinic Constantiaberg old T5 fluorescent bulbs have been replaced with new energy efficient LED lighting fixtures. All "new-build" constructions will have to use LED lighting in future.

Initiative type

Low-carbon energy installation

Description of initiative

Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

747

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

Investment required (unit currency – as specified in C0.4)

15,808,000

Payback period

Estimated lifetime of the initiative

16-20 years

Comment

Solar PV plants were installed at 7 different Mediclinic hospitals during 2018, namely: Thabazimbi, Lephalele, Heart Pretoria, Sandton, Wits Donald Gordon, Hoogland, Welkom,

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	All new air-conditioning and refrigerant equipment purchased makes use of refrigerants other than Freon or R22, which is being phased out in South Africa and Namibia.
Dedicated budget for energy efficiency	The Energy Initiative Committee measures the energy utilisation within the group to determine where savings can be achieved and it evaluates various new energy efficiency technologies.
Dedicated budget for low-carbon product R&D	The Energy Initiative Committee investigates and implements solar photovoltaic (PV) systems to generate renewable energy at hospitals.
Financial optimization calculations	Rising electricity costs have been an incentive to reduce electricity consumption and resultant carbon emissions through investments in energy efficient equipment and alternative renewable energy sources.
Partnering with governments on technology development	Mediclinic Southern Africa is a listed and registered Energy Services Company (Esco) to implement the Eskom Demand Side Management (DSM) and Energy efficiency programmes at Mediclinic while making use of the available subsidies and rebates to defray capital costs of equipment. It also partnered with the NBI's Private Sector Energy Efficiency Project (PSEE) to share knowledge and leverage off the skills of experts.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

No

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

April 1, 2016

Base year end

March 31, 2017

Base year emissions (metric tons CO2e)

23,841.37

Comment

2016 is used by Mediclinic as the base year due to it being the first year in which complete and accurate data is verifiably available.

Scope 2 (location-based)

Base year start

April 1, 2016

Base year end

March 31, 2017

Base year emissions (metric tons CO2e)

159,570.94

Comment

Scope 2 (market-based)

Base year start

April 1, 2016

Base year end

March 31, 2017

Base year emissions (metric tons CO2e)

159,570.94

Comment

No low-carbon electricity, heat or steam purchased. Hence, market-based Scope 2 emissions the same as location-based.

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

22,422.09

Start date

January 1, 2018

End date

December 31, 2018

Comment

In 2017, we changed our reporting year to a calendar year (January-December) in alignment with our new financial reporting year.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

No low carbon instruments purchased. Hence, location and market-based Scope 2 emission are the same.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

143,337.77

Scope 2, market-based (if applicable)

143,337.77

Start date

January 1, 2018

End date

December 31, 2018

Comment

No low-carbon contractual electricity instruments purchased.

C6.4

(C6.4) Are there 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

C6.4a

(C6.4a) 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

Newcastle Day Clinic; Welkom Day Clnic; Sandton Day Clinic

Relevance of Scope 1 emissions from this source

Emissions excluded due to recent acquisition

Relevance of location-based Scope 2 emissions from this source

Emissions excluded due to recent acquisition

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions excluded due to recent acquisition

Explain why this source is excluded

These are newly established "day-clinics" without a full reporting year's worth of data. Their total emissions would be less than 2.5% of total emissions and, hence, are considered immaterial. They will be included in the 2019 carbon footprint report.

Source

Air conditioning and refrigeration emissions from non-hospital buildings (corporate office buildings).

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

No emissions excluded

Relevance of market-based Scope 2 emissions from this source (if applicable)

No emissions excluded

Explain why this source is excluded

Emissions from these sources cannot be calculated as data is unavailable from landlords. However, such emissions will be less than 2.5% of total emissions and are therefore deemed immaterial and not relevant.

C6.5

(C6.5) Account for your organization's Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO2e

529.94

Emissions calculation methodology

Office paper: 313 tonnes of office paper purchased. Emissions calculated using latest environmental data provided by manufacturer of office paper (Mondi) for tonnes of CO2e emitted in the manufacturing process of one tonne of paper, AND using Eskom 2018 emission factor to calculate emissions associated with electricity consumption in the manufacturing of one tonne of paper.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Explanation

Other purchased goods and services: To still be evaluated.

