Welcome to your CDP Climate Change Questionnaire 2020

C0. Introduction

C0.1

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

Vodacom Group Limited (herein after referred to as Vodacom) is a leading African unified communications provider servicing 116 million active individual customers (including Safaricom) using its full range of products and services. Core consumer products and services include voice, data, messaging and financial services across mobile and fixed networks. Vodacom is expanding into new verticals, including financial services, self-service care and entertainment. It also provides Enterprise customers with various communication solutions and serve among large, medium and small enterprises. The solutions include connectivity and unified communication services, cloud and hosting, managed mobility, data security and the Internet of Things (IoT).

From its roots in South Africa, Vodacom has grown its mobile network business to include operations in Tanzania, the Democratic Republic of Congo (DRC), Mozambique, Lesotho and Kenya and its mobile networks cover a total population of over 289 million people. Through Vodacom Business Africa (VBA), Vodacom offers business-managed services to enterprises in 51 countries across the continent.

In August 2017 Vodacom concluded the acquisition of a 34.94% indirect stake in Safaricom, the number one mobile operator in Kenya.

Vodacom is majority owned by Vodafone (60.5% holding) and was listed on the South African Stock Exchange (JSE) on 18 May 2009. Its head office is in Johannesburg, South Africa.

C0.2

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

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	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	April 1, 2019	March 31, 2020	Yes	1 year

C0.3

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

Democratic Republic of the Congo
Lesotho
Mozambique
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 chosen approach for consolidating your GHG 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
Director on board	The chairman of the Board appointed Social and Ethics Committee, an independent non-executive director, has the responsibility for good corporate citizenship which includes corporate social responsibility, ethical behaviour and managing the environmental impacts of the group, including climate-related issues. During FY2020 the committee received reports from various business areas in the Group on a quarterly basis to ensure oversight and accountability for achieving sustainability goals and objectives. It reviewed Vodacom's newly established environmental target to reduce GHG emissions by 2025 (using 2017 as baseline).

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 – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Setting performance objectives	Oversight of climate related risks and opportunities at Board level occurs quarterly at the: - Social and Ethics Committee - Risk Management Committee Monthly at the: Monthly ExCo meetings Bi-annually at the:

	Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	Environmental Management Review Annually at the: Vodafone Sustainable Business Conference Position papers in respect of climate change risks and opportunities to Vodacom have been presented to the above committees and strategic decisions affecting the sustainability of the business have been taken as a result of these threats and opportunities.

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
Environment/ Sustainability manager	Both assessing and managing climate-related risks and opportunities	Quarterly
Other C-Suite Officer, please specify Chief Technology Officer	Both assessing and managing climate-related risks and opportunities	Quarterly
Other C-Suite Officer, please specify Chief Officer: External Affairs	Managing climate-related risks and opportunities	Quarterly

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).

Sustainability efforts across the group continue to be coordinated through a quarterly meeting, facilitated by the Head: Vodacom Group Sustainability. Each focus area champion reports back and feedback is channelled to the Social and Ethics Committee.

The Risk Management Committee overseas the comprehensive Operational Resilience Programme and provides feedback to the Executive Committee via the Chief Technology Officer.

A Governance board is mandated to manage specific projects, policy requirements and good practice to improve service resilience, thus safeguarding the network and services against potential interruptions caused by natural disasters, technology failure or human error.

Independent periodic audits are undertaken to assess network resilience, reviewing the operational readiness and status of fire detection and prevention systems, evaluating the standards of power installations, and auditing building management systems across facilities.

 The Chief Officer: External Affairs is responsible for advocacy of climate change risks and opportunities and influencing key stakeholders including Government, Business and Employees.

C1.3

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

	Provide incentives for the management of climate-related issues	Comment
Row 1	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).

Entitled to incentive	Type of incentive	Activity inventivized	Comment
Corporate executive team	Monetary reward	Emissions reduction target	GHG emission reduction targets are part of the Long Term Incentive for 2023. The achievement of the targets positively impacts bonuses or discretionary pay; hence there exists a strong incentive to reach the emission reduction targets.
Business unit manager	Monetary reward	Emissions reduction target	The key performance indicators for responsibility towards natural resources include greenhouse gas reduction targets, which are included in employee's performance scorecards. The

			achievement of the targets positively impacts employee's bonuses or discretionary pay; hence there exists a strong incentive to reach the emission reduction targets.
Environment/Sustainability manager	Monetary reward	Emissions reduction target	The key performance indicators for responsibility towards natural resources include greenhouse gas reduction targets, which are included in employee's performance scorecards. The achievement of the targets positively impacts employee's bonuses or discretionary pay; hence there exists a strong incentive to reach the emission reduction targets.
All employees	Monetary reward	Efficiency target	All employees whose direct or indirect line function responsibilities have environmental impacts are empowered to manage environmental issues as integral part of their job and to establish systems that allow for employee training to ensure that they are up to date with the latest information regarding impacts and greenhouse gas reduction targets. The responsibility and accountability for environmental performance affects their performance scorecards, which in turn affect bonuses or discretionary pay.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	1	Given recent advances in technology, the 'clock speed' in the telco sector has shown a propensity to speed up quite dramatically, not just in terms of network technology, but also at the IT layer, which is increasingly important in

			underpinning the services offered to customers. Further, this is aligned with the financial year budgets, annual reduction targets and capital budgets required for the implementation of projects, which focus on short-term changes in actions.
Medium-term	1	3	Vodacom's Vision 2025 developed in 2020 highlights the strategic objectives with goals to be achieved by 31 March 2025. Product or service planning has a medium term horizon.
Long-term	3	10	This aligns with more strategic view of climate-related risks and opportunities that affect traditional network planning which is typically between three and five years.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

During FY2017 the concept of 'principal risks' was introduced in order to enhance the process of identifying, assessing and reporting on risks and opportunities.

Substantive financial or strategic impact is defined in the Principal Risks Framework which provides the Executive Committee and Board with a robust assessment of the principal risks facing the Company.

A heat map depicts the top 10 residual risks, after taking into account mitigating risk factors, that have the most significant impact on Vodacom's ability to achieve its strategic objectives in the long-term ('macro risks'), and in the short- to medium-term ('tactical sub-risks'), together with risk appetite statements for each. The risk appetite for each principal risk is reviewed and approved by the Board to enable informed risk-based decision-making. Risks are also analyzed for its speed of impact, reflecting the rate at which the Company will experience adverse financial impacts if the risk materialised.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations

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Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

The process used to determine which risks and opportunities could have a substantive financial or strategic impact on Vodacom:
At company level the Board Directors consider risks and opportunities, including climate-related issues, when they formulate strategy, approve budgets and monitor progress against business plans. The process is overseen by the Risk Management Committees (RMC) in each operation, which is chaired by the respective Managing Directors and include the Executive Committee members in each country.

An Enterprise Risk Management Framework was developed to provide context and guide the identification, analysis, evaluation, treatment, communication and ongoing monitoring of risks in all business units. The risk management framework is in alignment with the ISO 31000 International Risk Management Standard and other risk management best practices and is being rolled out across the Group.

The Group Risk division reporting to the Chief Risk Officer assists in identifying, assessing and recording the risks and opportunities facing the Group and, where appropriate, monitors mitigating actions.

At asset level risks and opportunities are identified and managed at four different levels within the organisation, namely at project, process, operational and tactical levels. These risks and opportunities are periodically reviewed and updated. A filtering and reporting process ensures that the relevant risk items are reported to the Audit, Risk and Compliance Committee (ARC Committee).

The day-to-day responsibility for the management of enterprise risk lies with the head of the business unit or support function, which conducts the activity which gives rise to the risk. Line management is guided and assisted by the Risk Group division, which reports to the Chief Risk Officer.

Risks and opportunities are prioritized through the following process:
• Define the risks - Various levels of management in each operating company define risks and opportunities at project, process, operational, tactical and strategic levels.
• Risks are assessed based on their potential impact on the operation (customers, business systems and employees) and reputation (stakeholders and brand). At level 1 the risk impact is seen as insignificant and at level 5 as catastrophic.
• Assess their likelihood - Risks are assessed based on the likelihood of them happening after taking into account the controls that are already in place to mitigate them. A scale from 1 to 5 is used to assess the likelihood of the risk, where 1 is "never" and 5 is "almost certain". When a risk is rated with a likelihood as "5", it means the controls in place will not prevent the risk from happening due to factors outside our control or the control effectiveness is poor.
• Classify the risk - Risks are classified as critical, high, medium and low based on the impact and likelihood score.
• Treat the risk - Management reviews all critical and high risks to determine which of these need additional treatment to reduce the risk to a medium or low. One such type treatment is the implementation of additional controls.

How Vodacom makes decisions to mitigate, transfer, accept or control the identified climate-related risks and to capitalize on opportunities:
All risks and opportunities, including climate-related issues, are captured on the risk management system, continually monitored and reviewed every six months. Quarterly risk reports are provided to the Audit, Risk and Compliance Committee (ARC Committee) and the Board.

Vodacom considers chronic physical risks relating to changes in precipitation patterns and extreme variability in weather patterns as South Africa's rainfall over the past few years has been significantly below the long-term average.

In particular, the Western Cape experienced the worst drought recorded in history with dam levels at their lowest ever. Without drastic measures to further drive down consumption, Cape Town was set to experience critical water shortages and the possibility of taps being turned off – a scenario known as Day Zero. This would have had a devastating impact on Vodacom operations in Cape Town.

Proactive measures taken to reduce the water footprint included changes to the water reticulation system at the Century City and Techno Centre offices in Cape Town to accommodate waterless urinal waste systems as well as regulating the flow of water in kitchens, showers and

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sluices while aesthetic water features have been switched off.

To provide alternative water supply to offices a ground water harvesting project at Century City was implemented and a borehole sunk at Techno Centre. The water collected is extensively filtered to drinking water standard.

The Century City ground water harvesting project and the Techno Centre borehole project reduced average daily municipal consumption from 17kl to 2kl per day and from 30kl to 2kl per day respectively.

Transitional risks and opportunities for Vodacom relate to anticipated increases in energy taxes or fuel levies as its South African network consumes approximately 86% of total electricity consumption.