Capital goods

Evaluation status

Relevant, not yet calculated

Explanation

A detailed evaluation of emissions associated with capital goods purchased still to be undertaken.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Metric tonnes CO2e

12,999.98

Emissions calculation methodology

Electricity Transmission and Distribution losses:150 881 858.60kWh electricity purchased from off-site electricity utilities. Defra (2018) emission factor for electricity transmission and distribution loss applied. All kWh used in calculation provided through invoices from Eskom and municipalities distributing Eskom electricity.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Explanation

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

5,449.68

Emissions calculation methodology

Emissions of third party vehicle fleets used for pharmaceutical deliveries; gas deliveries; kitchen and laundry deliveries; and, waste collections are calculated using kilometres and type of vehicles used as provided by the suppliers. Defra (2018) freight emissions factors used accordingly.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Explanation

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO2e

5,123.8

Emissions calculation methodology

Waste to landfill and recycled Tonnes of wet waste to landfill and tonnes of municipal waste recycled were used to calculate emissions according to the GHG Protocol using Defra's 2018 emission factors for municipal waste and Friedrich and Trois (2013), GHG emission factors developed for the collection, transport and landfilling of municipal waste in South African municipalities. Waste from operations was calculated using the available records from waste service suppliers.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Explanation

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

2,972.16

Emissions calculation methodology

Business travel in rental cars, commercial airlines, hotel accommodation and travel claims. Car rental - kilometres travelled, car engine size and type of fuel used provided by service provider. Defra's 2018 emission factors for business travel - land used. Air travel - flight information provided by service provider, including class of travel, departure dates and destination of each leg. Carbon Calculated determined the distance travelled. Defra's 2018 emission factors for business travel - air used. Hotel accommodation bednights provided by service provider. Emissions factor sourced from UNEP World Meteorological Organisation Climate Change And Tourism Report; A2.2.3 Accommodation. Travel claims - kilometres travelled provided by employees. Defra's 2018 emission factors for business travel - land used. Emissions were calculated according to the GHG Protocol. Assumptions: It is assumed that there is one occupant per vehicle rented. All fights are booked through the company therefore there are no privately booked flights that are not accounted for. Hotel accommodation was based on number of nights away on business travel and calculations were based on 1 person occupying a room per night. Emissions from travel claims were calculated using the available records.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Explanation

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO2e

13,950.02

Emissions calculation methodology

Employee commuting: Kilometres travelled according to the mode of transport used to calculate emissions according to the GHG Protocol using Defra's 2018 emission factors and calculated as 0.92 tCO2e x 15 891 FTEs. Assumptions: A commuting survey was completed for the Mediclinic Group. A total of 5 335 surveys were used representing 30% of Mediclinic FTEs and 12 public holidays were included in the calculation, except for nursing staff who work shifts. The emissions per FTE according to the surveys were extrapolated to reflect the number of FTEs for CY2018 (15 891 employees).

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Explanation

Upstream leased assets

Evaluation status

Relevant, calculated

Metric tonnes CO2e

1,955.75

Emissions calculation methodology

ER24 aircraft: Litres of aviation fuel consumed provided by service provider was used to calculate emissions according to the GHG Protocol using Defra's 2018 emission factors for fuel. Assumptions: 6 fixed-wing aircraft were used by ER24 and 1 helicopter , recording 770 336 litres of aviation fuel.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Explanation

As a hospital group, Mediclinic does not provide services or manufacture goods that need to be transported to clients.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Explanation

As a hospital group, Mediclinic is a service provider and does not manufacture or process products.

Use of sold products

Evaluation status

Not relevant, explanation provided

Explanation

As a hospital group, Mediclinic is a service provider and does not manufacture or process products consumed or used by customers.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Explanation

As a hospital group, Mediclinic is a service provider and does not manufacture or process products consumed or used by customers that need to be disposed of in any way at end of life.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Explanation

Mediclinic does not lease out any assets to third parties whose emissions are not included under the operational control boundary of the Scope 1 and 2 emissions reported in this submission.

Franchises

Evaluation status

Not relevant, explanation provided

Explanation

Mediclinic does not own any franchise operations.

Investments

Evaluation status

Relevant, not yet calculated

Explanation

Mediclinic has investments of different equity percentages in a number of subsidiary companies who are not listed on the Johannesburg Stock Exchange and, hence, are not required to calculate their carbon emissions under any company codes of corporate governance.
Plans are being made to evaluate which, if any, of these investments should be evaluated and included in the Mediclinic carbon footprint

Other (upstream)

Evaluation status

Not relevant, explanation provided

Explanation

There are no other upstream activities that need to be included in the Mediclinic carbon footprint.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Explanation

There are no other downstream activities that need to be included in the Mediclinic carbon footprint.

C6.7

(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.0000103859

Metric numerator (Gross global combined Scope 1 and 2 emissions)

165,759.85

Metric denominator

unit total revenue

Metric denominator: Unit total

15,690,000,000

Scope 2 figure used

Market-based

% change from previous year

9.47

Direction of change

Decreased

Reason for change

Decreased Scope 1&2 emissions year on year of -4.35%, as a result of energy efficiency measures introduced, increased use of renewable energy and better energy management and employee and consultant behaviour. Scope 2 emission factor from national electricity grid also slightly lower than previous year.
Increased revenue of 5.65%.

Intensity figure

0.0833

Metric numerator (Gross global combined Scope 1 and 2 emissions)

165,760

Metric denominator

Other, please specify

bed-day sold

Metric denominator: Unit total

1,988,923

Scope 2 figure used

Market-based

% change from previous year

4.6

Direction of change

Decreased

Reason for change

Energy efficiency measures introduced during the reporting year, inclusive of significant solar PV installations in four hospitals during 2018. Scope 2 emission factor from national electricity grid also slightly lower than previous year.

Intensity figure

0.1998

Metric numerator (Gross global combined Scope 1 and 2 emissions)

165,760

Metric denominator

square meter

Metric denominator: Unit total

829,565

Scope 2 figure used

Market-based

% change from previous year

6.5

Direction of change

Decreased

Reason for change

Total scope 1&2 emissions decreased while total square meterage increased between the two reporting years, resulting in lower emissions per square meter. Greater efficiency achieved through energy efficiency measures introduced during latest reporting year, inclusive of significant solar PV installations in four hospitals during 2018. Scope 2 emission factor from national electricity grid also slightly lower than previous year.

Intensity figure

10.431

Metric numerator (Gross global combined Scope 1 and 2 emissions)

165,760

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

15,891

Scope 2 figure used

Market-based

% change from previous year

1.7

Direction of change

Decreased

Reason for change

Decreased scope 1&2 emissions as a result of energy reduction initiatives, inclusive of significant solar PV installations in four hospitals during 2018. The number of full-time employees also, however, decreased thereby resulting in the decrease of CO2e/FTE being limited. Scope 2 emission factor from national electricity grid also slightly lower than previous year.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

No

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
South Africa	22,422

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By activity

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Stationary Fuel	355.88
Fugitive gases	1,298.48

Gas consumption (N2O, LPG, CO2, LNG)	10,424.93
Anaesthetic gases	4,665.23
Mobile fuels	5,677.57

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
South Africa	143,337.77	143,337.77	150,881,858.69	0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Tshwane	32,971.12	32,971.12
Northern	34,484.47	34,484.47
Central	28,481.45	28,481.45
WCC	19,453.68	19,453.68
WC1	25,494.26	25,494.26

Corporate	2,452.73	2,452.73

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) 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.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	339.39	Decreased	0.2	Mediclinic has been producing and consuming renewable energy onsite at three hospitals since before 2017. In 2018, Mediclinic produced and consumed solar energy at four new facilities, namely: • Mediclinic Heart – operation since October 2018 (3 months) • Mediclinic Lephalale – operational since July 2018 (6 months) • Mediclinic Thabazimbi – operational since April 2018 (9 months) • Wits Donald Gordon Medical Centre – operational since October 2018 (3 months) Some hospitals have hybrid solar water systems for heating water and heat pumps.
Other emissions reduction activities	829	Decreased	0.49	As in CDP2017, there have been further decreases of 39% in fugitive emissions and 23% of Outside of Scopes R22 Freon consumption. This is due to the replacement of old air-conditioning units across the group.

Divestment	0	No change	0	Mediclinic sold its Barbeton hospital during 2018 but, due to its very small size, its emissions are not considered to be material in the decrease in Mediclinic's overall scope 1&2 emissions.
Acquisitions	0	No change	0	There were no acquisitions by Mediclinc during the reporting period.
Mergers	0	No change	0	There were no acquisitions by Mediclinc during the reporting period.
Change in output	0		0	Although there were 606 less bed days sold in 2018, compared to 2017, (out of a total 1 988 923), this is not deemed a material reason for changes in Scope 1&2 emissions.
Change in methodology	5,771		3.33	Despite a 0.84% decrease in electricity consumption between 2017 -2018 (152 152MWh - 150 882 MWh), the decrease in the Eskom national grid emission factor for South African electricity (from 0.98kgCO2e/kWh to 0,95kgCO2e/kWh, 2018-2019) resulted in a net decrease of 3.87% of Scope 2 emissions, accounting for a 3.33% decrease in Scope 1&2 emissions.
Change in boundary	0	No change	0	There was no change in boundary by Mediclinic during the reporting period.
Change in physical operating conditions	0	No change	0	There was no change in emissions by Mediclinic that can be attributed to a change in physical operating conditions.
Unidentified	0	No change	0	There are no changes in emissions by Mediclinic that would be attributed to "unidentified" reasons.
Other	0	No change	0	here are no changes in emissions by Mediclinic that would be attributed to "other" reasons.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

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

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating	0	27,697.81	2,769,781

	value)			
Consumption of purchased or acquired electricity		0	150,881.89	150,881.89
Consumption of self-generated non-fuel renewable energy		795.02		795.02
Total energy consumption		795.02	178,579.7	179,374.72

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)

Diesel

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

13,489.95

MWh fuel consumed for self-generation of electricity

1,322.5

MWh fuel consumed for self-generation of heat

12,167.45

Comment

Diesel used in generators for electricity and in vehicles (heat).