Diesel and electricity consumption at base stations are monitored and initiatives aimed at operating more efficiently are implemented while adopting renewable and alternate sources of energy where feasible.

Hybrid Generator Power-Cubes – a combination of diesel generators and batteries that cut diesel use by up to 70% per site – were introduced to convert 24x7 generators to hybrid generator units, resulting in significant diesel fuel savings. Lithium ion (Li-Ion) batteries with longer life-expectancy replaced lead-acid batteries at radio sites.

The old inefficient UPSs were replaced with modern high-efficiency variants at 6 data centres across South Africa. Adiabatic cooling panels on air-conditioning chiller plants were installed to pre-cool the ambient air used by the chiller coils to reduce energy consumption.

These initiatives are aimed at reducing energy consumption and costs, carbon emissions and where possible, take advantage of the promulgated S12l tax allowances for energy efficiency.

C2.2a

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

	Relevance & inclusion	Please explain

Current regulation	Relevant, always included	South Africa's current climate-related regulation such as carbon taxes, national greenhouse gas reporting regulations and white paper on climate change to enable a transition to a low carbon economy will have an impact on Vodacom's business operations. A carbon tax added to the fuel levy of 7 cents per litre on petrol, and 8 cents on diesel will add operating cost. Vodacom has therefore assessed all its facilities to determine if it needs to register with the DEA, using a specific template of the National Atmospheric Emissions Inventory System (NAEIS). Vodacom is now reporting onto the South African Greenhouse Gas Emissions Reporting System (SAGERS). In order to save on diesel costs, carbon emissions and carbon tax Vodacom "build the last mile" at its own expense in order to get grid power to 6 sites in South Africa that were running exclusively on generator or alternative power.
Emerging regulation	Relevant, always included	Emerging regulatory risks such as increases in fuel levies, water and energy tariffs are considered by Vodacom. For example, the increased water tariffs in the Cape Town region as a regulatory measure aims to affect behavior change in encouraging business and industry to reduce their water consumption. The Century City and Techno Centre offices are situated in Cape Town, therefore the national facilities team assess and manage these risks. Vodacom has also established a Water Crisis Steering Committee in South Africa to provide a response and action plan which aims to assist affected employees and their families, communities and customers across the country, to reduce levels of water usage.
Technology	Relevant, always included	Vodacom believes that its technologies can play a significant role in enabling a low-carbon future e.g. creation of digital platforms - video-conferencing, smart working and virtual education. Technology leads to smarter ways of doing business whilst minimising the impact on the environment. The transition to the 'Fourth Industrial Revolution' – characterised by recent rapid developments in AI, Big Data analytics and blockchain technology, as well as the growth in the Internet of Things, connected homes and autonomous vehicles – is challenging many traditional business models and significantly reshaping consumer behaviour. Big Data and the Internet of Things (IoT) changes how products, businesses, homes and services operate - increased automation significantly optimising resources and efficiencies whilst providing valuable insights to improve decision-making, e.g. smart metering. Vodacom introduced the 'internet in the car' solution which enables a vehicle to be connected to the internet through a mobile data stream. Common features in connected cars include vehicle telematics and infotainment systems, which transform cars into 'smartphones on wheels'.

		Connectivity features can send real-time alerts to the service centre about the car's condition and enable e-call type features for roadside assistance, as well as monitor driver behaviour to promote vehicle efficiencies and reduce carbon emissions. During FY2020 56 380 auto connections were fitted in South Africa.
Legal	Relevant, always included	Climate-related litigation claims could stem from non-compliance with the proposed carbon tax, national greenhouse gas reporting regulations and the white paper on climate change and could include monetary fines and/or prison sentences for those responsible of such oversight at Vodacom. Compliance risks are identified and assessed as part of the compliance management processes. Feedback on issues is reported as per Vodacom's risk management framework.
Market	Relevant, always included	Digital technology is disrupting traditional business models and significantly reshaping consumer behaviour. New technologies such as the Internet of Things (IoT) continue to spread through every aspect of daily life – bringing network intelligence and optimised energy use to a wide variety of machines, devices and processes. Vodacom therefore needs to continuously deploy new network technologies, while rolling out a national IoT network and developing new IoT applications and solutions to help customers reduce their emissions. In South Africa, Vodacom's Smart Utilities Management Service has installed 54 900 smart meters for both water and electricity to support municipalities, public and private entities to automate meter reading, perform billing integration, and provide user profiles through a cloud-based web platform. Additional benefits linked to this solution include reduced carbon emissions, prevention of revenue losses and improved energy theft reporting. The management of assets has become a concern for municipalities, public and private enterprises, as assets sometimes depreciate before the end of its expected life span. In some instances, assets become overloaded and non-operational due to a lack of regular maintenance. Vodacom, through Mezzanine and EMS Advisory, developed the Smart Asset Management Solution (SAMS) which empowers customers to manage assets more efficiently while complying with regulations. During FY2020 Vodacom monitored and optimised more than 1 097 000 assets across three municipalities in South Africa. Vodacom's integrated fleet management solution addresses three main challenges in the fleet management industry: safety and productivity, fuel price volatility, and cost reduction. LiveTrack enhances responsible driving through real-time information on speed, preventing accidents while also increasing efficiency and reducing carbon emissions. The diesel tank monitoring solution provides early warning of possible leaks, enabling enterprises to act timeously to limit loss and avoid the environmental impact of diesel leakages. During FY2020 the IoT fleet management system was introduced in Mozambique and the DRC to facilitate optimal

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		management of vehicles. The IoT connections have enabled carbon savings for customers of approximately 224 004 tCO2e during FY2020. Vodacom's IoT connections increased 17.2% to 5.3 million, with revenue growth of 38.5% during FY2020.
Reputation	Relevant, always included	Vodacom considers reputational risks relating to investors, government and customers requiring it to respond to climate change issues. As part of its commitment to accelerating socio-economic transformation, Vodacom identified and prioritised eight of the seventeen United Nations Sustainable Development Goals (SDGs), where it believes it can have the most meaningful impact by providing enabling technologies and innovative digital products and services to customers and stakeholders. Vodacom is supporting communities through digital inclusion in support of SDG11: Sustainable cities and communities. It strives to assist in making cities and human settlements more inclusive, safe, resilient and sustainable by offering innovative digital solutions. To stimulate agricultural productivity through digital solutions Vodacom, through Mezzanine, partnered with Agritechnovation to develop MyFarmWeb, a mobile and web-based solution aimed at leveraging geo-spatial mapping and 'IoT' sensor features to assist farmers in data-driven planning and decision-making. 3 600 farmers use the platform to drive efficient decision making for profitable and sustainable farming. Through MyFarmWeb, 950 000 hectares of commercial farming has been mapped in South Africa. The cloud-based Connected Farmer platform, developed in partnership with GIZ, services small-scale farmers and makes sourcing from smallholder farmers more realistic and executable for food manufacturers and retail businesses; increasing the number of smallholders and subsistence farmers in commercial agricultural value chains. Further, enterprises have real time visibility of their supply chains, as well as the ability to engage and communicate with smallholders directly. The application is currently used by various agribusinesses in South Africa, with more than 1 644 registered users. In the DRC, the Connected Farmer application is known as AgroMwinda. During FY2020, in the DRC, Vodacom has trained 100 female farmers as agents of change in ICT skills and use of the platform. This programme has led to the registration of 7 000 farmers, transporters and entrepreneurs on the AgroMwinda platform. More than 47 500 female farmers use Connected Farmer in the DRC. These initiatives make an important contribution in improving agricultural productivity and food security, creating jobs and increasing incomes in the agriculture sector which could enhance Vodacom's reputation as a leader in environmental issues in the ITC industry.

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Acute physical	Relevant, always included	Vodacom considers acute physical risks as weather-related disruptions such as storms or floods could damage base stations or the road infrastructure. Currently unreliable grid power exists in Mozambique, Lesotho, DRC and Tanzania. The mobile network base stations therefore rely extensively on diesel generators for electricity. The huge distances between the sites and the challenging terrain makes the logistics of refuelling and maintenance costly with today's infrastructure. With storms or floods the infrastructure could be negatively impacted making access to refuel and maintain the base station generators difficult. This could result in a disruption of operations and the non-availability of the network. In March 2019, the tropical cyclone Idai caused catastrophic damage in Mozambique, Zimbabwe, and Malawi, affecting more than 3 million people and leaving more than 1 000 people dead and thousands missing. Beira in Northern part of Mozambique, was especially affected; approximately 90% of the city's infrastructure was destroyed by the storm, affecting health and education facilities and thousands of acres of crops, which will significantly affect food security in the country. In response Vodacom restored communication services as quickly as possible and free-rated calls during the height of the crisis, both of which assisted with aid relief efforts. Vodacom with Vodafone donated US$1 million to aid in restoring roofs on schools to ensure education is least disturbed, this reflects Vodacom's commitment to addressing societal challenges through its core business activities and corporate social investments.
Chronic physical	Relevant, always included	The network is the backbone of Vodacom's business and the quality of its network allows Vodacom to distinguish it from the competitors. It attracts new customers and ensures retention of the existing customer base. Vodacom considers chronic physical risks relating to changes in average precipitation that could influence the network quality and the demand for Vodacom's solutions and services. Vodacom is therefore strengthening its resilience as an organisation by renewing the radio access network (RAN) to incorporate newer technologies that could withstand weather influences. During FY2020 Vodacom started with the implementation of project Raptor to deploy intelligent controls to more than 3 700 base stations in South Africa through a partnership with IoT.NXT. This IoT solution enables early detection of maintenance alarms, reduces the need for call-outs and reduces energy consumption by monitoring operating conditions in the base station cabinet and automatically switching off the air-conditioning when not needed. The plan is to roll out this innovative solution to an additional 5 000 base station sites. These projects improve energy efficiency, drives down operational cost, helps to expand data coverage and improve the customer experience.

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 & Primary climate-related risk driver

Current regulation

Carbon pricing mechanisms

Primary potential financial impact

Increased direct costs

Company-specific description

In February 2019 the Carbon Tax Bill was passed in alignment with South Africa's commitment to the Paris Agreement to reduce greenhouse gas emissions by 42% by 2025. The first phase will run until December 2022, after which it will be reviewed. The tax follows the polluter pays principle whereby companies that exceed stipulated threshold activities will be penalised R120 per tonne of CO_2 emitted.

It was also announced that the carbon tax would also be added to the fuel levy at 7 cents per litre on petrol, and 8 cents on diesel, and would

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come into effect on 5 June 2019.

Both the Carbon Tax Act and the Customs and Excise Amendment Act came into effect on 1 June 2019.

The South African Revenue Service (SARS) will be the main implementing administrative authority on the tax liability assessment.

The Department of Environmental Affairs(DEA) will assess the data submitted, which will form the tax base. The Department of Energy will supply the energy combustion data. All information will feed into the National Atmospheric Emissions Inventory System (NAEIS). Companies will self-assess and submit their emissions to SARS and if found to be incorrect, could be penalized.

The first carbon tax payment was due by 31 July 2020. Due to Covid-19 the filing and payment date was delayed by three months to 31 October 2020.

In order to report an organization has to assess its company-wide energy generation capacity. The threshold for registration is 10MW thermal. So, for example, if a company has fifteen small boilers with a capacity of 700 kW each, the cumulative capacity is 10,5MW, which will require the company to register and report on these activities.

It is important to keep in mind that those businesses which have identified themselves as not liable for carbon tax during the first phase will still be required to submit environmental levy accounts to the DEA regardless of whether any carbon tax payment is due.

While Vodacom is not liable to pay carbon tax in Phase 1, operating costs will increase due to the additional carbon tax on fuel.

In order to assess the carbon tax accurately, reporting of GHG emissions will be required together with verification of the reported South African emissions. This will place a financial compliance burden on Vodacom, 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
Short-term

Likelihood

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Virtually certain

Magnitude of impact

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)

375,000

Potential financial impact figure – maximum (currency)

5,000,000

Explanation of financial impact figure

Additional cost relates to carbon tax on liters of diesel and petrol used in stationary combustion and mobile fuels throughout Vodacom South Africa's operations.

Other costs relates to penalties for non-compliance to submit GHG inventories and data which is estimated to be capped at R5 million for a first offence. However, there is no potential financial impact for Vodacom as current resources would be able to cope with the emissions reporting obligation.

Cost of response to risk

930,000

Description of response and explanation of cost calculation

In order to comply with regulatory requirements Vodacom has assessed all its facilities to determine whether its associated emission activities qualify for or exceed the 10MW thermal threshold to see if it needs to register with the DEA, using a specific template of the National Atmospheric Emissions Inventory system (NAEIS). Vodacom is now reporting onto the South African Greenhouse Gas Emissions Reporting

System (SAGERS).

Further, Vodacom annually appoints external consultants costing approximately R450 000 per annum to determine its organizational carbon footprint as well as the verification thereof to ensure it is free of material misstatements.

The processes for obtaining the required data are continually refined to ensure accurate and consistent data capturing.

In order to save on diesel costs, carbon emissions and carbon tax Vodacom "build the last mile" at its own expense in order to get grid power to sites that were running exclusively on generator or alternative power. During FY2020 Vodacom spent capital of R480 000 to connect 6 sites to the South African electricity grid.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Technology

Unsuccessful investment in new technologies

Primary potential financial impact

Decreased asset value or asset useful life leading to write-offs, asset impairment or early retirement of existing assets

Company-specific description

Vodacom, an information, communications and technology company, contribute to greenhouse gas (GHG) emissions predominantly through the use of energy to power its base station sites, data centres, switches and remote hubs. The electricity sourced from the grid is supplemented by

electricity generated from diesel, solar panels, fuel cells, batteries and generators mostly owned and/or managed by Vodacom. Electricity consumption in the Group remains the main source of emissions at 88% with fuel consumption at 7% and emissions associated with supply chain activities at 5%.

To reduce energy consumption, Vodacom installed free cooling technology at 90% of its base stations in Mozambique, Lesotho, Tanzania, DRC and South Africa. Free cooling is when electronic air-conditioning is supplemented with fresh air to reduce the temperatures of equipment resulting in reduced energy requirements of between 2 000–3 500 kWh per year per site. Further, since 2016 the majority of new sites are single A/C outdoor cabinets.

Higher temperatures will result in lesser usage of free cooling with the resultant increase in electrical energy consumed. This could make the free cooling equipment obsolete as well as increase the maintenance and replacement intervals on cooling equipment resulting in higher operational cost.

Time horizon
Medium-term

Likelihood
About as likely as not

Magnitude of impact
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)
7,500,000

Potential financial impact figure – maximum (currency)

19

12,500,000

Explanation of financial impact figure

To date the equipment was installed at a capital cost of approximately R125 million. With higher average temperatures the energy use and cost could increase and the equipment may become obsolete. Should the energy use increase by 1%, then the operational expenses could increase by approximately R7.5 million per annum while a 10% redundancy rate of the equipment could result in a R12.5 million loss of capital invested.

Cost of response to risk

127,100,000

Description of response and explanation of cost calculation

Free cooling technology reduces the need for powered air-conditioning at base-stations by monitoring the external air temperature and when possible shuts down air-conditioning units to use ambient air to do the cooling whenever the outside temperature falls below 20°C.   To manage an increase in temperatures Vodacom is upgrading its network with components that can withstand higher temperatures and is installing individual battery coolers rather than cooling the whole facility. Technicians are working on free cooling systems that will work even when the outside temperature is 30°C.

To date 3 500 free-cooling units were installed at base stations to help reduce air-conditioning use together with 840 smart meters installed at a capital cost of approx. R1.5 million. The technology reduced air-conditioning run-time and energy consumption by up to 45% as well as extended maintenance and replacement intervals on cooling equipment.

During 2019 Vodacom started with the rollout of project Raptor, which is an extension of traditional free cooling and entails remote monitoring, temperature regulation and optimisation of energy at base station sites. The R125.6 million phased installation can result in approximately 20% saving on the energy utilisation of a site due to more efficient cooling.

Comment

Identifier

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Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

Vodacom's international mobile operations make up 36% of total base stations and consist of 8 032 2G sites, 6 175 3G sites, 2 672 4G sites and 2 5G sites, with high-speed transmission extended to 92% of sites.

There are various challenges in providing connectivity to these areas, including the high costs in deploying base stations, lack of access to and unreliable grid power in Mozambique, Lesotho, DRC and Tanzania.

The mobile network base stations therefore rely extensively on diesel generators for electricity. The huge distances between the sites and the challenging terrain makes the logistics of refuelling and maintenance costly with today's infrastructure.

With more frequent rainfall the infrastructure could be negatively impacted making access to refuel and maintain the base station generators difficult. This could result in a disruption of operations and the non-availability of the network.

Higher temperatures will require more cooling at the mobile base stations resulting in more frequent refuelling of generators. Not only will the logistics of refuelling and maintenance increase operational costs, but it could impact on the network quality.

Unplanned disruptions in network performance, and any resulting shortfalls in network quality and availability, negatively impact consumer sentiment, which can be rapidly shared on social media. Maintaining network quality and performance is both a significant source of competitive differentiation and revenue.

During 2019 two consecutive cyclones in Mozambique damaged major roads and infrastructure, affecting Vodacom's network services.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

61,620,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

A shortage of diesel at the base stations could lead to the non-availability of the network and negatively impact customer usage resulting in a loss of revenue.

A cumulative one day shutdown of operations could result in loss of revenue of approx. R61.62 million based on current revenue levels in Lesotho, Mozambique, DRC and Tanzania.

Cost of response to risk

485,500,000

Description of response and explanation of cost calculation

In order to reduce the reliance on diesel for electricity generation Vodacom is actively looking at deploying small scale renewable and alternate energy technologies.

There are 950 solar-operated sites across the Group in the DRC, Mozambique and Lesotho that required capital investment of R485 million. During FY2020 Vodacom invested another R500 000 on the deployment of solar power solutions on BSC sites to reduce grid consumption.

Vodacom Lesotho has embraced the renewable technology in the largely rural country and about 30% of the total 346 sites are now powered through a combination of energy saving solar power technologies and are powered independently of diesel generators or the national grid.

Other environmentally conscious technologies include power system optimisation that ensures that in the event of power failure, a traditional site continues to operate for up to three hours on stored battery power before a diesel generator is activated.

Smart meters are used to monitor power consumption and remote control systems are used to operate base station sites, reducing the need for physical site visits.

Hybrid Generator Power-Cubes – a combination of diesel generators and batteries that cut diesel use by up to 70% per site – were introduced to convert 24x7 generators to hybrid generator units. Llithium ion (Li-Ion) batteries with longer life-expectancy replaced lead-acid batteries at radio sites.

The green base stations require less refuelling, maintenance and monitoring which greatly reduces ongoing operational costs and these cost savings will ultimately benefit customers.

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Reputation

Shifts in consumer preferences

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

Vodacom has helped to positively transform the lives of millions of people across markets by connecting them to voice and digital products and services. With access to the internet and data services now an essential part of people's lives, and key to facilitating economic development, Vodacom is committed to promoting digital inclusion and democratising data.

All activities involve partnerships of some sort – with business peers, government agencies, technology providers, civil society organisations, academia and/or community representatives – aimed at identifying and implementing innovative ways of using mobile and data to make a significant social contribution.

Vodacom's approach to sustainability focuses on creating and protecting value, driving growth and innovation, and providing societal value through core business activities and to make a meaningful contribution to the countries in which it operates.

In 2020 society experienced a global crisis on a scale not yet experienced in modern history. In less than six months the COVID-19 pandemic has brought the world to a halt and in these uncertain times, the impacts of this virus will be felt for years to come. In the short-term, it may appear that the environment has been given a chance to recover through less pollution from a decline in global trade and travel.

The global COVID-19 outbreak presents profound risks for the countries and communities in which Vodacom operates and has challenged business models globally, upending traditional ways of working, shutting down certain sectors of the economy, disrupting supply chains, and severely constraining consumer spend. With people physically isolated, and with many workers operating remotely, Vodacom's mobile and fixed networks have never been more critical in helping to keep societies functioning.