Fuels (excluding feedstocks)

Liquefied Petroleum Gas (LPG)

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

1,166.8

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

1,165.34

Comment

LPG used in heating and cooking.

Fuels (excluding feedstocks)

Natural Gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

67.22

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

67.24

Comment

Natural gas used in heating.

Fuels (excluding feedstocks)

Petrol

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

12,978.37

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

12,978.37

Comment

Petrol used in vehicles (heat).

C8.2d

(C8.2d) List the average emission factors of the fuels reported in C8.2c.

Diesel

Emission factor

2.68779

Unit

kg CO2e per liter

Emission factor source

UK Government GHG Conversion Factors for Company Reporting; Dept. for Business, Energy and Industrial Strategy & Dept. for Environment Food and Rural Affairs; 2018 (version 1.01)

Comment

Liquefied Petroleum Gas (LPG)

Emission factor

1.51906

Unit

kg CO2e per metric ton

Emission factor source

UK Government GHG Conversion Factors for Company Reporting; Dept. for Business, Energy and Industrial Strategy & Dept. for Environment Food and Rural Affairs; 2018 (version 1.01)

Comment

Natural Gas

Emission factor

1,841

Unit

metric tons CO2e per MWh

Emission factor source

UK Government GHG Conversion Factors for Company Reporting; Dept. for Business, Energy and Industrial Strategy & Dept. for Environment Food and Rural Affairs; 2018 (version 1.01)

Comment

Petrol

Emission factor

2.30531

Unit

kg CO2e per liter

Emission factor source

UK Government GHG Conversion Factors for Company Reporting; Dept. for Business, Energy and Industrial Strategy & Dept. for Environment Food and Rural Affairs; 2018 (version 1.01)

Comment

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	2,117.52	2,117.52	795.02	795.02
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2f

(C8.2f) Provide details on the electricity, heat, steam and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3.

Basis for applying a low-carbon emission factor

No purchases or generation of low-carbon electricity, heat, steam or cooling accounted with a low-carbon emission factor

Low-carbon technology type

Region of consumption of low-carbon electricity, heat, steam or cooling

MWh consumed associated with low-carbon electricity, heat, steam or cooling

Emission factor (in units of metric tons CO2e per MWh)

Comment

No low-carbon instruments purchased.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description

Energy usage

Metric value

0.33

Metric numerator

Gigajoule

Metric denominator (intensity metric only)

Bed-day sold

% change from previous year

3.13

Direction of change

Increased

Please explain

The increase in energy consumption is largely seen in our emergency medical services (ER24) where there was a particular increase in vehicle fuel and aviation fuel (due to increased number of flying hours).

Description

Other, please specify

Water consumption

Metric value

0.56

Metric numerator

Kilolitre

Metric denominator (intensity metric only)

Bed-day sold

% change from previous year

5.09

Direction of change

Decreased

Please explain

Continued focus on water stewardship and savings, following drought in Western Cape during 2017/2018 (including installation of boreholes and reverse osmosis water treatment plants in all Western Cape hospitals) and general awareness on water conservation across all our hospitals.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 and/or Scope 2 emissions and attach the relevant statements.

Scope

Scope 1

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Mediclinic Southern Africa CY2018 GHG Verification Report - Final[1].pdf

Page/ section reference

p.12-16

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Mediclinic Southern Africa CY2018 GHG Verification Report - Final[1].pdf

Page/ section reference

p.12

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Mediclinic Southern Africa CY2018 GHG Verification Report - Final[1].pdf

Page/ section reference

P.12

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope

Scope 3- at least one applicable category

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Attach the statement

Mediclinic Southern Africa CY2018 GHG Verification Report - Final[1].pdf

Page/section reference

p.12-13

Relevant standard

ISO14064-3

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C6. Emissions data	Year on year change in emissions (Scope 1 and 2)	ISO140643	In the attached report, year-on-year changes in emissions verified. 1
C6. Emissions data	Year on year change in emissions (Scope 3)	ISO140643	In the attached report, year-on-year changes in emissions verified. 1
C8. Energy	Other, please specify Energy-related data used for GHG Inventory	ISO14064-3	In the attached separate report, year-on-year changes in emissions verified. 2

[1]Mediclinic Southern Africa CY2018 GHG Verification Report - Final[1].pdf

[2]MC Verification_June2019.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, but we anticipate being regulated in the next three years

C11.1d

(C11.1d) What is your strategy for complying with the systems in which you participate or anticipate participating?