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The reputation and profitable growth of Vodacom is closely linked to the economic prosperity and social sustainability of the communities it operates.

Vodacom therefore has a responsibility to minimise its associated environmental impacts and through proactive actions can be seen as a champion of and environmental "thought" leader in South Africa and Africa.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

91,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

While there remains much uncertainty regarding the full social and economic impact of the COVID-19 pandemic, all scenarios indicate a significant downturn in economic activity globally, for at least the medium term.

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The potential financial impact from reputational risk will emanate from a loss of customer confidence and loyalty leading to reduced demand for Vodacom's products and services, together with reduced funds available to spend.

An estimated 0.1% decrease in sales could result in a decrease in Group service revenue of approx. R91 million based on current revenue levels.

Cost of response to risk

510,000,000

Description of response and explanation of cost calculation

To manage reputational risk and to reduce the likelihood and magnitude thereof, Vodacom in response to the global pandemic, implemented numerous measures to ensure the safety of employees and contractors, to keep individuals, communities, businesses and governments connected, and to harness the power of digital technologies in a collective effort to flatten the curve.

During the pandemic, connectivity and communication services have been more important than ever. Taking into account restricted movements and lockdowns in the various markets, and Vodacom's status as an essential service, more than 4 100 essential field technical resources were identified in South Africa to maintain the network, using 200 000 medical masks, 15 000 litres of hand sanitiser and 440 000 latex gloves.

Additional capital expenditure of R500 million was allocated to ensure sufficient network capacity in response to the rapid escalation in demand for network capacity and data services.

Vodacom supported governments across all markets through various initiatives, including:
- Using Big Data analytics to provide aggregated data to help track the spread of the disease and monitor population movements.
- Providing timely and authentic information on COVID-19 via different channels, including sending text messages on preventative health measures to 115.5 million customers.
- Zero-rating data links to key essential government and other websites.
- Donated 20 000 smartphones, 100TB of data and 10 million voice call minutes to health workers in South Africa and extended similar interventions in Lesotho.
- Provided SMS awareness messaging on preventative health measures to over 44 million subscribers in South Africa.

Vodacom also partnered with health insurance company Discovery Health in South Africa to connect the public with doctors through virtual consultations; each contributing R10 million to cover the cost of virus-related consultations.

To support the increase in home-schooling, the Vodacom e-School platform was strengthened and the zero-rated offering to all public schools, universities and T-Vet colleges across the country was expanded. In addition, large discounts to schools, universities and other educational institutions for virtual teaching options was offered.

Vodacom will continue to demonstrate leadership and innovation, both in ensuring the resilience of Vodacom, and in helping individuals, companies and communities to adapt to the changing conditions.

Comment

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

27

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of new technologies

Primary potential financial impact

Reduced direct costs

Company-specific description

South Africa's largest emitter, Eskom, is exempt from paying carbon taxes during the first phase that came into force on 1 June 2019. Had it been included its tax liability would have been R11.5-billion per annum and most likely it would have passed on the costs through increased tariffs, which will increase operational costs (electricity bills) for Vodacom as 86% of emissions are derived from grid electricity consumed in South Africa.

However, energy savings will result in large operational costs savings while benefits from potential tax allowances and incentives or subsidies for energy-efficient equipment and renewable energy technologies will add to an organization's bottom line.

Further, reduced energy consumption could reduce load shedding by Eskom resulting in less frequent disruptions in operations and improve the network quality in South Africa. These cost savings could add to Vodacom's cost competitiveness in South Africa.

Vodacom's property portfolio therefor has consistently decreased its energy consumption since 2012, saving over 40 GWh. These savings have been achieved by implementing building automation and process optimisation; installation of energy efficient technologies; introduction of renewable energies and property rationalisation.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

8,800,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Upgrades to the building management system have resulted in the automation of processes, resulting in better control of energy demands, accurate energy measurements and enhanced energy decision making.

The new heat ventilation and air-conditioning system installed at the Midrand Campus has resulted in an estimated 5% saving on energy consumed by the HVAC system per building irrespective of increased occupancy levels. Further, the installation of LED lighting and lighting sensors in buildings resulted in a 71% reduction in energy consumed by lighting.

Energy savings from replacing the UPSs will be monitored during FY2021 as the replacement started in the last quarter of FY2020.

Total electricity saved in FY2020, excluding growth in bases stations, was calculated as 5 355 MWh with cost savings of approximately R8.8 million, together with tax allowances that can be claimed on the equipment.

Cost to realize opportunity

9,800,000

Strategy to realize opportunity and explanation of cost calculation

29

At Vodacom the primary source of energy to power operations is electricity from the grid. Vodacom's energy management approach therefore focuses on realising efficiencies, reducing energy consumption, while switching to alternative energy sources where possible, for both infrastructure and offices. It is continuously renewing its network, data centres and offices to support future technologies and services.

To benefit from tax and regulatory opportunities while at the same time combat the increases experienced in energy tariffs, Vodacom during FY2020 spent R9.8 million on replacing old inefficient UPSs with modern high-efficiency variants at 6 data centres across South Africa. It also installed adiabatic cooling panels on air-conditioning chiller plants that pre-cool the ambient air used by the chiller coils to reduce energy consumption.

The initiative is aimed at reducing energy consumption and costs, carbon emissions and where possible, take advantage of the promulgated S12l tax allowances for energy efficiency.

Comment

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

Primary potential financial impact

Reduced direct costs

30

Company-specific description

The first phase of the South African Carbon Tax that came into force on 1 June 2019 is seen as "weak" and industry is cautioned to prepare for a significant strengthening of the carbon tax during the second phase of implementation, which will begin in January 2023.

South Africa's largest emitter, Eskom, is exempt from paying carbon taxes during the first phase, but could be included in the second phase. Its first phase tax liability is estimated to be R11.5-billion per year and most likely it will pass on the costs through increased tariffs, which will increase operational costs (electricity bills) for Vodacom as 86% of emissions are derived from grid electricity consumed in South Africa.

However, by agreeing a tariff for renewable energy with IPPs today with known annual escalations, the energy costs can be contained which will add to the organization's bottom line and aide cost competitiveness.

Vodacom believes that business performance should not come at a cost to the environment. As its most material environmental impact is from the use of energy to power network sites it consistently explores alternative energy sources through an energy mix that includes own generation and independent power producers (IPPs) through power purchase agreements (PPAs). Currently the proportion of renewables in Vodacom's energy mix is around 13% including 950 solar-operated sites, as well as a smaller number of wind and other 'greenpowered' sites across all markets.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

21,300,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The PPA has the potential to reduce GHG emissions by 15% on an annual basis in the Nelson Mandela Bay region.

Savings from the installation of PowerCubes at base stations to save on energy cost was estimated to be R21.3 million by reducing the running time of a diesel generator by up to 80%, saving up to 90% on servicing costs and cutting fuel consumption and emissions by more than 50%.

Cost to realize opportunity

20,000,000

Strategy to realize opportunity and explanation of cost calculation

With customer demand for voice and data services growing at a rapid rate, Vodacom is striving to optimise power-intensive infrastructure by investing in climate-smart networks and solutions.

To reduce energy costs and carbon emissions, Vodacom, signed a Purchase Power Agreement (PPA) with an Independent Power Producer (IPP) to facilitate the supply of renewable energy to power Vodacom infrastructure and facilities in Nelson Mandela Bay (South Africa). The PPA covers 36 base station sites and has the potential to reduce GHG emissions by 15% on an annual basis in the region. The sources used to generate energy through this PPA include a variation of wind and solar energy.

Vodacom also has a Site Solution Innovation Centre (SSIC) focussing on energy and site infrastructure efficiency. An example of a SSIC innovation include the standardisation of hybrid energy technologies and high security and low cost site infrastructure. The hybrid technology 'PowerCube' was deployed in South Africa requiring an investment of R20 million. This integrates energy supplies from grid electricity, solar PV and diesel together with on-site battery storage, reducing the running time of a diesel generator by up to 80%, saving up to 90% on servicing costs and cutting fuel consumption and emissions by more than 50%.

Comment

32

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of recycling

Primary potential financial impact

Reduced direct costs

Company-specific description

Changes in the availability of natural resources and a continued increase in the cost of resources may affect Vodacom's cost of operation and competitiveness.

The ICT sector is a significant source, both directly and indirectly of electronic-waste (e-waste) including mobile handsets and electrical accessories, network equipment (such as air-conditioning units, batteries, generators, and other 'mixed-waste') and end-of-life ICT equipment. Vodacom has embedded the principles of reduce, reuse and recycle across operations and engage across the value chain to identify opportunities to improve efficiencies and reduce e-waste and general waste.

Vodacom's Group policy on waste management prioritises the reuse or recycling of e-waste in a safe and responsible manner. All local markets are required to keep records of their e-waste equipment and to use strictly selected and audited recycling suppliers.

With the promotion of digital inclusion and move into the fourth industrial revolution, the volume of e-waste is expected to increase. Responsible

e-waste collection and management provides a valuable opportunity for income generation associated with the collection, recycling and re-use of materials.

By identifying waste streams that can be reused and recycled, less waste is directed to landfill and behavior of customers, suppliers and the broader business community can be influenced.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

121,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Recycling or reusing equipment will reduce operational costs while reducing the number of third party waste deliveries to landfill sites and related carbon emissions.

Costs avoided by using recovered network equipment amounted to R120 million while the sale of E-waste generated revenue of R1 million.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

For ongoing e-waste management Vodacom partnered with 3 SMME's in South Africa to manage the recycling of electronic waste. At no point in the waste management process does any network waste end up at a landfill site.

During FY2020 977 tonnes (FY2019: 364 tonnes) of network equipment and handsets (e-waste) was collected, extracted for valuable components and disposed of in a safe and responsible manner at no cost.

The useful life of more than 308 tons of network equipment was extended by reintroducing it into the network across the Vodacom Group in areas where the equipment is needed.

Obsolete batteries, classified as hazardous waste, follow a separate process. Batteries that cannot be rejuvenated or reused are sent to a licensed facility for incineration. During FY2020 over 367 tons of batteries were rejuvenated and reintroduced into the network while 1 189 tons of batteries across the group were discarded responsibly. The large increase in batteries discarded compared to the previous year, is due to the replacement of lead acid batteries with new lithium ion batteries, which are less harmful to the environment.

Vodacom also installed additional batteries to help manage the impacts caused by load-shedding in South Africa.

During FY2020 Vodacom enabled the first smartphone only town, Wakkerstroom in Mpumalanga, by encouraging residents of the town to return their old 2G devices and receive discounts on smart devices that are 3G and 4G enabled. A total of 500 devices (57.5 kg) was collected and disposed of responsibly.

130 tonnes of general waste were not sent to landfill by implementing a polystyrene baling operation at Vodacom's head office in South Africa for compressing used polystyrene containers to reduce volumes. This material is then repurposed for various applications such as photo frames.

To reduce organic waste, Vodacom uses Biobin to convert food waste from canteens into compost to fertilise the gardens. During the year, 36 tons of food waste was converted to compost in this way.

Vodacom initiated the phasing out of single-use plastics in offices (at no additional costs) and engage with suppliers to phase out single-use plastics in the catering facilities. To this end Vodacom went from 686 kg to 0 kg of plastic cups used in South Africa.

Vodacom no longer includes the terms and conditions pages in the SIM card package distributed across all channels in South Africa, thereby avoiding the use of around 240 million paper pages each year.

Comment

Identifier

Opp4

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Mobile data traffic has grown exponentially over the past five years and will continue to rise at a rapid rate.

By 2025 it is predicted that:
• the number of mobile internet users will increase to 5 billion, up 31.6% from the 3.8 billion users in 2019;

• the penetration rate (% of population) will increase from 49% to 61%; and
• the number of total IoT connections will increase to 24.6 billion, up 105% from the 12 billion connections in 2019.

As new technologies such as the Internet of Things (IoT) continue to spread through every aspect of daily life – bringing network intelligence and optimised energy use to a wide variety of machines, devices and processes – the beneficial climatic effects of the global ICT industry will increase.

One recent estimate is that the industry could account for a 20% reduction in total global GHG emissions by 2030, in effect maintaining emissions at 2015 levels despite a further 15 years of global population growth and increasing urbanisation and industrialisation in emerging markets.

The transition to the 'Fourth Industrial Revolution' – characterised by recent rapid developments in AI, Big Data analytics and blockchain technology, as well as the growth in the Internet of Things, connected homes and autonomous vehicles – is challenging many traditional business models and significantly reshaping consumer behaviour.

As an ICT company with operations and activities across emerging markets in Africa, Vodacom faces a particularly dynamic operating context that presents some challenging risks as well as exciting opportunities.

Vodacom's ambition is to transform the business from a conventional telco into a digital company that plays a leading role in the fourth industrial revolution. As such it is using technology to transform its business model and enable a customer-centric and digitally-connected world. Through connectivity, the Internet of Things (IoT), robotics and mobile financial services, it developed innovative, smart technologies to make the lives of customers easier, healthier and smarter.

Through Vodacom's subsidiary Mezzanine, the uptake of IoT gained traction in areas such as smart buildings, smart utilities, logistics, fleet and citizen engagement, as well as successfully deploying solutions in education, healthcare and agriculture.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

71,500,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

According to the report, The Mobile Economy 2020 from GSMA Intelligence, the mobile industry contribution to global GDP will grow from the current $4.1 trillion or 4.7% of GDP in 2019 to $4.9 trillion or 4.9% of GDP in 2024.

Should this growth result in a 0.5% increase in demand for Vodacom South Africa's services, then revenue could increase by approx. R71.5 million per annum based on current enterprise service revenue levels.

This is conservatively calculated as Vodacom's IoT connections increased 17.2% to 5.3 million, with revenue growth of 38.5% during FY2020.

Cost to realize opportunity

1,000,000,000

Strategy to realize opportunity and explanation of cost calculation

Vodacom identified opportunities to use Internet of Things (IoT) to promote resource efficiency through smart metering.

In South Africa, Vodacom's Smart Utilities Management Service has installed 54 900 smart meters for both water and electricity to support municipalities, public and private entities to automate meter reading, perform billing integration, and provide user profiles through a cloud-based web platform. Additional benefits linked to this solution include reduced carbon emissions, prevention of revenue losses and improved energy theft reporting.

Managing assets have become a concern for municipalities, public and private enterprises as assets sometimes depreciate before the end of its expected life span. Assets can also become overloaded and non-operational due to a lack of regular maintenance.

Vodacom, through Mezzanine and EMS Advisory, developed the Smart Asset Management Solution (SAMS) which empowers customers to manage assets more efficiently while complying with regulations. SAMS includes asset on-boarding, verification, valuation and compilation of the asset register, as well as asset management software. The solution is based on Vodacom's IoT platform and includes decision support services such as sensor installation, connectivity, data analytics and notification services.

During FY2020 Vodacom monitored and optimised more than 1 097 000 assets across three municipalities in South Africa.

Vodacom's integrated fleet management solution addresses three main challenges in the fleet management industry: safety and productivity, fuel price volatility, and cost reduction. LiveTrack enhances responsible driving through real-time information on speed, preventing accidents while also increasing efficiency and reducing carbon emissions. The diesel tank monitoring solution provides early warning of possible leaks, enabling enterprises to act timeously to limit loss and avoid the environmental impact of diesel leakages.

During FY2020 the IoT fleet management system was introduced in Mozambique and the DRC to facilitate optimal management of vehicles.

The IoT connections have enabled carbon savings of approximately 224 004 tCO2e during FY2020 for customers.

In May 2019, Vodacom acquired a 51% stake in IoT.NxT for approximately R1 billion. Through this acquisition, Vodacom will leverage on what IoT.NxT has been doing in the IoT market and will support this by combining it with existing IoT capabilities within Vodacom Business.

Comment

Identifier

Opp5

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Resilience

Primary climate-related opportunity driver

Resource substitutes/diversification

Primary potential financial impact

Increased revenues through access to new and emerging markets

Company-specific description

For Vodacom sustainability is an integral part of business strategy. As part of its commitment to accelerating socio-economic transformation, Vodacom has identified and prioritised seven of the seventeen United Nations Sustainable Development Goals (SDGs), where it believes it can have the most meaningful impact by providing enabling technologies and innovative digital products and services to customers and stakeholders.

Agriculture is a critical sector for the African economy, with a significant potential to mitigate poverty. The sector accounts for 65% of the continent's employment and 75% of domestic trade.

Vodacom has operations and activities across emerging markets in Africa where the digitisation of the agricultural value chain offer significant opportunities to boost productivity and to empower particularly small-scale farmers. Vodacom's solutions for the agriculture sector aggregate various data streams from various sources, and assist commercial and subsistence farmers to perform business transactions on their mobile devices.

Vodacom is supporting communities through digital inclusion in support of SDG11: Sustainable cities and communities. It strives to assist in making cities and human settlements more inclusive, safe, resilient and sustainable by offering innovative digital solutions.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

136,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

With sustainable agriculture and improved productivity there will be jobs created in future coupled with disposable income.

This could lead to an increased demand for Vodacom's solutions and services. An estimated 0.15% increase in sales could result in increased revenue of approx. R136 million per annum based on current revenue levels.

Cost to realize opportunity

21,000,000

Strategy to realize opportunity and explanation of cost calculation

Vodacom is assisting in building sustainability and enhancing resilience in communities by providing them with alternative ways of conducting business.

To stimulate agricultural productivity through digital solutions Vodacom, through Mezzanine, partnered with Agritechnovation to develop MyFarmWeb, a mobile and web-based solution aimed at leveraging geo-spatial mapping and 'IoT' sensor features to assist farmers in data-driven planning and decision-making. 3 600 farmers use the platform to drive efficient decision making for profitable and sustainable farming. Through MyFarmWeb, 950 000 hectares of commercial farming has been mapped in South Africa.

The cloud-based Connected Farmer platform, developed in partnership with GIZ with a budget of R21 million over three years, services small-scale farmers and makes sourcing from smallholder farmers more realistic and executable for food manufacturers and retail businesses; increasing the number of smallholders and subsistence farmers in commercial agricultural value chains. Further, enterprises will have real time visibility of their supply chains, as well as the ability to engage and communicate with smallholders directly.

The application is currently used by various agribusinesses in South Africa, with more than 1 644 registered users. In the DRC, the Connected Farmer application is known as AgroMwinda, and has M-Pesa capability, which makes payments easier and more convenient.

During FY2020, in the DRC, Vodacom has trained 100 female farmers as agents of change in ICT skills and use of the platform. This programme has led to the registration of 7 000 farmers, transporters and entrepreneurs on the AgroMwinda platform. More than 47 500 female farmers use Connected Farmer in the DRC.

These initiatives have been implemented across Kenya, Tanzania and Mozambique through Vodafone, making an important contribution in improving agricultural productivity and food security, creating jobs and increasing incomes in the agriculture sector.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

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

No, but we anticipate using qualitative and/or quantitative analysis in the next two years

C3.1c

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

Although Vodacom has not yet formally used climate-related scenario analysis to inform its business strategy, its holding company, Vodafone, has used climate-related scenario analysis in the setting of Science-based targets.

The energy mix in the Vodacom Group of companies varies from country to country and as such as in-depth review needs to be done on the energy plans in each of these countries in the near future.

Vodacom's current and future energy demands would need to take heed of these plans to inform the sustainability of our business.

The Department of Science and Technology in 2018 published the second edition of the South African Risk and Vulnerability Atlas (SARVA). This on-line portal is open to all stakeholders, aims to equip decision-makers at national, provincial and local government as well as NGOs and the private sector with information on impact and risk associated with global change. The data is essential in planning for current and projected global and climate change impacts and assists decision makers in implementing adaption strategies.

This SARVA tool is used by Vodacom's technology and infrastructure planning and maintenance teams to take cognisance of climate-change risks in the roll out of new property and network infrastructure and maintenance of existing property and infrastructure.