Executive directors and senior executives at Mediclinic have met with Industry Bodies who lobby government regarding new legislation such as domestic carbon taxes. Mediclinic is managing the carbon tax risk by providing input and advice to research and studies done by the South African National Treasury on the carbon tax. It provided its comments to the SA National Treasury Carbon Tax Policy Paper as well as giving input to the Carbon Offsets Paper.

The South African Carbon Tax will be introduced in a phased approach in June 2019 and, as such, does not impact on the reported period (calendar year 2018).

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

No, but we anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Compliance & onboarding

Details of engagement

Other, please specify

We require all our on-site suppliers such as laundry, cleaning services and doctors to comply with our target of 20 litre of water per staff member per day.

% of suppliers by number

2

% total procurement spend (direct and indirect)

65

% Scope 3 emissions as reported in C6.5

20

Rationale for the coverage of your engagement

We engage with the top 26 of our suppliers, by spend, out of a total of 380, through strategic quarterly reviews. Engagement includes issues of supplier environmental performance and climate change risks and responses.

Impact of engagement, including measures of success

Engagement is currently focused on direct impacts to our operations, such as water conservation by on-site service providers (doctors, caterers, laundry and cleaning suppliers).

Comment

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers

Trade associations

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Carbon tax	Neutral	Executive directors and senior executives at Mediclinic meet with the Industry Bodies who lobby the government regarding new legislation such as domestic carbon taxes. Mediclinic is managing the carbon tax risk as it gave input to research and studies done by the South African National Treasury on the carbon tax. It provided its comments to the SA National Treasury Carbon Tax Policy Paper as well as gave input to the Carbon Offsets Paper.	Mediclinic accepts that under South Africa's international commitment to reduced national greenhouse gas emissions, certain financial and legislative initiatives need to be introduced. As such, Mediclinic is in support of the proposed carbon tax legislation. Where possible, Mediclinic will work with policymakers to ensure that such a solution is relevant and appropriate.
Adaptation or resilience	Support	Mediclinic has directly engaged with provincial and metropolitan policy-makers and authorities with regard the Western Cape water crisis of 2017 and 2018. In particular, Mediclinic has actively participated in Major Incident Medical Management and Support (MIMMS) program of the Western Cape government and, also, the Health Services Continuity Disaster plan of the Western Cape government.	Support for and continued engagement in all water saving and management programs devised by the Western Cape government to ensure supply of potable water to Cape Town and to the essential services identified by the Western Cape government, which includes healthcare services.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

South African Federation of Hospital Engineering

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

SAFHE aims to promote more efficient management, planning, operation, maintenance and safety of healthcare facilities. SAFHE also organise and promote conferences and discussions on climate change, carbon footprint computation, environmental management and its impact on the healthcare industry in South Africa. This is consistent with Mediclinic's view of integrating climate change into business strategy for sustainability. SAFHE formed an Infrastructure Unit Support System to provide benchmarks for the design and management of healthcare facilities, which include emissions, water, waste and energy consumption benchmarks. SAFHE is also actively involved on various committees of ECSA (Engineering Council of South Africa).

How have you influenced, or are you attempting to influence their position?

Mediclinic's Environmental Systems Manager is currently the President of SAFHE. Through this position of leadership, we are directly influencing the position of SAFHE.

C12.3f

(C12.3f) 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?

Mediclinic engages with Government, Regulators, Industry Bodies and Business Partners on policy issues impacting the business including climate change. They meet on a regular basis with their associations to debate and give recommendations on various topics to ensure sustainability in their business models. Feedback on issues is reported as per Mediclinic's risk management framework, and where necessary incorporated into our business strategy, risk and opportunity response frameworks.

C12.4

(C12.4) 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

In voluntary sustainability report

Status

Complete

Attach the document

Page/Section reference

Content elements

Governance
Strategy

Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

C14. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C14.1

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Executive Officer, Mediclinic Southern Africa	Chief Executive Officer (CEO)

Submit your response

In which language are you submitting your response?

Please confirm how your response should be handled by CDP

	Public or Non-Public Submission	I am submitting to
I am submitting my response	Public	

Please confirm below