Vodacom is aware of the task force for climate-related financial disclosure initiative and its voluntary set of recommended disclosures. With the support of its parent company, Vodafone Group, it has contracted with a service provider to adopt such climate-related scenario analyses for TCFD reporting in annual integrated reporting procedures. The aim is to complete a feasibility study by March 2021.

C3.1d

(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Vodacom is presented with exciting new opportunities beyond connectivity. The transition to the 'Fourth Industrial Revolution' – characterised by recent rapid developments in AI, Big Data analytics and blockchain technology, as well as the growth in the Internet of Things, connected homes and autonomous vehicles – is challenging many traditional business models and significantly reshaping consumer behaviour. Big Data and the Internet of Things (IoT) changes how products, businesses, homes and services operate - increased automation significantly optimising resources and efficiencies whilst providing valuable insights to improve decision-making. Technology leading to smarter ways of doing business whilst minimising the impact on the environment influenced strategy over the short-, medium- and long-term. In South Africa, Vodacom's Smart Utilities Management Service has installed 54 900 smart meters for both water and electricity to support municipalities, public and private entities to automate meter reading, perform billing integration, and provide user profiles through a cloud-based web platform. Additional benefits include reduced carbon emissions and improved energy theft reporting. Asset management has become a concern for municipalities, public and private enterprises, as assets sometimes depreciate before the end of its expected life span. In some instances, assets become

		overloaded and non-operational due to a lack of regular maintenance. Vodacom's Smart Asset Management Solution (SAMS), developed through Mezzanine and EMS Advisory, monitored and optimised more than 1 097 000 assets across three municipalities in South Africa during FY2020. Vodacom's integrated fleet management solution, LiveTrack, enhances responsible driving through real-time information on speed, preventing accidents while also increasing efficiency and reducing carbon emissions. The diesel tank monitoring solution provides early warning of possible leaks, enabling enterprises to act timeously to limit loss and avoid the environmental impact of diesel leakages. The IoT connections have enabled carbon savings for customers of approximately 224 004 tCO2e during FY2020. Vodacom's IoT connections increased 17.2% to 5.3 million, with revenue growth of 38.5% during FY2020.
Supply chain and/or value chain	Yes	Climate-related opportunities that have influenced Vodacom's strategy over the medium to long-term relates to their target of using 100% renewable energy by 2025 through a blend of: - exhausting energy efficiency options, - investing in generating own renewable energy to power operations, - procurement of renewable energy through PPA's and - purchasing renewable energy certificates. To this end and to reduce carbon emissions Vodacom signed a Purchase Power Agreement (PPA) with an Independent Power Producer (IPP) to facilitate the supply of renewable energy to power infrastructure and facilities in Nelson Mandela Bay (South Africa). The PPA covers 36 base station sites and has the potential to reduce GHG emissions by 15% on an annual basis in the region. The sources used to generate energy through this PPA include a variation of wind and solar energy. Vodacom has an energy policy which requires that all infrastructure be energy efficient. To this end they are working with suppliers to phase out fire suppressants and refrigerants with high global warming potential (GWP) in favour of gasses with a low GWP.
Investment in R&D	Yes	Vodacom believes that strategic advantage over the medium- and long-term can be obtained through providing technological innovative solutions that can reduce operating costs from fuel and electricity

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		consumption, thereby reducing carbon emissions and Vodacom's impact on the environment while providing products and services that help customers to live and work more efficiently and flexibly. The Vodacom Site Solution Innovation Centre in Midrand is one of the first four projects to be certified as 'net zero' under the Green Building Council South Africa's (GBCSA) pilot certification programme in South Africa. The GBCSA is one of 14 green building councils participating in the World Green Building Council's Advancing Net Zero project, which aims to promote and support the acceleration of net zero carbon buildings to 100% by 2050. Net zero carbon buildings are defined as highly energy efficient buildings, with remaining energy demand supplied by on-site and/or off-site renewable sources, or through offsets. R&D at Vodacom's Innovation Centre has a high impact on business as it produces innovative solutions to Vodacom's energy needs for its network and operations such as the hybrid generator power-cube – a combination of diesel generators and batteries that cut diesel use by up to 70% per site. During Covid-19 Vodacom's Big Data and Analytics team supported governments across all markets through various initiatives, including: - Using Big Data analytics to provide aggregated data to help track the spread of the disease and monitor population movements. - Providing timely and authentic information on COVID-19 via different channels, including sending text messages on preventative health measures to 115.5 million customers.
Operations	Yes	Vodacom as an information, communications and technology company is a significant energy user with resultant greenhouse gas emissions associated with climate change. Vodacom's business strategy is influenced by the need to reduce greenhouse gas emissions through determining its carbon footprint, be energy efficient, develop and use alternative energy sources and sustainable resource utilization including water consumption. Vodacom therefore implemented a Carbon Management Strategy during FY2016 to guide business regarding managing internal energy and carbon performance. It contains a set of 9 guiding principles on how to work efficiently with dedicated resources to effectively track, manage and report performance. Vodacom has strengthened its commitment to the sustainable use of resources, by establishing a

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	Carbon Management Implementation Plan containing all projects that relate to energy and carbon emissions. As a living document, it is designed to evolve as the business and its context changes, staying true to the business strategy and strategic sustainability priorities. During FY2018 Vodacom conducted an in-depth examination of its energy and climate change impacts. The review provided clarity on the areas of the business with the greatest energy demands and informed the development of action plans to drive further energy efficiencies and the adoption of renewable energy where feasible. In FY2020 Vodacom set long-term environmental targets to reduce its GHG emissions by 50% in 2025 from a 2017 base year. This will be achieved by investing in new technologies, free cooling, and using alternative energy sources such as generator-battery power hybrid units, and solar generation for remote base station sites.

C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Capital expenditures Capital allocation Access to capital Assets	Access to capital: During FY2020 Vodacom secured a long-term sustainability-linked loan worth R2 billion with Standard Bank South Africa (SBSA), making it the first agreement of its kind for a telco in South Africa. The sustainability loan motivates Vodacom to better manage ESG factors by lowering the finance costs in accordance with its sustainability performance. As part of the agreement, Vodacom and SBSA agreed on a set of targets for the loan, based on an overall ESG management score, of which the baseline is 55.8 points this year. The overall ESG management score will be assessed independently by Sustainalytics for the duration of the loan, to

		determine an updated management score.
		The ESG score is calculated based on seven key principles: corporate governance, product governance, carbon emissions, data privacy and security, business ethics, human capital, and human rights.
		Acquiring this loan demonstrates Vodacom's commitment to improving its sustainability performance, which is underpinned by the objective of connecting people for a better future.

C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C4. Targets and performance

C4.1

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

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number
Abs 1

Year target was set
2020

48

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Base year

2017

Covered emissions in base year (metric tons CO2e)

599,213

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2025

Targeted reduction from base year (%)

50

Covered emissions in target year (metric tons CO2e) [auto-calculated]

299,606.5

Covered emissions in reporting year (metric tons CO2e)

610,914

% of target achieved [auto-calculated]

-3.9054559898

Target status in reporting year

New

Is this a science-based target?

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

Please explain (including target coverage)

During FY2020 Vodacom set a company-wide absolute target to reduce Scope 1 &2 GHG emissions by 50% in 2025 from a 2017 baseline.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2020

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: energy carrier

Electricity

50

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)

Percentage

Target denominator (intensity targets only)

Base year

2017

Figure or percentage in base year

0.2

Target year

2025

Figure or percentage in target year

100

Figure or percentage in reporting year

3.5

% of target achieved [auto-calculated]

3.3066132265

Target status in reporting year

New

51

Is this target part of an emissions target?

Abs1

Is this target part of an overarching initiative?

Science-based targets initiative

Please explain (including target coverage)

During FY2020 Vodacom set a company-wide target to use 100% renewable energy by 2025 through a blend of:

- exhausting energy efficiency options,

- investing in generating our own renewable energy to power our operations,

- procurement of renewable energy through PPA's and

- purchasing renewable energy certificates

This target is part of our absolute Scope 2 emissions reduction target Abs1.

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	2	
To be implemented*	1	9,737
Implementation commenced*	0	0

Implemented*	4	8,224.37
Not to be implemented	1	

C4.3b

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

Initiative category & Initiative type

Energy efficiency in production processes

Electrification

Estimated annual CO2e savings (metric tonnes CO2e)

519.12

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

2,108,250

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

467,350

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

Self-Build on Grid – "build the last mile" to get grid power to sites previously running exclusively on generator or alternative power. Six sites were completed in FY2020.

Initiative category & Initiative type

Low-carbon energy generation

Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

44.84

Scope(s)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

113,000

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

500,000

Payback period

4-10 years

Estimated lifetime of the initiative

16-20 years

Comment

Solar Retrofit – deployment of solar power solution at base station sites to reduce grid electricity consumption.

Initiative category & Initiative type

Energy efficiency in production processes
Machine/equipment replacement

Estimated annual CO2e savings (metric tonnes CO2e)

455.11

Scope(s)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

3,490,000

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

9,824,000

Payback period

1-3 years

Estimated lifetime of the initiative

11-15 years

Comment

Core Network Energy Savings – replacement of old, inefficient power conversion UPS with high-efficiency variants and installing adiabatic cooling panels on air-conditioning chiller plants that pre-cool the ambient air used by the chiller coils.

Initiative category & Initiative type

Energy efficiency in production processes

Smart control system

Estimated annual CO2e savings (metric tonnes CO2e)

7,205.3

Scope(s)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

36,200,000

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

125,600,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Digital WS 2: IoT.NXT Raptor and free-cooling installations – phased installation of Raptors to enable remote monitoring and management of elements on BTSs and can result in approximately 20% saving on the energy utilisation of the site due to more efficient cooling.

C4.3c

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

Method	Comment
Financial optimization calculations	Financial optimization taking energy consumption into account. Upgrading/replacing equipment is according to available budgets, depreciation rates, asset write-offs and other business drivers including an energy consumption analysis.
Employee engagement	Employees are empowered to manage environmental issues as an integral part of their job and to investigate more efficient technology interventions to lower operational costs through energy efficiency.
Partnering with governments on technology development	Vodacom makes use of the Eskom Demand Side Management (DSM) subsidies and rebates where available to help defray the capital costs of equipment and the NBI's Private Sector Energy Efficiency Project (PSEE) to leverage off the knowledge and 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?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Group of products

Description of product/Group of products

IoT - SMART METERING / SMART WORKING

Vodacom offers products that contribute to saving energy and reducing CO2 emissions for clients by giving end users detailed, real-time information that could lead to behaviour changes and enabling them to work differently from the traditional, carbon-intensive methods of doing business.

IoT solutions enable objects or devices such as cars, traffic or streetlights and buildings to send and receive real-time information through our network. This information enables business customers to gain insight into how their resources are being utilised. This enables customers to reduce costs, energy and fuel consumption, carbon emissions and improve efficiency in their assets and operations. Vodacom provides technology solutions for monitoring water and energy consumption, which prevents wastage from excessive or abnormal usage.

During FY2020 Vodacom Business had 5.3 million IoT connections which enabled carbon savings. This included the following:
3 000 commercial electricity smart meters.
7 250 residential electricity smart meters.
483 004 smart logistics and fleet management capabilities.

These IoT connections enabled carbon savings of approximately 224 004 mtCO2e during the year for customers. Additionally, our diesel tank monitoring solution provides early warning of possible leaks, enabling enterprises to act timeously to limit loss and avoid the environmental impact of diesel leakages.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Evaluating the carbon-reducing impacts of ICT

% revenue from low carbon product(s) in the reporting year

15.75

Comment

Enterprise service revenue increased 6.7% to R14.3 billion, with revenue from IoT growing 38.5% during FY2020.

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, 2008

Base year end
March 31, 2009

Base year emissions (metric tons CO2e)
40,981.17

Comment

Scope 2 (location-based)

Base year start
April 1, 2008

Base year end
March 31, 2009

Base year emissions (metric tons CO2e)
371,052.06

Comment

Scope 2 (market-based)

Base year start

April 1, 2008

Base year end

March 31, 2009

Base year emissions (metric tons CO2e)

371,052.06

Comment

C5.2

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

54,069.57

Start date

April 1, 2019

End date

March 31, 2020

Comment

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

48,773.49

Start date

April 1, 2018

End date

March 31, 2019

Comment

Vodacom for FY2020 reports according to the operational control basis - previously equity share approach.
FY2019 restated with the operational control approach.

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

C6.3

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

Reporting year

Scope 2, location-based

556,916.56

Scope 2, market-based (if applicable)

556,844.57

Start date

April 1, 2019

End date

March 31, 2020

Comment

Past year 1

Scope 2, location-based

516,600.12

Scope 2, market-based (if applicable)

516,600.12

Start date

April 1, 2018

End date

March 31, 2019

Comment

Vodacom for FY2020 reports according to the operational control basis - previously equity share approach.
FY2019 restated with the operational control approach.

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?

No

C6.5

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

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO2e

239.92

Emissions calculation methodology

Consumption of office paper

Emission factors: Mondi Rotatrim Paper Profile and Sappi Typek Paper Profile – released August 2019 and May 2019 respectively, indicating electricity usage and CO2 emissions per tonne of paper.

Tonnes of paper purchased provided by the service providers were used to calculated emissions according to the GHG Protocol using the provided emission factors.

Assumptions: Data was provided for all operations and extrapolated according to the equity ratios.

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

100

Please explain

Capital goods

Evaluation status

Relevant, not yet calculated

Please explain

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

Evaluation status

Relevant, calculated

Metric tonnes CO2e

54,367.48

Emissions calculation methodology

Transmission and Distribution losses from purchased electricity

KWhs consumed were used to calculate emissions according to the GHG Protocol using Eskom's 2019 emission factors for transmission &

distribution losses, South Africa and the IEA 2019 emission factors for African countries.
Assumptions: This figure relates to transmission and distribution losses from electricity purchased in South Africa, Mozambique, Lesotho, Tanzania and DRC.

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

100

Please explain

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

5,707.89

Emissions calculation methodology

Third-party courier
Litres of diesel and petrol consumed by third party vehicles were used to calculate emissions according to the GHG Protocol using Defra's 2019 emission factors for fuel.
Assumptions: Third-party courier data applies to Vodacom SA only.

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

100

Please explain

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO2e

2,927.37

Emissions calculation methodology

Waste to landfill and recycled

Tonnes of waste to landfill and recycled were used to calculate emissions according to the GHG Protocol using Defra's 2019 emission factors for waste disposal and Friedrich and Trois (2013), GHG emission factors developed for the collection, transport and landfilling of municipal waste in South African municipalities.

Assumptions: Waste from operations was calculated using the available records.

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

100

Please explain

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

9,634.25

Emissions calculation methodology

Business travel in rental cars, commercial airlines, hotel accommodation

Car rental - kilometres travelled, average engine size and unknown fuel type provided by service provider. Defra's 2019 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 2019 emission factors for business travel - air used.

Hotel accommodation - bednights provided by service provider. Defra's 2019 emission factors for hotel stay used.

Emissions were calculated according to the GHG Protocol.

Assumptions: Hotel accommodation was based on estimated number of nights away on business travel and calculations were based on 1 person occupying a room per night.

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

100

Please explain

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO2e

13,208.62

Emissions calculation methodology

Employee commuting

A commuting survey was completed for Vodacom South Africa in 2012. A total of 707 surveys were received with 696 useable surveys. Due to the low percentage of response, this figure was combined with the 2009 Vodacom South Africa employee commuting survey and an average of the two was used to extrapolate the emissions per FTE for the Vodacom group according to the GHG Protocol using Defra's 2019 emission factors for business travel - land.

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

100

Please explain

Upstream leased assets

Evaluation status

Relevant, not yet calculated

Please explain

Downstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Please explain

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Vodacom's services are not intermediate products that require further processing. It is not responsible for directly generating greenhouse gas emissions.

Use of sold products

Evaluation status

Relevant, not yet calculated

Please explain

Emissions from the use of goods and services sold by Vodacom, principally from the energy used by network equipment – such as routers – and the energy required to charge mobile devices.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Vodacom sells mobile communication solutions and services. There is then no end of life treatment for sold products other than for handsets which make up a small % of Scope 3 emissions.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Vodacom does not have any equipment or assets that are owned and leased to third parties.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Emissions reported under Scope 1 & 2.

Investments

Evaluation status

Relevant, not yet calculated

Please explain

Other (upstream)

Evaluation status

Please explain

Other (downstream)

Evaluation status

Please explain

C6.7

(C6.7) Are carbon dioxide emissions from biogenic 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
0.0000067321

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

70

610,914.14

Metric denominator

unit total revenue

Metric denominator: Unit total

90,746,000,000

Scope 2 figure used

Market-based

% change from previous year

7.25

Direction of change

Increased

Reason for change

Scope 1 & 2 emissions increased by 8.05% mainly as a result of an increased emission factor in South Africa for purchased electricity and increased diesel consumption due to load shedding. This was offset by the installation of Raptor and free-cooling installations at base stations to enable remote monitoring and management for efficiencies, while building the "last mile" to get grid power to base stations running on generators or alternative energy, installing solar PV and replacing old, inefficient power conversion UPS resulted in energy and fuels savings and associated emissions of 1.45%.

Revenue increased by 0.76% resulting in an increase in the intensity figure for revenue.

Intensity figure

1.13

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

467,504.96

Metric denominator

Other, please specify

Terabyte of network traffic

Metric denominator: Unit total

415,194

Scope 2 figure used

Market-based

% change from previous year

32.98

Direction of change

Decreased

Reason for change

Scope 1 & 2 emissions for the network increased by 11.22%, mainly as a result of an increased emission factor in South Africa for purchased electricity and increased diesel consumption due to load shedding. This was offset by the installation of Raptor and free-cooling installations at base stations to enable remote monitoring and management for efficiencies, while building the "last mile" to get grid power to base stations running on generators or alternative energy, installing solar PV and replacing old, inefficient power conversion UPS resulted in energy and fuels savings and associated emissions of 1.45%.

The 11.22% increase in Scope1 & 2 emissions, off-set by a 65.97% increase in network traffic as a result of growth in data traffic from increasing demand for internet and data services, resulted in a decrease in the intensity figure for network traffic.

C7. Emissions breakdowns

C7.1

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

72

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	14,151.15
Mozambique	5,396.01
Lesotho	1,158.44
Other, please specify Tanzania	5,699.88
Democratic Republic of the Congo	27,664.09

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	45,341.13
Fugitive emissions	3,812.41
Mobile fuel	4,916.03

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 for in Scope 2 market-based approach (MWh)
South Africa	546,797.49	546,795.01	525,766.82	2.39
Mozambique	2,685.89	2,616.38	38,424.84	994.47
Lesotho	2,279.09	2,279.09	7,660.8	0
United Republic of Tanzania	5,131.38	5,131.38	16,952.02	0
Democratic Republic of the Congo	22.71	22.71	17,469.95	17,469.95

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 (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Access Network	397,675.96	397,673.48
Core Network	65,944.1	65,944.1
Data Centres	54,669.89	54,600.38

Offices	38,588.43	38,588.43
Retail	38.18	38.18

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?

Increased

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	72	Decreased	0.01	During FY2020 a PPA that covers 36 base station sites in South Africa and Mozambique purchases delivered 996.9 MWhs of renewable electricity for the first time. Total Scope 1 & 2 emissions for 2019 were 565 374 tCO2e. We therefore arrived at 0.01% through (72/ 565 374) * 100 = 0.01%.
Other emissions reduction activities	8,224.37	Decreased	1.45	The installation of Raptor and free-cooling installations at base stations to enable remote monitoring and management, building the "last mile" to get grid power to base stations running on generators or alternative energy, installing solar PV and replacing replacement of old, inefficient power conversion UPSes resulted in energy and fuels savings and associated emissions.

				Total Scope 1 & 2 emissions for 2019 were 565 374 tCO2e. We therefore arrived at 1.45% through (8 224.37/ 565 374) * 100 = 1.45%.
Divestment				
Acquisitions				
Mergers				
Change in output	26,568.85	Increased	4.69	The number of base stations increased by 751 or 3.5% while network traffic increased by 65.97% due to COVID-19 resulting in increased Scope 2 emissions. Total Scope 1 & 2 emissions for 2019 were 565 374 tCO2e. We therefore arrived at 4.69% through (26 568.85/ 565 374) * 100 = 4.69%.
Change in methodology	13,675.72	Increased	2.42	The emissions factor for purchased electricity from Eskom in South Africa (Scope 2) increased from 0.95 in 2018 to 1.04 kg CO2e per kWh in 2019. Total Scope 1 & 2 emissions for 2019 were 565 374 tCO2e. We therefore arrived at 2.42% through (13 675.72/ 565 374) * 100 = 2.42%.
Change in boundary				
Change in physical operating conditions	13,591.94	Increased	2.4	Load shedding in South Africa resulted in increased consumption of diesel in generators. Total Scope 1 & 2 emissions for 2019 were 565 374 tCO2e. We therefore arrived at 2.40% through (13 591.94/ 565 374) * 100 = 2.40%.
Unidentified				
Other				

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?

76

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 undertook this energy-related activity in the reporting year
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 (renewable and non-renewable) MWh

Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	199,144.13	199,144.13
Consumption of purchased or acquired electricity		18,466.81	587,807.61	606,274.42
Consumption of self-generated non-fuel renewable energy		3,139.31		3,139.31
Total energy consumption		21,606.12	786,951.74	808,557.86

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

HHV (higher heating value)

Total fuel MWh consumed by the organization

193,956.65

MWh fuel consumed for self-generation of electricity

179,447.99

MWh fuel consumed for self-generation of heat

14,508.66

Emission factor

2.68697

Unit

kg CO2e per liter

Emissions factor source

Defra 2019 - Guidelines to Defra's GHG Conversion Factors for Company Reporting, Fuels, updated July 2019. Available:
www.ukconversionfactorscarbonsmart.co.uk

Comment

Diesel consumed in generators & equipment and fleet vehicles.

Fuels (excluding feedstocks)

Petrol

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

5,187.48

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

5,187.48

Emission factor

2.31495

Unit

kg CO2 per liter

Emissions factor source

Defra 2019 - Guidelines to Defra's GHG Conversion Factors for Company Reporting, Fuels, updated July 2019. Available:
www.ukconversionfactorscarbonsmart.co.uk

Comment

Petrol consumed in fleet vehicles.

C8.2d

(C8.2d) 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	3,139.31	3,139.31	3,139.31	3,139.31
Heat	0	0	0	0
Steam	0	0	0	0

80

Cooling	0	0	0	0

C8.2e

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

Sourcing method

Power purchase agreement (PPA) with a grid-connected generator with energy attribute certificates

Low-carbon technology type

Solar

Country/region of consumption of low-carbon electricity, heat, steam or cooling

South Africa

MWh consumed accounted for at a zero emission factor

2.39

Comment

Vodacom signed a Purchase Power Agreement (PPA) with an Independent Power Producer (IPP) - Power X - to facilitate the supply of renewable energy to power Vodacom infrastructure and 36 base station sites in Nelson Mandela Bay (South Africa).

Sourcing method

Green electricity products (e.g. green tariffs) from an energy supplier, not supported by energy attribute certificates

Low-carbon technology type

Low-carbon energy mix

81

Country/region of consumption of low-carbon electricity, heat, steam or cooling

Mozambique

MWh consumed accounted for at a zero emission factor

994.47

Comment

Purchased renewable electricity for Mozambique – source unknown and market-based emission factor assumed to be zero.

Sourcing method

Green electricity products (e.g. green tariffs) from an energy supplier, not supported by energy attribute certificates

Low-carbon technology type

Low-carbon energy mix

Country/region of consumption of low-carbon electricity, heat, steam or cooling

Democratic Republic of the Congo

MWh consumed accounted for at a zero emission factor

17,469.95

Comment

Vodacom DRC electricity is purchased from the DRC national grid, which is predominantly a renewables mix and thus has a very low emission factor.

C9. Additional metrics

C9.1

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

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	No third-party verification or assurance

C10.1a

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

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

📎 Vodacom Assurance Report 2020.pdf

Page/ section reference

Pages 1-3

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

23

C10.1b

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

Scope 2 approach

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

📎 Vodacom Assurance Report 2020.pdf

Page/ section reference

Pages 1-3

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

98

Scope 2 approach

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

📎 Vodacom Assurance Report 2020.pdf

Page/ section reference
Pages 1-3

Relevant standard
ISAE 3410

Proportion of reported emissions verified (%)
98

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?
No, but we are actively considering verifying within the next two years

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)?
Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.
South Africa carbon tax

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

South Africa carbon tax

Period start date
June 1, 2019

Period end date
December 31, 2019

% of total Scope 1 emissions covered by tax
0

Total cost of tax paid
0

Comment
Both the Carbon Tax Act and the Customs and Excise Amendment Act came into effect on 1 June 2019.
The first carbon tax payment was due by 31 July 2020. Due to Covid-19 the filing and payment date was delayed by three months to 31 October 2020.
Vodacom is not liable to pay carbon tax in Phase 1, but needs to report on activities in NAEIS. The fuel levy of 7 cents per litre on petrol and 8 cents on diesel is added to operating costs.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?
As part of South Africa's ongoing efforts to move towards a low carbon economy and to meet South Africa's INDC targets, the Carbon Tax Act and the Customs and Excise Amendment Act came into effect on 1 June 2019.

The tax rate is set at R120 per tonne of CO2e (carbon dioxide equivalent) produced. During the first stage, a percentage-based threshold of 60% will apply, below which tax is not payable.

The intention is to provide for a tax-free liability threshold of 10 megawatts (MW) thermal capacity. The threshold is high enough to exclude non-industrial activities from the carbon tax, but low enough to make the tax applicable to most high-emitting industries in the country.

The South African Greenhouse Gas (GHG) Reporting Regulations came into law in April 2017. This mandatory regulation requires all South African companies that are in control of certain listed activities exceeding a specified threshold to report their GHG emissions to the Department of Environmental Affairs (DEA). The DEA will use the GHG emissions reported by companies as basis for carbon tax liability calculations.

An entity liable for mandatory reporting was obliged to register each facility on the internet-based National Atmospheric Emission Inventory System (NAEIS) by 3 May 2017. Once registered, liable entities are required to report their aggregated South African facilities' GHG emissions at company level for the preceding calendar year to the DEA by 31 March each year via NAEIS.

It is important to keep in mind that those businesses that have identified themselves as not liable for carbon tax during the first phase, will still be required to submit environmental levy accounts regardless of whether any carbon tax payment is due.

Vodacom is therefore complying with the carbon tax legislation by compiling its annual carbon footprint. It has assessed all its facilities to determine whether its associated emission activities qualify for or exceed the 10MW thermal threshold to see if it needs to register with the DEA, using a specific template of the National Atmospheric Emissions Inventory system (NAEIS).

Vodacom has therefore registered with the DEA and is now reporting onto the South African Greenhouse Gas Emissions Reporting System (SAGERS).

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

Yes, our customers

C12.1a

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

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

1

% total procurement spend (direct and indirect)

1

% of supplier-related Scope 3 emissions as reported in C6.5

6.6

Rationale for the coverage of your engagement

Courier services makes up a large part of the distribution channel. Vodacom measures the footprint of the services provided by the third party courier company.

In South Africa, Vodacom has initiated the phasing out of single-use plastics in offices and engage with suppliers to phase out single-use plastics in catering facilities.

Vodacom plans to engage with more suppliers, e.g. the travel agency to explore opportunities for smarter, more efficient ways of operating to reduce carbon emissions and cost.

Impact of engagement, including measures of success

The courier company makes use of route and load optimisation where feasible and has a vehicle tracking system to monitor fuel usage and driver behaviour to reduce emissions. Emissions decreased by 9.5% during FY2020, although it is difficult to isolate the impact of COVID-19.

Vodacom went from 686 kg to 0 kg of plastic cups used in South Africa and reduced plastic by 14 767 kgs.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement

Education/information sharing

Details of engagement

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

27

% of customer - related Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

IoT solutions enable objects or devices such as cars, traffic or streetlights and buildings to send and receive real-time information through our network. This information enables business customers to gain insight into how their resources are being utilised resulting in reduced costs, energy and fuel consumption, carbon emissions and improve efficiency in their assets and operations. Vodacom provides technology solutions for monitoring water and energy consumption, which prevents wastage from excessive or abnormal usage.

During FY2020 Vodacom Business had 5.3 million IoT connections which enabled carbon savings. This included the following:

- 3 000 commercial electricity smart meters
- 7 250 residential electricity smart meters
- 483 004 smart logistics and fleet management capabilities.

Impact of engagement, including measures of success

These IoT connections have enabled carbon savings of approximately 224 004 tCO2e during the year for customers.

Additionally, our diesel tank monitoring solution provides early warning of possible leaks, enabling enterprises to act timeously to limit loss and avoid the environmental impact of diesel leakages.

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?

Trade associations

C12.3b

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

No

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?

Vodacom has specialist regulatory and government relations teams who engage with Government, Regulators, and Business Partners such as Business Unity South Africa (BUSA) and the National Business Initiative (NBI) on policy issues impacting the business including climate change. They participate actively through written submissions and formal hearings on legislative and regulatory changes. Feedback on issues is reported as per Vodacom's risk management framework.

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 mainstream reports

Status

Complete

Attach the document

🔗 Vodacom Integrated Report 2020.pdf

Page/Section reference

Integrated Report - p1 - 65

Content elements

Governance

92

Strategy
Risks & opportunities
Emissions figures

Comment

Publication

In voluntary sustainability report

Status

Complete

Attach the document

📎 Vodacom Sustainability Report 2020.pdf

Page/Section reference

Sustainability Report - p 1- 89

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Publication

In voluntary communications

Status

Complete

Attach the document

🔗 Vodacom-UN-SDGs-Report-2020.pdf

Page/Section reference

Vodacom UN SDGs 2020 - p 1-12

Content elements

Emissions figures
Other metrics

Comment

C15. 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.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Executive Head: Vodacom Group Sustainability	Environment/Sustainability manager

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms