Welcome to your CDP Climate Change Questionnaire 2020

C0. Introduction

C0.1

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

Barloworld is a distributor of leading global brands with corporate offices in Johannesburg (South Africa) and Maidenhead (United Kingdom), providing integrated rental, fleet management, product support and logistics solutions. Established in 1902 in South Africa, we are one of the country's oldest companies. Inspiring leadership, a reputation for ethical conduct, innovation and a commitment to giving back have ensured Barloworld's longevity over 117 years. The core divisions of the group comprise Equipment (earthmoving equipment and power systems), Automotive (car rental, motor retail, fleet services, used vehicles and disposal solutions) and Logistics (logistics management, supply chain optimisation). The brands we represent on behalf of our principals include Avis, Audi, BMW, Budget, Caterpillar, Ford, Mazda, Mercedes-Benz, Toyota, Volkswagen and others.
Our shared value approach is based on the understanding that sustainable value creation requires that the interests of all stakeholders are addressed and ultimately benefits society at large.
Central to our approach is:
· Broader conception of value creation
· Focusses on connections between economic and societal progress
· Aims to enhance competitiveness while simultaneously advancing economic and social conditions of communities
· Requires looking at business decisions and opportunities through the lens of shared value
· Leads to new approaches that generate greater innovation and growth.
We are committed to moving away from traditional stakeholder trade-offs to create shared value and meaningful relationships. We aim to enhance business competitiveness while simultaneously advancing social and environmental outcomes. The Barloworld Way of doing business focuses on developing and maintaining mutually beneficial, long-term relationships.
Our strategy consists:
- Deliver top quartile shareholder returns

- Drive profitable growth
- Instil a high-performance culture

These are underpinned by our Sustainable Development framework.

Material issues that impact our strategic priorities, the risks for our goals and performance, and alignment of these issues to concerns identified by our stakeholders are:

1. Capital allocation (Focus on optimal capital deployment): Key Features: Cash release and distribution, Maximising returns, Active portfolio management, Performance monitoring and Opportunities for growth.
2. Operational performance (Driving our business to full potential): Key Features: Levers for operational efficiencies, Unlocking our full potential, Customer centricity and Future outlook.
3. High-performance culture (Instil a high-performance culture with execution ability): Key Features: Talent and performance management, Diversity and inclusion, Remuneration and reward, Organisational culture and Safety and health
4. Sustainable development (We embrace our role as a responsible corporate citizen, and strive to play an active and meaningful role in the societies where we operate): Our role in communities, Environmental stewardship and Transformation

The interests of our stakeholders are factored into our business operations and the management of our economic, social and environmental issues. We believe in creating shared value and meaningful relationships through in-depth planning and rigorous relationship management programmes.

We are committed to sustainable development and long-term value creation for all our stakeholders, and we manage our business in an integrated manner, embraced by a strong governance environment which is underpinned by our BAW Worldwide Code of Conduct.

Although BAW's GHG emissions are fairly limited (243 478 tCO2e scope 1 & 2 FY19), it has focused on limiting emissions. The group has set aspirational group targets of 10% efficiency improvements for its non-renewable energy consumption and GHG emissions (scope 1 & 2) by FYE20 against a business as usual scenario (2015 baseline), and an aspirational renewable energy target of 2 000 MWh or more per annum by FYE20.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	October 1, 2018	September 30, 2019	Yes	3 years

C0.3

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

Angola
Botswana
Democratic Republic of the Congo
Eswatini
Ghana
Lesotho
Malawi
Mozambique
Namibia
Russian Federation
South Africa
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
Zambia
Zimbabwe

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.

Financial control

C1. Governance

C1.1

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

Yes

C1.1a

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

Position of individual(s)	Please explain
Board-level committee	The Group Risk and Sustainability Committee, one of six sub-board committees, holds the highest level of responsibility for Climate Change within Barloworld. This Committee was established to assist the board in ensuring sound corporate governance, improving internal controls and monitoring company performance. The Committee assists the board in recognising all substantive sustainability, climate change, environmental and health and safety risks to which the group is exposed and ensures that the requisite management culture, practices, policies and systems are implemented and function effectively. In giving consideration to Safety, Health and Environmental (SHE) aspects of the group, the committee receives SHE reports on a quarterly basis which includes water-related and climate change information such as water withdrawals, recycling and rain water harvesting, emissions and energy usage and related efficiency improvement initiatives, and progress towards set aspirational targets. Examples of decisions made by the committee include the assurance approach over selected non-financial disclosures, including energy consumption and emissions.

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 Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	The Group Risk and Sustainability Committee, which is one of six sub-board committees, holds the highest level of responsibility for Sustainability aspects within Barloworld. This Committee was established to assist the board in ensuring sound corporate governance, improving internal controls and monitoring company performance. The Committee assists the board in recognising all substantive sustainability, climate change, environmental and health and safety risks to which the group is exposed and in ensuring that the requisite management culture, practices, policies and systems are implemented and function effectively within the group. In giving consideration to Safety, Health and Environmental (SHE) aspects of the group, the committee receives SHE reports on a quarterly basis which includes climate change information such as emissions and energy usage as well as related efficiency improvement initiatives, and progress towards aspirational non-renewable and emissions (scope 1 and 2) efficiency improvement and renewable energy targets. The committee has oversight of the risk management framework, identified risks and mitigation strategies/ measures. Environmental risks, including climate change aspects are included in the group's identified risks. The Chairperson of each of the Board sub-committees, including the Risk and Sustainability Committee, report to the Board on a quarterly basis.
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding business plans	The group has a comprehensive strategic planning process that includes identified major risks and opportunities. These plans are presented at various levels within the organisation to ensure integration across the group and include an overall presentation to the Board. This process takes place on an annual basis.

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Other C-Suite Officer, please specify Group and Divisional CEOs	Other, please specify Achievement of group strategy	Quarterly
Other, please specify Divisional Risk and Sustainability Committees	Other, please specify Directing, monitoring, assessing & managing environmental aspects and related risks	Quarterly
Other C-Suite Officer, please specify Executive: Sustainability	Other, please specify Achievement of Sustainability strategy	Quarterly
Other, please specify Divisional Sustainability champions	Other, please specify Driving Sustainability strategy	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).

Position: Group and Divisional CEOs

Responsibilities: These individuals are part of the group Executive Committee, which is the highest level of executive management within Barloworld (BAW).

As the highest level/s of executive management, these individuals are responsible for driving the achievement of the approved group strategy within their respective operations, which include sustainability and environmental objectives.

The Chief Executive Officer and Board of Directors in each division are ultimately responsible and accountable for climate change management. Climate change aspects are an integral part of management in the company and are recognised as a corporate priority.

Monitoring: Implemented processes ensure that the Chief Executive Officer and Board of Directors remain fully informed about all pertinent environmental issues, including those relating to climate change. For example a SHE report is presented at divisional and group risk and sustainability meetings, which include performance against set aspirational targets and pertinent issues including climate change.
These individuals are responsible for the achievement of the group strategy, including non-financial metrics. Included in individual/personal scorecard metrics are other role-based non-financial elements. Sustainability related objectives incorporate efficiency improvement targets for non-renewable energy, greenhouse gas emissions (scope 1 and 2), water withdrawals (municipal sources), and where relevant, achievement of the renewable energy targets.
The achievement of such targets contributes towards climate change mitigation.

Position: Divisional Risk and Sustainability Committee
Responsibilities: Divisional executive management committee which is chaired by the divisional CEOs. These CEOs sit on the Group Executive Committee, the highest level of executive management within BAW.
Directing, monitoring, assessing & managing divisional activities, including environmental aspects and related risks. The Chief Executive Officer in each division is ultimately responsible and accountable for climate change management. Climate change aspects are an integral part of management in the division and is recognised as a corporate priority.
Monitoring: Implemented processes ensure that the committee remains fully informed about all pertinent environmental issues, including those relating to climate change. For example a SHE report is presented at the divisional risk and sustainability meetings, which includes performance against set aspirational targets and pertinent issues including climate change.
The committee monitors progress against Sustainability related objectives including efficiency improvement targets for non-renewable energy, greenhouse gas emissions (scope 1 and 2), water withdrawals (municipal sources), and where relevant, achievement of the renewable energy targets.

Position: Group Sustainability Manager
The Group Manager is part of the management team, who reports to the Group Corporate Executive: Governance and Corporate Affairs who attends the Group Executive Committee.
Responsibilities and Monitoring: This position is required to:
- Co-ordinate, compile and execute the overall group sustainability strategy which includes addressing climate change.
- Set sustainability objectives in the group, including climate change related targets e.g. GHG emission intensity reductions.
- Drive the endorsed sustainability strategy across the group.
- Compile and roll-out environmental related policies, including climate related policies that have been appropriately endorsed by the relevant governance structures.

- Ensure day-to-day operational requirements, systems, reports, etc. are in place to ensure relevant, timely and accurate reporting to stakeholders on sustainability issues, including measurement and monitoring of environmental impacts e.g. emissions generated.
- Appropriate engagement with relevant stakeholders on environmental related matters.
- Assess, monitor and consider climate change risks and opportunities across the group and ensure strategies are implemented addressing these aspects.

Position: Divisional Sustainability Champions
These are generally Divisional Executive level individuals.
Responsibilities: The Divisional Sustainability Champions are responsible for the achievement of and reporting on defined sustainability initiatives/objectives (including climate change), energy and emission efficiency improvement targets.
Monitoring: Included in their performance indicators are non-renewable and greenhouse gas emissions (scopes 1 and 2) efficiency improvements. Champions identify and drive initiatives in support of set objectives and targets. The achievement of the group aspirational efficiency improvement targets contributes towards climate change mitigation. Appropriate engagement with relevant stakeholders on environmental related matters.

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
Other, please specify	Monetary reward	Efficiency target	Sustainability Manager: Generally responsibilities and outputs include: formulating the environmental strategy which includes

Sustainability Manager and Champions			climate change, analysis and reporting of qualitative and quantitative data, ensuring compliance with SHE legislation, pursuing relevant standards, ensuring adequate and effective control environment, operational environmental risk management, environmental training, waste management, incidents and complaints management and achievement of applicable targets. Sustainability Champions: Generally responsibilities and outputs at a divisional level include: Achievement of and reporting on defined sustainability initiatives/objectives, energy and emission efficiency improvement targets. Included in the performance indicators are the group's aspirational efficiency improvement target for non-renewable energy and greenhouse gas emissions (scopes 1 and 2). The achievement of the aspirational efficiency improvement targets will contribute towards climate change mitigation. The group implemented an aspirational target of a 10% efficiency improvement in non-renewable energy consumption and GHG emissions (scope 1 and 2) by 2020FYE off a 2015 baseline, and a renewable energy target of 2 000 MWh or more per annum.

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	1	3	Identified risks in the short-term that are often of an operational nature.

Medium-term	3	5	Risks coincide with the strategic planning period that are often of a strategic nature given the group's business model.
Long-term	5	10	The group has long-term ambitions and these risks are assessed and addressed in the context of such ambitions.

C2.1b

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

BAW has a robust and systematic risk management process in place which assesses risks on their probability, severity and quality of the control environment and gives each risk a residual risk score. On an annual basis the Risk and Sustainability Committee sets a risk appetite that is used in the risk assessment process. Definition of Substantive Risk: risks with a Residual (opposed to Inherent) score of critical or high relative to the set Risk Appetite may have the ability to substantively change BAW's business model or business operations, revenue or expenditure. Such risks are identified in BAW's risk assessment process together with related impacts and mitigation as reflected in response C2.3.a. Despite BAW not being a significant emitter of greenhouse gas emissions. (FY19: 243 478 - scope 1 and 2 emissions), it considers a number of environmental-related risks to its operations and value chain. These include climate change and related physical risks due to changing weather patterns; regulatory risks associated with greenhouse gas emissions; financial risks resulting from carbon taxes; operational risks due to constraints in energy supply and the availability of natural resources, such as water. The group identifies the predominant use of fossil fuel-based energy in its supply chain, operations, products and solutions as a risk to itself and its value chain. This is built into the group's strategic planning process.

In considering such risks and related opportunities, a number of variables are considered, some of which may overlap with the various climate related scenarios.

Ongoing engagement assists BAW in understanding challenges currently being faced or anticipated by its customers as well as its suppliers.

Customer satisfaction is primarily gauged through a range of informal and formal surveying tools, including regular direct engagement with customers. This, in addition to market surveys and analysis, allow the various BAW business units to track customer demand, satisfaction and anticipate demand trends.

This allows BAW to assess risks and opportunities in its value chain which will inform business strategy and risk management as appropriate.

BAW engages with organised business to remain aware of climate-related trends which may influence its management of risks and opportunities and its business strategy.

While the above is incorporated into our business strategy, we are currently considering the optimal manner in which to incorporate climate-related scenario analysis.

BAW strives to minimise the environmental impact of its direct operations and to manage emissions appropriately, including efficiency targets for non-renewable energy consumption and GHG emissions (scope 1 and 2). BAW has considered its direct operations, as well as supply chain and customers in its risk assessment.

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
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

Risks are identified through robust risk assessment and systematic strategic management procedures. A biannual High Level Risk Assessments (HLRA) engages various levels (BU, divisional and group) of the organisation and involves ongoing review and reporting at management, executive and board levels. Identification and assessment of risks, including climate change, begins with divisional management at asset level. The risks are assessed in terms of timeframe, likelihood, impact and quality of controls. In addition, an annual climate change risk

assessment is conducted at a Group (company) level which focuses on the identification, assessment and response to climate change related risks. Due to the longer-term nature of climate change risks, these feature lower on the HLRA.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

A specific climate-related risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

BAW recognised the strategic importance of climate change and as such a specific climate change risk assessment is undertaken. This complements the broader risk assessment described above and has longer time perspectives.

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	Identification of risks follows a robust and systematic process. A comprehensive risk management policy is in operation throughout the group, complemented by the Barloworld Limited risk management philosophy. Enhancing and entrenching a risk culture in the group includes dedicated divisional risk assessment interventions at which internal audit and group risk management services are present. Risk management is incorporated into the group's strategic planning process. BAW considers current regulations in its risk assessments, including those related to climate change. Examples of current climate change related regulations include mandatory emissions reporting, carbon pricing and budget regulations. Impacts of national commitments in the various regions BAW operates are also taken into consideration to better understand challenges that may be faced not only directly by BAW but also in its value chain. BAW does consult with legal specialist on current and emerging regulations to ensure the impacts of these are understood and appropriately responded to. In the case of Carbon Taxes, BAW performs calculations to understand the related financial impacts of both the direct tax liability and where relevant the financial impacts of anticipated 'pass through' costs. An example of a regulatory risk that BAW currently faces in South Africa is the uncertainties around pass through costs related to electricity and the impact this could also have on BAW's suppliers. This poses additional costs to BAW's current operating model and could pose a financial risk to BAW. BAW also engages with organised business to better understand the impacts of current regulations within its own operations and throughout its value chain. Changes to existing regulations and/or emergence of new regulations influence customer behaviour and can lead to uncertainty in the purchase/investment decision. Such impacts could negatively influence demand for BAW's products and services.
Emerging regulation	Relevant, always included	Identification of risks follows a robust and systematic process. A comprehensive risk management policy is in operation throughout the group, complemented by the Barloworld Limited risk management philosophy. Enhancing and entrenching a risk culture in the group includes dedicated divisional risk assessment interventions at which internal audit and group risk management services are present. Risk management is incorporated into the group's strategic planning process. BAW considers emerging regulations in its risk assessments, including those related to climate change. Examples of emerging climate change related regulations include carbon pricing and carbon budget in South Africa. Impacts of national commitments in the various regions BAW operates are also taken into consideration to better understand current and emerging challenges that may be faced not only directly by BAW but also in its value chain. BAW does consult with relevant specialists on current and emerging regulations to ensure the impacts of these are understood

		and appropriately responded to. BAW also engages with organised business to better understand the impacts of emerging regulations within its own operations and throughout its value chain. Changes to existing regulations and/or emergence of new regulations influence customer behaviour and can lead to uncertainty in the purchase/investment decision. An example could be the introduction on emission thresholds on equipment, plant and vehicles. Such impacts could negatively influence demand for BAW's products and services as well as influence decision-making of BAW's broader stakeholders.
Technology	Relevant, always included	Identification of risks follows a robust and systematic process. A comprehensive risk management policy is in operation throughout the group, complemented by the Barloworld Limited risk management philosophy. Enhancing and entrenching a risk culture in the group includes dedicated divisional risk assessment interventions at which internal audit and group risk management services are present. Risk management is incorporated into the group's strategic planning process. Adaptation of processes, products and technologies are required to meet shifts in customer preferences and expectations, including a transition to a lower carbon economy. An inability or slow response to adapting current and innovating future technologies to support such a transition may result in a loss in competitive advantage and reduced demand for BAW's products and services. Risks related to products and services, including the technologies these incorporate are factored into risk assessments. BAW engages with principals, customers and organised business associations to better understand emerging requirements and technological trends, which inform its risk assessments and mitigation where relevant. Changes to current climate change related regulations and/or emergence of new regulations in this regard could also influence technological preferences and are considered under technology related risks. An example is the transition in energy solutions from fossil-fuel based to renewable energy. BAW product offerings include: solar PV solutions and microgrids, energy efficient plant and equipment, fuel efficient as well as hybrid and electric vehicles.
Legal	Relevant, always included	Identification of risks follows a robust and systematic process. A comprehensive risk management policy is in operation throughout the group, complemented by the Barloworld Limited risk management philosophy. Enhancing and entrenching a risk culture in the group includes dedicated divisional risk assessment interventions at which internal audit and group risk management services are present. Risk management is incorporated into the group's strategic planning process.

		Possible legal exposure, claims and litigation form part of the risk assessment process. Claims made are directed to Group and Divisional legal departments. Past claims and the validity of these will inform the risk assessments and management process. An example of a legal risk which BAW faces is the transition to a low-carbon economy and the imposition of new or amendments to existing regulations may impact the inherent likelihood and/or the severity of litigation risks.
Market	Relevant, always included	Identification of risks follows a robust and systematic process. A comprehensive risk management policy is in operation throughout the group, complemented by the Barloworld Limited risk management philosophy. Enhancing and entrenching a risk culture in the group includes dedicated divisional risk assessment interventions at which internal audit and group risk management services are present. Risk management is incorporated into the group's strategic planning process. Market risks are considered in BAW's risk assessment process. An example of possible market risk that BAW faces is the shifts in consumer behaviour and preferences, possibly driven by amendments to existing and/or emergence of new regulations, which may impact cost of ownership of BAW products and services e.g. Carbon pricing. Global consumer shifts towards lower carbon products and services necessitate greater customer engagement and improved understanding of customers' sustainability related approaches and targets. Also, customer requirements may evolve more rapidly in certain of BAW's markets than others, impacting which products/technologies are offered in each of the markets, i.e. market differentiation e.g. ICE vs Electric drive vehicles, plant and equipment.
Reputation	Relevant, always included	Identification of risks follows a robust and systematic process. A comprehensive risk management policy is in operation throughout the group, complemented by the Barloworld Limited risk management philosophy. Enhancing and entrenching a risk culture in the group includes dedicated divisional risk assessment interventions at which internal audit and group risk management services are present. Risk management is incorporated into the group's strategic planning process. Reputational risks are considered in BAW's risk assessment process. Shareholders are becoming increasingly aware of climate change related matters and the inherent risks thereof not only related to companies, but also to their value chains. As such Barloworld continues to assess its physical, regulatory, reputational and financial risks associated with climate change and, where practicable, adapt its operations, processes and procedures accordingly.

		BAW actively manages such risks through ongoing stakeholder engagement to better understand stakeholder concerns and formulate appropriate responses to meet expectations, manage perceptions and enhance the position of the group. Such engagement informs reputational risks including those stemming from climate change in a global context where companies are increasingly under pressure to recognise and take action on climate change. Stakeholder engagement includes relevant disclosures and reporting on BAW's commitments, strategies, responsible citizenship programme, and sustainable development framework, all of which assist in managing BAW's reputation. Reputational risks could also stem from an organisation's supply chain. In this regard, BAW represents globally leading principals who have in place risk management frameworks that allow them to manage their climate change related risks accordingly.
Acute physical	Relevant, always included	Identification of risks follows a robust and systematic process. A comprehensive risk management policy is in operation throughout the group, complemented by the Barloworld Limited risk management philosophy. Enhancing and entrenching a risk culture in the group includes dedicated divisional risk assessment interventions at which internal audit and group risk management services are present. Risk management is incorporated into the group's strategic planning process. Physical risks are considered in BAW’s risk assessment process. By way of example, extreme weather events, like flooding, hail, snow and ice could result in damage to BAW assets including buildings, vehicles, plant and equipment as well as those of suppliers and/or customers. Such impacts may result in disruptions to BAW, its suppliers and/or customers operations impacting on demand, operating costs and availability of capital due to repair costs. Depending on the severity of damage, such instances may also impact on BAW's ability to service and supply its customers' with goods and services. Such risks also pose health and safety risk to employees. Business continuity and contingency plans as well as relevant insurance coverage are place in this regard.
Chronic physical	Relevant, always included	Identification of risks follows a robust and systematic process. A comprehensive risk management policy is in operation throughout the group, complemented by the Barloworld Limited risk management philosophy. Enhancing and entrenching a risk culture in the group includes dedicated divisional risk assessment interventions at which internal audit and group risk management services are present. Risk management is incorporated into the group's strategic planning process. Chronic physical risks are considered in the above process.

		Examples are the increase in average temperatures and changing rainfall patterns, which may impact on agricultural and human settlements and possible relocation of these. These could impact demand for BAW's products and services if such relocation is outside BAW's distribution geographies. This may also impact on the health and safety of BAW staff and its ability to attract and retain key talent. In the longer term, BAW may have to increase capital expenditure to ensure employees operate in a safe and healthy work environment.

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?

Downstream

Risk type & Primary climate-related risk driver

Market

Changing customer behavior

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

Changes in customer behaviour could stem from shifts in consumer preferences leading to a substitution of existing products and services with lower emission options. Consumer preferences could be influenced by increased pricing of emissions, enhanced emission reporting obligations, cross-border adjustments, mandates on and regulation of existing products and services and exposure to litigation. Examples of such changes include customers shifts towards products and services that: are locally sourced; more efficient; have a reduced carbon footprint; limit regulatory exposure and stakeholder negativity. If BAW and its principals are unable to adapt and innovate to provide their customers with such products and services that meet standards and/or customer expectations, this could result in customers switching to competitor products, which would reduce demand (reduced revenue) for BAW's products and services. Changes in customer behaviour include the shift towards renewable energy solutions such as solar PV. BAW has expanded its offerings to meet such shifts in customer behaviour as reflected (example: BAW supply of a seven megawatt solar power plant to B2Gold in Namibia).

In addition, there are competitive risks from suppliers who may enter the market with technologies, products and services that are more competitive with respect to the above. Backward integration by customers into their supply chain to close gaps in current product offerings also poses a risk. For example, some company's are assessing feasibility of hydrogen powered heavy plant and equipment in pursuit of reduced greenhouse gas emissions. If such products are not within the current offerings, this will result in reduced demand for BAW's products.

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)

115,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The estimated aggregated financial impact reflected above includes estimated impacts relating to reduced revenue from decreased demand for goods/services, research and development (R&D) expenditures in new and alternative technologies, capital investments in technology development and costs to adopt/deploy new practices and processes.
The estimated R115 million equates to less than 0.25% of BAW's FY2019 revenue (R56.8 billion).

Cost of response to risk

600,000

Description of response and explanation of cost calculation

BAW is diversified across its customers, regions of operations and products including a number of energy efficient and low emission technologies. BAW represents leading global principals who are committed to developing technologies that meet customer requirements including emission standards, and optimising processes, distribution and supply chains aimed at emissions reduction. BAW engages with customers and offers products which include high efficiency gas generators that can utilise natural gas, biogas (landfill and sewerage) or coal bed methane and can provide even higher energy efficiency if incorporated with Combined Heat and Power (CHP) technology. Renewable energy offerings include solar photovoltaic (PV) solutions, an example includes BAW supplying a seven megawatt (MW) solar power plant to B2Gold at its Otjikoto mine in 2017- one of the largest solar installations in Namibia at the time. Additionally, BAW's Logistics business worked with the CSIR and others in designing a more energy efficient and ergonomic vehicle which can carry a higher payload, while reducing the fuel consumption and ultimately the emissions. Smart Trucks generate on average 31% less road damage per ton of payload transported and have seen fuel savings as high as 25% per ton of payload transported; and Green Trailers included in the fleet which significantly reduce fuel consumption through aerodynamic innovation. This translates into significant emission reductions.
Costs associated with providing a wide product range and developing new products are incorporated into the ongoing operational activities and cost base of the group. In some cases, the costs associated with developing new products may be covered in the group's 'cost of sales' which

was some R43 billion for FY2019. ‘Green trailers' (Truck and trailer) and Smart Trucks were designed with improved aerodynamics at a cost of some R600 000. This cost was incorporated into the operating costs of the business.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Reputation

Increased stakeholder concern or negative stakeholder feedback

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

Risks associated with increased stakeholder concern and negative stakeholder feedback arising from climate change issues may result in financial and reputational risks for companies that fall foul of regulations or public opinion. Public perception is influenced by the growing awareness of climate change issues and company practices impacting these; the disclosure of which is often regulated. Reputational damage could negatively affect commercial standing and activity of the group as well as its ability to attract and retain capital and key talent. Additionally, increased stakeholder concern and prolonged negative feedback could undermine BAW's responsible citizenship programme and sustainable development framework, result in reduced demand(reduced revenue) for its products and services, ability to attract investment and finance and jeopardise its social license to operate.

Prolonged adverse public perception could lead to stigmatization of certain sectors which may have an impact on strategic decisions such as business models, disposals and operational locations. Growing public outcry could result in the introduction of/amendments to legislation and

regulations.
In recent years the impact of supply chain and logistics processes on the environment has come into question with consumers growing increasingly concerned with whether or not these processes meet environmental standards when making a purchasing/ investment decision. A relevant example in addressing stakeholder feedback and driven by its objective to deliver smart transport solutions, BAW Logistics introduced smart trucks with innovative features that will improve overall performance of the transport industry while ensuring safety and efficiency standards are continually improved. A further example is the inclusion on sustainability aspects in customer RFP/ Tender documents and assessment and ESG aspects in funding and investment decision criteria

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

80,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The estimated aggregated financial impact reflected above includes estimated impacts relating to reduced revenue from decreased demand for goods/services, reduced revenue from negative impacts on workforce management and planning, increased operating costs, research and development (R&D) expenditures in new and alternative technologies, capital investments in technology development, costs to adopt/deploy new practices and processes and the reduction in capital availability.
The estimated R80 million equates to less than 0.2% of BAW's FY2019 revenue (R56.8 billion).

Cost of response to risk

2,000,000

Description of response and explanation of cost calculation

BAW manages this risk through geographic, product, customer and industry diversification. Ongoing stakeholder engagement assists BAW to manage its reputation and address stakeholder expectations and public perceptions. Stakeholder perception is influenced through transparent public reporting, including climate change data, for which BAW has reporting systems and obtains assurance on relevant aspects by the group external auditors to enhance credibility. BAW reports its GHG emissions and management of climate change risks and opportunities to stakeholders, as well as its efforts in terms of climate change including energy efficient products and services. Staying aware of developments in the market and representing international leading brands allows BAW to uphold its reputation as a responsible corporate citizen. BAW also positively positions itself by participating in a number of environmental related business and industry forums including Business Unity South Africa, National Business Initiative, WWF and each of BAW's business units belong to and participate in their respective industry bodies/associations. BAW has adopted a Measure, Avoid, Reduce, Switch and Offset (MARSO) methodology to manage energy/emissions. BAW has set a group aspirational target of 10% efficiency improvement in non-renewable energy and emissions (scope 1 & 2) intensity by 2020FYE (2015 baseline), further supported by BAW's Energy Efficiency, Climate Change and Environmental Policies.

There are no additional costs associated with geographic, industry and customer diversification which are part of the group's overall risk management approach. Actual costs associated with integrated reporting, reporting systems and external assurance was some R2 million for FY19.

Comment

Identifier

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

Climate change can result in: variability in weather patterns; storms; flash floods; droughts; rising mean temperatures; rising sea levels and other extreme weather events (example: cyclones) which are expected to become more prevalent. Flooding and extreme weather events could damage company infrastructure, stock and negatively affect operations including field servicing, operation of plant, equipment and vehicles. Droughts would also negatively affect operations through water shortages, water price increases and operational disruptions. Adaptation and mitigation of the above consequences may require expenditure on infrastructure to overcome related challenges. If the consequences are severe it could result in changes to the existing business model or relocation, possible increases in insurance premiums and could impact safety levels. Variability and extremities in weather patterns could impact on BAW’s customers, including mining operations, impacting on the demand for products/services. If such changes are not anticipated this could lead to BAW's misalignment between supply and demand, resulting in an inability to meet customers demand or an over supply of products and/or services. An example includes the drought conditions experienced in the Western Cape in FY2018 or Cyclone Idai in Mozambique. Within BAW water is predominantly used for washing vehicles, plant and equipment. Certain operations have taken a decision to only wash excessively dirty vehicles, plant and equipment. Such decisions and practices may negatively impact on customer satisfaction levels. Tourism volumes could also be negatively impacted by the drought or flood conditions which may result in a reduced demand for BAW's products and services, for example car hire.

Time horizon

Short-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

80,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The estimated aggregated financial impact reflected above includes estimated impacts relating to reduced revenues from lower sales/output, increased operating costs, capital investments in technology development, costs to adopt/deploy new practices and processes, increased capital costs, reduction in capital availability, increased insurance premiums and potential for reduced availability of insurance on assets in "high-risk" locations, increased production costs due to changing input prices and output requirements, write-offs and early retirement of existing assets. The estimated R80 million equates to less than 0.2% of BAW's FY2019 revenue (R56.8 billion).

Cost of response to risk

930,000

Description of response and explanation of cost calculation

The diversification of BAW's geographies (15 countries), industry segments, products, its supply chains and manufacturing footprint, and customers minimises this risk and related impacts, as it is typically confined to specific regions at a given time. BAW engages with stakeholders including principals and customers to understand and meet demand requirements. BAW insures for any physical and consequential damages. All BAW facilities maintain business plans that incorporate emergency response actions and business continuity. The group continues to

implement water efficiency initiatives to curb the impact of water shortages and potential price increases. In FY2019, BAW recycled 24.1% of its municipal water withdrawals. Various water recycling and harvesting initiatives were implemented across the group, in one business unit these have resulted in an annual saving of some 144 million litres of water that would have otherwise been withdrawn from municipal water systems. Cumulative water saved from 2007 to 2019 in the same business unit is some 1 292 million litres. Over the 2019 financial period water harvested volumes were some 1 857 kilolitres.

There are no additional costs associated with BAW's geographic, industry, product, supply chain and customer diversification which are part of the group's overall risk management approach. BAW insurances include physical damage associated with changes in precipitation and extreme weather patterns, for example floods and droughts. The actual cost of this insurance was marginally above R34 million for the reporting period. BAW has invested significantly in water recycling and rainwater harvesting systems. For example, one of our divisions spent some R9.3m on water-related initiatives, including water-use efficiency, harvesting and re-use initiatives during the period 2010 to 2019. This equates to an average investment spend of R930 000 per annum.

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?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Shifts in consumer preferences could be impacted by climate change leading to increased demand for more energy and emission efficient products and services. BAW has the opportunity to capitalise on this by continuing to supply required products to existing markets and through the development and/or expansion of low emission or alternate energy products and services. The expansion of such products and services provide BAW with a competitive advantage and may allow for further diversification of business activities and possibly access to new markets. BAW represents world-class principals who anticipate changes in consumer preferences and through R&D and innovation are able to meet these by providing more energy efficient and lower emission products and services as well as renewable energy offerings, for example solar PV.

Time horizon

Short-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)

40,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The estimated aggregated financial impact reflected above includes estimated impacts relating to reduced operating costs, increased production capacity, resulting in increased revenues, increased value of fixed assets, benefits to workforce management and planning, reduced exposure to future fossil fuel price increases, reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon, increased capital availability, reputational benefits resulting in increased demand for goods/services, better competitive position to reflect shifting consumer preferences, resulting in increased revenues, increased market valuation through resilience planning, increased reliability of supply chain and ability to operate under various conditions, and increased revenue through new products and services related to ensuring resiliency. The estimated R40 million equates to less than 0.1% of BAW's FY2019 revenue (R56.8 billion).

Cost to realize opportunity

600,000

Strategy to realize opportunity and explanation of cost calculation

BAW is diversified across its customers, regions of operations and products including a number of energy efficient and low emission technologies. BAW represents worldclass principals who are committed to developing technologies that meet customer requirements including emission standards, and optimising processes, distribution and supply chains aimed at emission reduction. BAW engages with customers and offers products which include high efficiency gas generators that can utilise natural gas, biogas (landfill and sewerage) or coal bed methane and can provide even higher energy efficiency if incorporated with Combined Heat and Power (CHP) technology. Renewable energy offerings include solar photovoltaic (PV) solutions, an example includes the supply of a seven megawatt (MW) solar power plant to B2Gold at its Otjikoto mine - one of the largest solar installations in Namibia in 2017. Additionally, BAW’s Logistics business worked with the CSIR and others in designing a more energy efficient and ergonomic vehicle which can carry a higher payload and while reducing the fuel consumption and ultimately the emissions. Smart Trucks generate on average 31% less road damage per ton of payload transported and have seen fuel savings as high as 25% per ton of payload transported; and Green Trailers included in the fleet which significantly reduce fuel consumption through

aerodynamic innovation. This translates into significant amounts of emission reductions. Efficiency of emissions per tonnes per kilometre is information factors into customer's supplier selection decision making.

The costs associated with developing the opportunities form part of the ongoing costs of the business or are part of the product offering and form part of the normal actual ‘cost of sales’ which was R43 billion in the reporting period. For example, ‘Green trailers' (Truck and trailer) and Smart Trucks were designed with improved aerodynamics at an actual cost of some R600 000. This cost was incorporated into the operating costs of the business.

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 indirect (operating) costs

Company-specific description

Efforts to meet group’s commitments in terms of Energy Efficiency Leadership Network Pledge have benefited BAW in embedding energy efficiency and climate change in policy, strategies and operations. In 2016, BAW set a group aspirational target of 10% efficiency improvement in non-renewable energy and greenhouse gas emissions (scope 1 and 2) by 2020FYE off a 2015 baseline year, and a renewable energy target

of 2 000 MWh or more per annum. Anticipated benefits of such targets include: costs savings through efficiency of use and price increases/ carbon pricing; enhanced competitive advantage and operational resilience through minimising supply interruptions and forced shut downs; and a lower impact on the environment. Where practicable, initiatives have been implemented within the group which include: the use of more efficient production and distribution processes, and modes of transport; and the use of new technologies, including high efficiency and renewable energy solutions. Further, BAW has the opportunity to gain more market share as a result of protecting their reputation by managing climate change risks and opportunities effectively.

Time horizon

Short-term

Likelihood

Likely

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)

15,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The estimated aggregated financial impact reflected above includes estimated impacts relating to reduced operating costs, increased production capacity, resulting in increased revenues, increased value of fixed assets, benefits to workforce management and planning, reduced exposure to future fossil fuel price increases, reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon, increased

capital availability, reputational benefits resulting in increased demand for goods/services, better competitive position to reflect shifting consumer preferences, resulting in increased revenues, increased market valuation through resilience planning, increased reliability of supply chain and ability to operate under various conditions, and increased revenue through new products and services related to ensuring resiliency. The estimated R15 million equates to less than 0.1% of BAW's FY2019 revenue (R56.8 billion).

Cost to realize opportunity

6,700,000

Strategy to realize opportunity and explanation of cost calculation

Being an early signatory to Energy Efficiency Leadership Network Pledge and adopting standards/legislation and by participating in the Private Sector Energy Efficiency initiative, assists BAW in preparing for any climate change related regulations including mitigation & pricing mechanisms. BAW has adopted a Measure, Avoid, Reduce, Switch and Offset (MARSO) methodology to manage energy/emissions. BAW has set a group aspirational target of 10% efficiency improvement in non-renewable energy and emissions (scope 1 & 2) intensity by 2020FYE (2015 baseline), further supported by BAW's Energy, Climate Change and Environmental Policies. The group has invested in a number of energy reduction initiatives that would facilitate a smoother transition to lower/zero emission energy sources, and will continue to implement such initiatives. Through one of BAW's principals, Caterpillar, renewable energy product offerings include solar photovoltaic (PV). Leveraging this, installations have been installed at two Equipment sites with others anticipated. Annually this generates some 598MWh of renewable energy and saves just under 550 tCO2e. Converting road to rail transportation are among solutions offered by BAW Logistics. Anticipated benefits include enhanced service delivery, reduced time to market and reduced emissions and road congestion. Such solutions are also available to the group.

In FY16, the group's contributed R200 000 towards PSEE' Barloworld's initiative.
To date (FY2013 to FY2019) one of our divisions spent some R35.6m in energy efficiency initiatives including, HVAC, Building Management System & sensor control, efficient lighting and improved insulation. Other costs associated with the implementation of energy efficiency improvement projects including installation of the solar PV, the installation of efficient HVAC and hydroboil systems and lighting and motion sensors. Investments into such initiatives for FY2019 was some R3.7m for the same division. In addition, Solar PV at a cost of some R3 million was installed in FY2018 at a facility which is shared with one of Barloworld's principals.

Comment

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

Other, please specify

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

Company-specific description

The adaptation and mitigation against climate change necessitates efficient material usage, consumption and reduced wastage. Circular economy principles and practices, including extending or multiple product lifecycle/s and recycling can contribute towards more efficient material and resource usage, energy consumption and reduced waste, all of which impact positively on climate change, support BAW's responsible citizenship programme, its shared value approach and provides a competitive advantage.

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)

20,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The estimated aggregated financial impact reflected above includes estimated impacts relating to reduced operating costs, reputational benefits resulting in increased demand for goods/services, better competitive position to reflect shifting consumer preferences, resulting in increased revenues and increased revenues through access to new and emerging markets.
The estimated R20 million equates to less than 0.1% of BAW's FY2019 revenue (R56.8 billion).

Cost to realize opportunity

400,000,000

Strategy to realize opportunity and explanation of cost calculation

BAW understands the lifecycle implications of its products and solutions. We focus on ensuring maximum and efficient use of the products we sell, rent and lease, including extending their operating life cycle or providing multiple life cycles. Such practices contribute towards more efficient energy and materials consumption and reduce waste to landfill. For example, BAW has Caterpillar Rebuild and Remanufacture facilities

in South Africa and Russia which extend the lifespan of machines and equipment. Less energy is used to remanufacture than to produce a completely new product. A relatively high percentage of Caterpillar components are rebuilt. Generally, such efficiencies contribute to the competitiveness of rebuilt components while having a lower impact on the environment and finite resources.

Prior to the reporting period, BAW invested R240m and USD11m in rebuild and remanufacture facilities in South Africa and Russia, respectively which aims to extend the lifespan of machinery and equipment, thus minimising waste and reducing energy consumption and emissions.

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?

Despite BAW not being a significant emitter of greenhouse gas emissions (FY19: 243 478 - scope 1 and 2 emissions), it considers a number of environmental-related risks to its operations and value chain. These include climate change and related physical risks due to changing weather patterns; regulatory risks associated with greenhouse gas emissions; financial risks resulting from carbon taxes; operational risks due to constraints in

energy supply and the availability of natural resources, such as water. The group identifies the predominant use of fossil fuel-based energy in its supply chain, operations, products and solutions as a risk to itself and its value chain. This is built into the group's strategic planning process.
BAW is not a significant emitter and has integrated sustainable development considerations (including environmental aspects) into its strategic ambitions, thus BAW has not identified the need to conduct a separate climate-related scenario analysis at this stage. BAW supplements the climate change risks and opportunities through various means, including ongoing assessment of customer satisfaction, product and service demand and utilisation measures, engagements with customers and suppliers and keeping informed of changes to existing and emerging regulations. In considering such risks and related opportunities, a number of variables are considered, some of which may overlap with the various climate related scenarios.
Ongoing engagement assists BAW in understanding challenges currently being faced or anticipated by its customers as well as its suppliers.
Customer satisfaction is primarily gauged through a range of informal and formal surveying tools, including regular direct engagement with customers. This, in addition to market surveys and analysis, allow the various BAW business units to track customer demand, satisfaction and anticipate demand trends.
This allows BAW to assess risks and opportunities in its value chain which will inform business strategy and risk management as appropriate.
BAW engages with organised business to remain aware of climate-related trends which may influence its management of risks and opportunities and its business strategy.
While the above is incorporated into our business strategy, we are currently considering the optimal manner in which to incorporate climate-related scenario analysis.

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	Sustainability, one of our core values includes 'We innovate to make our customers more efficient and productive'. Accordingly, this is regarded as being material and related risks and opportunities are incorporated into our risk management and strategic processes. BAW's strategy has been influenced by these aspects of climate change:

		i. Changes in customer expectations: The group's customers may require environmentally sound products that assist them in achieving their emission reduction targets. BAW and its world class principals develop new technologies, adapt existing technologies and offer new products and services that address customer demands. ii. Long-term strategy (>5yrs) impact: BAW has placed long-term strategic focus on offering products and solutions that assist customers in achieving their ambitions and environmental objectives, including GHG emission management. Climate change has influenced BAW's long-term strategy by increasing focus on development of more environmentally friendly products and service offerings and internal environmental stewardship initiatives. BAW is focused on product development to retain existing markets and to enter new markets. Embedded in the existing, short-term and long-term strategy is continued association with leading international brands and principals and diversification in terms of geographies, products and customers. These aspects of BAW's strategy allows the group to mitigate many of the risks associated with climate change. iii. Strategic advantage over competitors: BAW strives to reduce its operational costs through implementation of non-renewable energy and emissions efficiency improvement projects in pursuit of its aspirational targets. Not only are the implemented projects aimed at improving emissions efficiency, but they have also positively impacted on electricity and fuel consumption and related operational costs, and have improved organisational resilience. Examples addressing the above include: BAW, through Caterpillar, offers Solar Photovoltaic (PV) solutions; the deployment of Smart Trucks and Green Trailers that reduce fuel used through increased payload and aerodynamic innovation; BAW has Caterpillar Rebuild and Remanufacture facilities which extend the lifespan of machines and equipment. Less energy and emissions are used to remanufacture than to produce a completely new product.
Supply chain and/or value chain	Yes	Barloworld's Supplier and Service Provider Code of Conduct sets out the required standards for doing business with Barloworld or a Barloworld group, subsidiary, division or business unit. Such standards include legal and ethical standards as well as health, safety and environment related standards.

		Further, Sustainability, one of our core values includes 'We focus on environmental responsibility and preventing waste'; and 'We innovate to make our customers more efficient and productive'. Accordingly, this is regarded as being material and related risks and opportunities are incorporated into our risk management and strategic processes. BAW's strategy has been influenced by these aspects of climate change i. Changes in customer expectations: The group's customers may require environmentally sound products that assist them in achieving their emission reduction targets. BAW and its world class principals develop new technologies, adapt existing technologies and offer new products and services that address customer demands. Examples include: Smart Trucks and Green Trailers that reduces the amount of fuel used through increased payload and aerodynamic innovation with its Logistics operation. Barloworld Logistics is also an internal supplier of services within the Barloworld Group and forms part of its supply chain. ii. Long-term strategy (>5yrs) impact: BAW has placed long-term strategic focus on offering products and solutions that assist customers in achieving their ambitions and environmental objectives, including GHG emissions. These solutions, such as Solar PV Solutions and component rebuild and remanufacture facilities will also assist customers in terms of operational resilience and long-term sustainability. Climate change has influenced BAW's long term strategy by increasing focus on development of more environmentally friendly products and service offerings and internal environmental stewardship initiatives. BAW is focused on product development to retain existing markets and to enter new markets. Embedded in the existing, short term and long-term strategy is continued association with leading international brands and principals and diversification in terms of geographies, products and customers. These aspects of BAW's strategy allows the group to mitigate many of the risks associated with climate change.
Investment in R&D	Yes	BAW and its worldclass principals develop new technologies, adapt existing technologies and offer new products and services that address customer demands. Barloworld provides feedback to principals through established engagement structures which then influence research and development. Risk

		management, including risks and opportunities related to climate change are incorporated into the strategic planning process across the group.
Operations	Yes	Sustainability, one of our core values includes 'We focus on environmental responsibility and preventing waste'. Accordingly, this is regarded as being material. BAW's strategy has been influenced by these aspects of climate change: 1. Reputation and responsibility: BAW is committed to conducting its activities in an environmentally responsible manner. Integration of climate change into the business strategy comes from the need to act responsibly and to conduct business in a transparent and ethical manner. BAW strives to manage the impacts (risks and opportunities) to ensure that the group's reputation as a responsible corporate citizen is maintained. 2. Increased operational costs: In South Africa, carbon tax coupled with the increase in fuel prices has driven the need to improve energy efficiency, and consequently GHG emissions. BAW's aspirational targets drive non-renewable energy and emission efficiency improvements, and renewable energy consumption which will limit its contribution to climate change and reduce anticipated negative impacts of carbon taxes. 3. Linking BAW's business strategy to targets: In line with its sustainable development framework, BAW has group aspirational targets that aim to improve efficiency by 10% by FYE20 off a 2015 baseline, for non-renewable energy, greenhouse gas emissions (scope 1&2) and water withdrawal (municipal sources), and renewable energy targets (≥2 000MWh). Climate change related issues are integrated into our business objectives and strategy through our sustainable development framework, and elements of Natural capital. 4. Substantial business decisions include investments into energy efficient and renewable energy initiatives in support of BAW's aspirational targets and will contribute to climate change mitigation. An example of a renewable energy initiative includes a 300kWp Solar PV installation in BAW Equipment's Isando site (avoided 600 tCO2e). 5. Short term strategy (5yrs): Climate change has influenced short term strategy through the introduction of aspirational targets. The group has adopted a MARSO approach to manage emissions. Initiatives include climate change data collection, reporting, communication, internal awareness, energy

		efficiency initiatives, new buildings incorporating environmentally beneficial aspects, recycling (including component rebuild and remanufacture), and waste disposal.

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 Indirect costs Capital expenditures Acquisitions and divestments Access to capital Assets Liabilities	Identification of risks follow a robust and systematic process. A comprehensive risk management policy is in operation throughout the group, complemented by the Barloworld Limited risk management philosophy. Enhancing and entrenching a risk culture in the group includes dedicated divisional risk assessment interventions at which internal audit and group risk management services are present. Risk management is incorporated into the group's strategic planning process. Risks are quantified in financial terms considering the likelihood and severity of the risk and the control effectiveness (to derive the residual risk value). Where relevant, opportunities are incorporated into the group strategic planning process. Such financial values could impact BAW through its: 1. Revenue: Example increased/decreased revenue impacted by demand, new markets, competitiveness, shifts in consumer preferences e.g. sales of solar PV solutions (e.g. the supply of Solar PV to B2Gold mining operations in Namibia) and increased demand for fuel efficiency plant and equipment, and logistics solutions; 2. Indirect Costs: Operating costs (e.g. increased/decreased compliance/administration costs, contingency measures and plans, 'pass-through' energy costs, changes to fuel levies/taxes, transitioning to lower emission sources of energy, changes to insurance premiums, etc.). Conversely decreases in operating costs could be realised from energy efficiency and switching to alternate renewable energy sources; 3. Capital expenditure: increases stemming from infrastructure development or repair due to damage, investment required to adapt product and service offerings e.g. BAW Remanufacture and Rebuild facilities, investment in alternate/renewable energy sources and water recycling and rainwater harvesting facilities, etc. which have been undertaken; 4. Acquisitions and divestment: A business acquisition policy and procedure is in place that sets out a structured approach and framework to be used when acquisitions and/or joint ventures are being made or entered into. This includes a pre-acquisition phase that includes the requirement to conduct a comprehensive strategic analysis of intended targets,

		development of acquisition criteria for both strategic and financial aspects, and the quantification of risk-adjusted value creation potential for the respective business unit and the group. The acquisition phase includes legal, financial, tax, human capital, transformation, information systems and technology, technical, risk, governance and responsible corporate citizenship and environmental due diligence processes to verify and validate assumptions and future projections. We consider the climate impact as it flows through in our own metrics and ESG tracking as part of the due diligence considerations. Following acquisitions and/or the formation of joint ventures, planning and task teams are established to focus on the realisation and management of identified value creation opportunities, including synergies; 5. Access to capital and any related risks are managed centrally by the Group Treasury function. Ongoing engagement with key stakeholders, including investors/shareholders assist the group in managing this risk, and reducing any impact/s. Anticipated impacts relate to increased cost of capital and challenges accessing capital; 6. Asset classes possibly impacted include inventory, fixed assets, working capital and rental fleet and equipment. Shifts in customer preferences and demand patterns may impact on assets. For example, preference may be given to more energy efficient fleet/equipment with lower carbon emissions which could have a negative impact on demand for BAW's products and if sustained could render current inventory obsolete. Climate related events may disrupt customer operations which in turn may impact demand for BAW's products and services affecting inventory levels, and impacting customer's ability to service debt obligations. Potential areas of credit risk includes trade receivables. Trade receivables consist mainly of a large and widespread customer base. Group companies monitor the financial position of their customers on an ongoing basis. Where considered appropriate, use is made of credit guarantee insurance. The granting of credit is controlled by application and account limits. Provision is made for bad debts; 7. Liability: This may be impacted by possible legal claims and litigation. The transition to a low-carbon economy and the imposition of new or amendments to existing regulations may impact the prevalence of such claims/litigation resulting from non-compliance.

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?

Intensity target

C4.1b

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

Target reference number

Int 1

Year target was set

2016

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (location-based)

Intensity metric

Metric tons CO2e per unit revenue

Base year

2015

Intensity figure in base year (metric tons CO2e per unit of activity)

4.4568229

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure

100

Target year

2020

Targeted reduction from base year (%)

10

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]

4.01114061

% change anticipated in absolute Scope 1+2 emissions

7

% change anticipated in absolute Scope 3 emissions

Intensity figure in reporting year (metric tons CO2e per unit of activity)

4.3

% of target achieved [auto-calculated]

35.1871509187

Target status in reporting year

Underway

Is this a science-based target?

No, and we do not anticipate setting one in the next 2 years

Please explain (including target coverage)

BAW has set aspirational group targets of 10% improvement in non-renewable energy and emissions (scope 1 and 2) intensity by 2020FYE of a 2015 baseline, and is based on a “business as usual” scenario which tracks turnover as a proxy for business activity. The intention is to focus attention and drive commitment to improving energy and emission efficiency with concomitant benefits of positively contributing to the mitigation of climate change and realising cost savings.

C4.2

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

Other climate-related target(s)

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Year target was set

2016

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Renewable fuel consumption

Other, please specify

Megawatt Hours of Solar Energy

Target denominator (intensity targets only)

Base year

2015

Figure or percentage in base year

0

Target year

2020

Figure or percentage in target year

2,000

Figure or percentage in reporting year

598

% of target achieved [auto-calculated]

29.9

Target status in reporting year

Underway

Is this target part of an emissions target?

While not included in the emissions targets, the adoption of renewable energy sources impacts on the emissions generated. The renewable energy target is aligned to Barloworld's MARSO (Measure, Avoid, Reduce and Switch) approach to energy consumption. Once efficiency has been achieved for non-renewable energy consumption, operations should assess the feasibility and practicability of switching from non-renewable to renewable energy sources, which also reduce emissions generated.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

The target for renewable energy will reduce emissions . The renewable energy target of 2000 MWh or more per annum is a group level target. The performance against this target is the aggregation of renewable energy consumption. It must be note that a number of solar PV installation have been planned and some completed during FY2020, however the commissioning of such installations have been impacted by lock-down and social distancing measures to curb the spread of the COVID-19 pandemic.

Target reference number

Oth 2

Year target was set

2016

Target coverage

Company-wide

Target type: absolute or intensity

Intensity

Target type: category & Metric (target numerator if reporting an intensity target)

Energy consumption or efficiency

GJ

Target denominator (intensity targets only)

unit revenue

Base year

2015

Figure or percentage in base year

50.62742

Target year

2020

Figure or percentage in target year

45.5647

Figure or percentage in reporting year

49.782

% of target achieved [auto-calculated]

16.6989286392

Target status in reporting year

Underway

Is this target part of an emissions target?

Efficiency of non-renewable energy consumption will reduce emissions generated.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

Improved efficiency of non-renewable energy will positively impact on GHG emissions generated. The target is a group level target.

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	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	30	2,602
Not to be implemented	0	0

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 buildings

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

463

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

560,020

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

2,734,322

Payback period

4-10 years

Estimated lifetime of the initiative

3-5 years

Comment

Includes installations of and retrofitting of lighting to more efficient lighting including LED lighting.

Initiative category & Initiative type

Energy efficiency in buildings

Heating, Ventilation and Air Conditioning (HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)

1,061

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

1,339,445

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

3,461,159

Payback period

1-3 years

Estimated lifetime of the initiative

3-5 years

Comment

Includes energy efficient HVAC, control equipment, motion sensors, etc.

Initiative category & Initiative type

Energy efficiency in buildings

Building Energy Management Systems (BEMS)

Estimated annual CO2e savings (metric tonnes CO2e)

1,078

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

1,360,830

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

381,000

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Building management systems incorporated into building revamps.

Initiative category & Initiative type

Transportation

Company fleet vehicle efficiency

Estimated annual CO2e savings (metric tonnes CO2e)

4,220

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

4,800,000

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

Payback period

No payback

Estimated lifetime of the initiative

Comment

At FYE2019, Barloworld Logistics operated 75 Smart (PBS) trucks, which when compared with 2018, achieved the following:
o Increase of 3.7% in tonnage moved
o 36.4 % savings in kilometres
o 32% saving in diesel and emissions.
o fuel savings as high as 25% per ton of payload transported.
• The division operates 5 Green Trailers which are superlink-tautliner trailer combinations that significantly reduces the amount of fuel it uses through aerodynamic innovation. A research exercise conducted on the N3 between Johannesburg and Durban showed that when the Green Trailer travelled at a constant speed of between 70 and 80 km/h almost 11% of fuel was saved. This translates into a reduction of 66.8 tons of carbon dioxide emissions over a ten-month period (extrapolated to 80.1 tons annually).
• Our patented Volumax Trailers provide us with 72-pallet tautliners with configurable stacking and racking mechanisms improve loading and unloading, packing and transportation efficiencies across industries and products. Two products traditionally requiring different packing configurations and therefore two vehicles and trips, can now be accommodated on one trailer completing one trip.
• In addition to driver training and specialist monitoring, a specialist fuel management team and system

Initiative category & Initiative type

Low-carbon energy consumption
Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

594

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

793,590

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

6,100,000

Payback period

4-10 years

Estimated lifetime of the initiative

21-30 years

Comment

300 kWp Solar PV installation at Equipment Isando in FY2017. Similar installations have taken place subsequently, some of which have been commissioned and some of which are underway.
In total, solar installations have been completed the following Barloworld Equipment sites to date: Isando (300KWp); Barloworld Power (200KWp); Boksburg Remanufacture Centre (400 KWp); Kathu (55KWp); Bloemfontein (110 KWp). The consumption of renewable energy from these sites may not be included in the reported renewable energy consumption to due metering considerations and temporary decommissioning due to construction, repairs and maintenance and delays in commissioning due to COVID-19 related lock-down measures. The anticipated calculated annual consumption from these installations is 1 062 kWh with avoided emissions in excess of some 1 000 tCO2e.

Initiative category & Initiative type

Waste reduction and material circularity
Remanufacturing

Estimated annual CO2e savings (metric tonnes CO2e)

Scope(s)

Scope 1
Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

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

421,000,000

Payback period

No payback

Estimated lifetime of the initiative

>30 years

Comment

Barloworld Remanufacture and rebuild initiatives. A relatively high percentage of Caterpillar components are rebuilt, prolonging their life and reducing waste. In 2019, some 84% of total component sales in Equipment southern Africa related to remanufactured and rebuilt components, of which 66% related to Barloworld Equipment remanufactured parts and 34% related to Caterpillar remanufactured parts. Similarly in Equipment Russia, some 9% of total component sales related to remanufactured and rebuilt components, of which 62% related to Barloworld Equipment remanufactured parts and 38% related to Caterpillar remanufactured parts. Barloworld has invested USD11 million and R240 million in facilities in Russia and South Africa respectively. This programme benefits local communities through skills development and job creation, positively impacts our environmental footprint, benefits customers, and enhances the group’s competitiveness and ability to provide innovative customer solutions.

Initiative category & Initiative type

Energy efficiency in buildings
Other, please specify
5 Star, Green-Star South African Certified Building

Estimated annual CO2e savings (metric tonnes CO2e)

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory

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

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

Payback period
No payback

Estimated lifetime of the initiative
>30 years

Comment
This environmentally friendly building houses Photo Voltaic (PV) panels on the roof which provide 25% of the buildings electricity requirements, proudly designed by Barloworld Power. A Thermal Energy Storage (TES) system allows for off-peak cooling which is then stored in glycol-water filled storage vessels. The tanks and heat-pump chiller supply the building with the required cooling during standard tariff times and thus provides a substantial saving on energy cost. The majority of the building lights have been fitted with motion sensors and all the lights are energy efficient. A Building Management System (BMS) has been incorporated into the building design to actively record and monitor services consumption such as water, electricity and HVAC. Real-time consumption is displayed on a monitoring screen that is located in the foyer of the

reception area. Staff and visitors can consciously react to this display during their use of the building. Outside spaces are landscaped to minimize hard-surface and improve building occupant use. Trees on the podiums mimic the cantilever building canopy to the south and allow for everyday shade use. Planting has been carefully chosen to minimize water consumption and a drip-irrigation system is actively monitored daily.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	Compliance drives investment in emission reduction activities. BAW ensures compliance with regulatory requirements/standards and has established processes in support of these. BAW has an aspirational target to improve emissions efficiency and is actively implementing emission reduction projects to reduce the impact of carbon pricing (current and in the future) and related indirect impacts on tariff pricing. BAW was an early signatory to South Africa's Energy Efficiency Accord (EEA) with the South African Department of Minerals and Energy, and subsequently a signatory of the South African National Business Initiative's (NBI) Energy Efficiency Leadership Network's (EELN) Energy Efficiency Pledge. The company also participates in Business Unity South Africa (BUSA)'s Environment committee which assists in keeping the company informed of leading practice, policies and regulatory changes. BAW also engages with legal experts regarding compliance and regulatory related matters. Impacts stemming from regulatory requirements are considered for BAW's operations and considered throughout its value chain.
Dedicated budget for energy efficiency	Costs of energy efficiency initiatives are incorporated into standard budgets and the on-going cost base of BAW divisions. However, BAW has implemented and is considering implementing a number of energy efficiency projects including renewable energy installations. In FY2019, BAW spent some R6.5m on energy efficiency projects, including HVAC, lighting and management systems. In addition, there have a number of solar installations, some of which have been commissioned and other in progress. An example of such expenditure was the 300kW (peak) installation at Barloworld Equipment's Isando campus at a cost of some R6.1m in FY2017. BAW participated in the NBI's Private Sector Energy Efficiency programme which assisted company's identify opportunities for energy efficiency. The cost to BAW for participation was R200 000 (FY16).
Dedicated budget for low-carbon product R&D	BAW's divisions and principals are engaged in the development of new products and offerings that reduce emissions. An example is the Solar Photovoltaic offerings. Additionally, Barloworld Logistics partnered with CSIR to design innovative

	and aerodynamic truck and trailer configurations that result in greater fuel efficiency.
Dedicated budget for other emissions reduction activities	Costs of emission reduction activities are incorporated into standard budgets and on-going cost base of BAW divisions. Currently BAW uses the MARSO approach: Measure, Avoid, Reduce, Switch and, finally, Offset. Dedicated budgets for offsetting, if and when appropriate, are likely to be a consideration. Most divisions are within the MAR processes, with some at the Switch and Offset stages. During FY17 BAW has also implemented a number of emission reduction projects at an actual cost of some R6.1m. In addition, the costs associated with the purchase of carbon offsets were some R0.7m in FY2019.
Employee engagement	Internal and external communication strategies have been developed. Employee engagement is used as a means to drive behaviour change that will result in greater awareness and energy savings. Specific employees are appointed as sustainability champions in order to communicate and liaise at divisional level, monitor, measure and report usage/emissions. Communication on initiatives and progress, as well as pertinent information is through management meetings, publications, intranet sites, screen savers, posters, exhibitions, email banners and newsletters. Communication initiatives share information on energy consumption/ emissions/ costs by branch or division and legally and appropriately disseminate information on best practice. An aspect of BAW's Integrated Employee Value Model is environmental stewardship. BAW is committed to training and upskilling. BAW has a human resources practice which is constantly engaged in ensuring that it manages, retains and recruits required skills and key talent. ‘Sustainability’ is a Value in the group's Worldwide Code of Conduct, which is widely communicated and all employees are expected to uphold them.
Financial optimization calculations	Incorporated into feasibility studies and capital vote applications. Financial optimisation drives investment in emission reduction projects as it considers the capital cost of projects against the energy cost savings achieved over the project life. All new property developments incorporate sustainable “green building” principles which incorporate financial considerations. The newly development Automotive and Logistics Head Office is a 5 Star, Green-Star South African certified building and the new Equipment facility in Isando while not certified was built to level 4 standards. Operations have switched to more environmentally friendly practices with improved financial returns such as retrofitted lighting, renewable energy and recycling. As a Logistics division business offering, operational efficiency is linked to network optimisation which in turn results in increased revenue and reduced costs.
Internal price on carbon	The cost of carbon is used in the decision-making process for emission reduction initiatives. The proposed carbon tax in South Africa is considered when evaluating the feasibility of various emission reduction projects, including renewable

	energy such as solar photovoltaic installations. The basic drivers to improve efficiencies for energy consumption and carbon emissions include increasing energy costs and the introduction of carbon pricing including carbon tax.
Internal incentives/recognition programs	Relevant and appropriate group, division, team and individual aligned key performance indicators, scorecards and awards are used to drive investment in improving efficiency in energy and greenhouse gas emission reduction activities.
Other Aspirational efficiency improvement targets	BAW has set aspirational group targets of 10% efficiency improvement in non-renewable energy and greenhouse gas emissions (scope 1 and 2) by 2020FYE against a business as usual scenario (2015 baseline year), and a renewable energy target of 2 000 MWh or more per annum. While some of our operations have reduced their non-renewable energy intensity against the prior year, our overall group target is to the end of FY2020 and progress against the targets will continue to be monitored and reported on. Targets play a major role in focusing our efforts on energy efficiency with significant benefits for the organisation. Functional responsibilities are managed through a group-wide, integrated performance scorecard system which includes defined climate change related objectives.
Partnering with governments on technology development	SA government is involved in bringing about a 'green economy'. BAW is a signatory of the Energy Efficiency Leadership Network's Energy Efficiency Pledge, together with the Department of Energy. BAW also contributes where possible to assist with the development of new technologies, including related policy development. For example, in 2009 Logistics working with a local science and research institute designed a more energy efficient and ergonomic vehicle which can carry a higher payload and be streamlined enough in its design to reduce the fuel consumption and ultimately emissions. Approximate reduction in fuel consumption is 11% per trip, Johannesburg to Durban.
Marginal abatement cost curve	BAW does consider the least cost option in terms of reducing emissions. However, it is not only about least cost, but also about operational requirements. Other factors, apart from cost, are considered in the business case when considering investment in emission reduction projects. Emissions trading, credits and/or offsets could reduce the group's or group companies' overall cost of compliance with emission constraints by taking advantage of differences in marginal abatement costs across different emission sources. For example, Avis Budget purchases carbon offsets for its internal carbon emissions. It could drive investment in emission reduction projects. This is dependent on the state of the carbon market and the success of market mechanisms created.

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

Company-wide

Description of product/Group of products

54 Smart trucks have been deployed within Barloworld Logistics across three provinces that are capable of transporting sugar, timber and platinum.

In FY19, these vehicles have transported the same payload while doing some 9 800 less trips within the period. This saving equates to an estimated reduction of 2 935 575 kms and a saving of some 1 585 368 litres of diesel and 4 220 tons of emissions. This initiative has cumulatively (from 2015 to 2019), allowed Barloworld Transport has to reduce the number of trips by 29 752 trips, resulting in an estimated saving of 4.6 million litres of diesel and a reduction of approximately 12 312 tons of emissions.

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

Other, please specify

Performance Based Standards

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

Comment

Level of aggregation

Group of products

Description of product/Group of products

Barloworld understands the lifecycle implications of its products and solutions. We focus on ensuring maximum and efficient use of the products we sell, rent and lease, including extending their operating lifetime. A relatively high percentage of Caterpillar components are rebuilt, prolonging their life, reducing energy, materials and waste. Such efficiencies impact positively on the mitigation of climate change.
Barloworld Remanufacture and rebuild initiatives. A relatively high percentage of Caterpillar components are rebuilt, prolonging their life and reducing waste. In 2019, some 84% of total component sales in Equipment southern Africa related to remanufactured and rebuilt components, of which 66% related to Barloworld Equipment remanufactured parts and 34% related to Caterpillar remanufactured parts. Similarly in Equipment Russia, some 9% of total component sales related to remanufactured and rebuilt components, of which
62% related to Barloworld Equipment remanufactured parts and 38% related to Caterpillar remanufactured parts. Barloworld has invested USD11 million and R240 million in facilities in Russia and South Africa respectively. This programme benefits local communities through skills development and job creation, positively impacts our environmental footprint, benefits customers, and enhances the group's competitiveness and ability to provide innovative customer solutions.

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

Other, please specify

Component Remanufacture and Rebuild

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

Comment

Level of aggregation

Group of products

Description of product/Group of products

Barloworld Power supplied equipment for a 4MW biogas-to-power project that is being built near Bronkhorstspruit, 78km north-east of Boksburg.

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

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

Comment

The Bronkhorstspruit Biogas Power Plant is an independent power producer (IPP) being developed by Bio2Watt, which has a contract for the purchase of waste from Beefcor, a cattle feedlot in Boschkop, Bronkhorstspruit. Approximately 40 000 tons per annum of cattle manure will be the primary waste stream, feeding two anaerobic digesters that will produce the biogas for a combined heat and power application, using Cat internal combustion gas generator sets.

Level of aggregation

Group of products

Description of product/Group of products

Barloworld Power offers renewable energy solutions through Solar PV.

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

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

Comment

Supplying cleaner power solutions for our customers:
During the year (FY2018), Barloworld was appointed by B2Gold to supply a seven megawatt (MW) solar power plant at its Otjikoto mine in Namibia. Barloworld is supplying engineering, procurement and construction services for the project. The project constitutes one of the largest solar installations in Namibia and will reduce reliance on the heavy fuel oil power plant currently used, while improving the quality of life for nearby communities. The system offers reliable and predictable energy in all climates and applications with modules that are independently tested to pass accelerated life and stress tests beyond industry standards. The technology is designed to reduce fuel expenses, lower utility bills, decrease emissions, and reduce the total cost of ownership while increasing energy efficiency in challenging environments. Installation of the system is underway, with the completion of the project expected in early 2018.

Level of aggregation

Product

Description of product/Group of products

Hybrid and electric vehicles available on Rental Fleet

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

Low-carbon product and avoided emissions

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

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

Comment

BMW i8 eDrive Coupé available on Avis Rental Fleet:
The beautifully designed BMW i8 looks and drives like a sports car but boasts low fuel consumption and emissions allowing you an extraordinary, yet responsible, driving experience.

Level of aggregation

Group of products

Description of product/Group of products

The Benefits of Rail as part of an Intermodal Supply Chain Solution

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

Low-carbon product

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

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

Comment

Environmentally friendly - rail transport reduces highway congestion, thus lowering emissions and reducing a company's carbon footprint. For example, by transferring a single route to rail, as many as 40 000 truck trips can be eliminated as was seen recently in the implementation of Barloworld Logistics' rail solution between Newcastle and Johannesburg. Read more: https://blog.barloworld-logistics.com/the-benefits-of-rail-as-part-of-an-intermodal-supply-chain-solution)

C5. Emissions methodology

C5.1

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

Scope 1

Base year start

October 1, 2014

Base year end

September 30, 2015

Base year emissions (metric tons CO2e)

177,170

Comment

Used as the base for the intensity calculation. Restated for discontinued operations at FYE2019.

Scope 2 (location-based)

Base year start

October 1, 2014

Base year end

September 30, 2015

Base year emissions (metric tons CO2e)

70,737

Comment

Used as the base for the intensity calculation. Restated for discontinued operations at FYE2019.

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

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)

180,353

Start date

October 1, 2018

End date

September 30, 2019

Comment

Continuing operations.

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

185,339

Start date

October 1, 2017

End date

September 30, 2018

Comment

Continuing operations.

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)

193,840

Start date

October 1, 2016

End date

September 30, 2017

Comment

Continuing operations.

Past year 3

Gross global Scope 1 emissions (metric tons CO2e)

189,976

Start date

October 1, 2015

End date

September 30, 2016

Comment

Continuing operations.

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 have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report 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

63,125

Start date

October 1, 2018

End date

September 30, 2019

Comment

Continuing operations.

Past year 1

Scope 2, location-based

69,777

Start date

October 1, 2017

End date

September 30, 2018

Comment

Continuing operations.

Past year 2

Scope 2, location-based

74,130

Start date

October 1, 2016

End date

September 30, 2017

Comment

Continuing operations.

Past year 3

Scope 2, location-based

73,724

Start date

October 1, 2015

End date

September 30, 2016

Comment

Continuing operations.

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, not yet calculated

Please explain

These emissions principally include those resulting from the combustion of fossil fuels (consumption of energy) by suppliers in the manufacturing process of products purchased by BAW. The group has not yet formally quantified emissions from its supply chain, but it appreciates that these could be significant and continues considering carbon reporting and management in the supply chain. BAW would work closely with principals to appropriately evolve this over time. These are not currently being included in reporting.

Capital goods

Evaluation status

Relevant, not yet calculated

Please explain

This refers to emissions associated with the manufacturing of the capital equipment (e.g. rental fleets, trucks) of which BAW divisions use to provide logistical service. This equipment has an extended life so that it is regarded as fixed assets. Emissions from this source have not yet been quantified, but could be significant. BAW will consider carbon reporting and management in upstream and downstream activities in due course. Given the diversified nature of the group, this reporting is relatively complex and would commence with significant suppliers with entrenched sustainability practices and reporting.

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

Evaluation status

Relevant, not yet calculated

Please explain

This refers to emissions associated with the production of electricity and fuels consumed by BAW. This includes emissions such as those associated with the mining of coal to produce electricity that is used by BAW and the refining of liquid fuel used (petrol and diesel). These emissions are not being quantified currently, but it is anticipated that these may be significant.

Upstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Please explain

This includes emissions from the transportation of goods purchased/acquired by BAW, e.g. the transportation of equipment and vehicles from the supplier to BAW's sites. These emissions are not being quantified currently, but it is anticipated that they may be significant. BAW will consider carbon reporting and management in upstream and downstream activities in due course. Given the diversified nature of the group, this reporting is relatively complex and would commence with significant suppliers with entrenched sustainability practices and reporting.

Waste generated in operations

Evaluation status

Relevant, not yet calculated

Please explain

This relates to the emissions generated in the group's waste disposal activities. The group recycled in excess of 100 tonnes of paper and 100 tonnes of tyres in FY2019. For indicative purposes; recycling of 1 tonne of paper results in the avoidance of 0.75 tCO2e. Certain waste service providers servicing operations within the group quantify emissions avoided from not disposing of waste via landfills.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

8,493

Emissions calculation methodology

The methodology followed to estimate the emissions involve multiplying activity data for mode of transport (e.g. kms travelled) by an applicable emission factor for that mode of transport (e.g. tCO2e/km). The mode of transport included in the reported figure is limited to business travel using aircraft. The GHG Protocol Corporate Value Chain Accounting and Reporting Standard is used.

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

100

Please explain

Emissions from the business air travel reported is obtained from travel agents used within the group.

Employee commuting

Evaluation status

Relevant, not yet calculated

Please explain

Employee commuting emissions include those associated with the travel of employees between their homes and work from employee-owned vehicles and public transport. These have not been estimated to date.

Upstream leased assets

Evaluation status

Relevant, not yet calculated

Please explain

The group will, in due course, consider its approach and reporting in this regard.

Downstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Please explain

This includes emissions from the transportation of goods sold by BAW, e.g. the transportation of equipment and vehicles to customers' sites. These emissions are not being quantified currently, but it is anticipated that they may be significant. BAW will consider carbon reporting and management in upstream and downstream activities. Given the diversified nature of the group, this reporting is relatively complex and would commence with significant suppliers with entrenched sustainability practices and reporting.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

BAW is mainly a distributor of leading global brands. Accordingly, there is no processing of sold goods.

Use of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO2e

105,455

Emissions calculation methodology

The emissions currently being reported are for sale of Avis Budget Rent a Car's products, namely, vehicle rentals. The reported figure relates to Avis Budget Rent a Car South Africa only. These emissions are from the combustion of fossil fuels in the use phase of the BAW product. The emissions would be estimated by multiplying an activity data (e.g. either consumption of fuel or km travelled) by an appropriate emission factor. The GHG Protocol Corporate Value Chain Accounting and Reporting Standard is used.

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

100

Please explain

It is in accordance with the concept of product stewardship to report on the emissions of the product use phase. The emissions currently being reported are for sale of Avis Budget Rent a Car's products, namely, vehicle rentals. The reported figure relates to Avis Budget Rent a Car South Africa only.

End of life treatment of sold products

Evaluation status

Relevant, not yet calculated

Please explain

Not undertaken at present. Component Remanufacture and Rebuild facilities extend the life of plant and equipment. This mitigates emissions associated with building new equipment and machinery.

Downstream leased assets

Evaluation status

Relevant, not yet calculated

Please explain

This includes emissions from assets leased by BAW to customers, e.g. leased fleet vehicles, equipment and machinery. These emissions are not quantified currently by BAW as the fuel is purchased and used by the client. However, BAW understands that these emissions may be significant and is engaging with suppliers to develop less emissions intensive technologies. BAW may consider quantifying these emissions at a later stage.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

The group has a limited number of franchisees through its Avis operations. The emissions from these operations are considered to be negligible against BAW's total group emissions.

Investments

Evaluation status

Relevant, not yet calculated

Please explain

BAW has a number of joint ventures. Data from joint venture operations are not consolidated into financial and non-financial reporting since these are not companies over which BAW exercises financial control. The emissions from these operations are not considered to be significant when compared to BAW's total group emissions.

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

0.0000043182

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

243,478

Metric denominator

unit total revenue

Metric denominator: Unit total

56,834,000,000

Scope 2 figure used

Location-based

% change from previous year

1.72

Direction of change

Increased

Reason for change

Absolute emissions decreased in 2019 against 2018 by 4.56%, however revenue decreased by a relatively higher percentage (-6.17%) for the same period. The relatively higher decrease in the denominator (Revenue) against the numerator (Emissions), resulted in a higher intensity in 2019. Given the diversified nature of the group, revenue is used as the denominator in the intensity measure and the correlation between Emissions and Revenue may not be direct. Contributing to the reduced numerator is the switch from grid electricity to Solar PV in certain operations, energy efficiency initiatives implemented that improved non-renewable energy efficiency and consequently emissions and the changing energy and emissions profile of the group.

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
N2O	1,324	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	65	IPCC Fourth Assessment Report (AR4 - 100 year)
CO2	178,963	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Russian Federation	2,648
Other, please specify Rest of Africa (Excluding RSA), Middle East and Europe	5,431
South Africa	172,274

C7.3

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

By business division

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)

Equipment & Handling	13,062
Automotive	18,801
Corporate	22
Logistics	148,469

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)
Russian Federation	1,270	0	3,593	0
Other, please specify Rest of Africa (Excluding RSA), Middle East and Europe	3,471	0	5,744	0
South Africa	58,384	0	56,683	0

C7.6

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

By business division

C7.6a

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

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)

Equipment & Handling	16,010	0
Automotive	31,968	0
Corporate	435	0
Logistics	14,712	0

C7.9

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

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	365	Increased	0.2	Decrease in renewable energy consumption in FYE2019.
Other emissions reduction activities	2,602	Decreased	1	Energy and emission efficiency initiatives reported in section C4.3a accounted for reductions of some 2602 tCO2e in FY2019. This has decreased the gross global emissions for FY 2019 by 1% ((2602/255103)*100)
Divestment				

Acquisitions				
Mergers				
Change in output	13,962	Decreased	5	Using a revenue based 'business as usual' calculation, it is estimated that decreased activity levels would have resulted in a decrease of approximately 6% of FY2019 in scope 1 and 2 emissions. Emissions were expected to decrease by 14 670 in FY 2019 over FY2018 levels. Calculation FY2018 emissions: 255 103 tCO2e, revenue R60 094m = intensity of 4.2. FYE2019 revenue R56 834m minus FYE2018 revenue of R60 094m = -R3 260m x 4.2 (FY2018 intensity) = -13 692 tCO2e less. (divided by FYE2018 emissions 255103 = 5%
Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified	4,305	Increased	2	Revenue is used as a proxy for activity levels across the group and enable intensity calculations. The relationship however between emissions and revenue may not be linear nor direct. Therefore, there will be changes in absolute emissions that do not correlate to changes in revenue. This is impacted by the varying emissions intensity of the various business units/activities within the group some of which are more emissions intensive than others. The emissions reflected under 'Unidentified' is the difference between the FY19 and FY18 absolute emissions less the changes from initiatives implemented, including the switching to renewable energy, and the change in output/activity (using revenue as a proxy).

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?

Location-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)	LHV (lower heating value)	0	719,893.05	719,893.05
Consumption of purchased or acquired electricity		0	66,020.27	66,020.27
Consumption of self-generated non-fuel renewable energy		598		598
Total energy consumption		598	785,913.32	786,511.32

C8.2b

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

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

C8.2c

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

Fuels (excluding feedstocks)

Diesel

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

655,843.33

MWh fuel consumed for self-generation of electricity

4,934

MWh fuel consumed for self-generation of heat

0

Emission factor

0.06987

Unit

metric tons CO2e per GJ

Emissions factor source

DEFRA 2015

Comment

Self generation relates to standby generators.

Fuels (excluding feedstocks)

Petrol

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

63,801.94

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Emission factor

0.06673

Unit

metric tons CO2e per GJ

Emissions factor source

DEFRA 2015.

Comment

Fuels (excluding feedstocks)

Liquefied Petroleum Gas (LPG)

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

219.44

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Emission factor

0.05963

Unit

metric tons CO2e per GJ

Emissions factor source

DEFRA 2015.

Comment

Fuels (excluding feedstocks)

Compressed Natural Gas (CNG)

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

29

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Emission factor

0.05123

Unit

metric tons CO2e per GJ

Emissions factor source

DEFRA 2015.

Comment

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	5,532	5,532	598	598
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C9. Additional metrics

C9.1

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

Description

Other, please specify

Energy: Non-renewable (GJ) intensity

Metric value

49.8

Metric numerator

Non-renewable energy (GJ)

Metric denominator (intensity metric only)

Revenue (ZAR millions)

% change from previous year

2.5

Direction of change

Increased

Please explain

It may not always be possible or practical to reduce absolute energy consumption year-on-year given the correlation between business activity and energy consumption. To mitigate this, Barloworld measures energy consumption against activity levels (using revenue as a proxy for activity), resulting in an intensity indicator. Despite the adoption of an intensity metric for energy, operations within the group have varying

energy intensity levels dependent on the nature of their respective activities. The intensity figure is a function of non-renewable energy consumption and activity (using revenue as a proxy). Absolute consumption in non-renewable energy was 3% down year-on-year (2018: 2 922 370 GJ vs 2019: 2 829 289 GJ).

Intensity of Non-renewable Energy (GJ) over Rand million revenue increased by 2.5% (FYE2018: 48.6; FYE2019: 49.8.), as year-on-year revenue (denominator) decreased by relatively more (-5.4%).

Description

Other, please specify

Energy: Renewable Energy (Solar)

Metric value

2,000

Metric numerator

MWh

Metric denominator (intensity metric only)

% change from previous year

37

Direction of change

Decreased

Please explain

Aspirational Target: 2000 MWh or more per annum sourced from renewable energy sources.
Some solar installation installed had to be decommissioned during FY2019 to facilitate construction.

C10. Verification

C10.1

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

	Verification/assurance status
Scope 1	No third-party verification or assurance
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

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, we do not verify any other climate-related information reported in our CDP disclosure

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

September 30, 2019

% of total Scope 1 emissions covered by tax

1

Total cost of tax paid

0

Comment

Barloworld's carbon footprint consists largely combustion emissions related to liquid fuels and purchased electricity from national power providers. Liquid Fuels are currently exempt from the carbon tax as this is levied at the fuel pump.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

BAW’s South African operations may be impacted by the Carbon Tax which was introduced in South Africa in June 2019.

Strategy for compliance:
BAW engages externally with organised business e.g. National Business Initiative and Business Unity South Africa to keep informed of developments regarding the national climate change strategy which includes the Carbon Tax Act and internally with technical experts (e.g. Tax department) to better understand the impacts of the carbon tax.
Reporting systems are in place across the group for the collation, consolidation and reporting of data for relevant emission indicators. Using the reported data, BAW has been able to estimate the financial impact of the Carbon Tax on its operations. Additionally, 'pass-through' costs have also been quantified.
Emissions-related data is assured to ensure credibility of reported data. This enables BAW to calculate the impacts of the proposed Carbon Tax on the group using accurate emissions data.

Examples of strategic application:
Such engagement, reporting and assurance practices ensure that BAW is well positioned to comply with the Carbon Tax regulations.
Attempting to minimise its environmental impact, improve operational resilience and to realise cost savings, BAW undertook a number of initiatives which will also help it reduce the impacts of a Carbon Tax:
• BAW is a signatory of the Energy Efficiency Leadership Network's Energy Efficiency Pledge, together with the Department of Energy;
• Adopted a Measure, Avoid, Reduced, Switch and Offset (MARSO) approach with regarding to greenhouse gas emissions
• Implemented group aspirational efficiency improvement targets of 10% for non-renewable energy and greenhouse gas emissions (scope 1 and 2), to be achieved by the end of its 2020 financial period
• Implemented a group aspirational target of 2 000 MWh (or more) per annum of renewable energy by end of its 2020 financial period.

C11.2

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

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase

Credit purchase

Project type

Landfill gas

Project identification

JO'BURG LANDFILL GAS TO ENERGY PROJECT

Verified to which standard

VCS (Verified Carbon Standard)

Number of credits (metric tonnes CO2e)

1,459

Number of credits (metric tonnes CO2e): Risk adjusted volume

0

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

Credit origination or credit purchase

Credit purchase

Project type

Landfill gas

Project identification

JO'BURG LANDFILL GAS TO ENERGY PROJECT

Verified to which standard

VCS (Verified Carbon Standard)

Number of credits (metric tonnes CO2e)

12,289

Number of credits (metric tonnes CO2e): Risk adjusted volume

0

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

C11.3

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

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

Drive energy efficiency

Drive low-carbon investment

GHG Scope

Scope 2

Application

Carbon pricing is factored into business case calculations for energy efficiency and renewable energy within South Africa, for example the nett carbon price anticipated was factored into the costing and payback periods for the solar PV installation.

Actual price(s) used (Currency /metric ton)

120

Variance of price(s) used

0

Type of internal carbon price

Shadow price

Impact & implication

Where shadow pricing is included in the business case for renewable energy and energy efficiency projects, these generally increase estimated cost savings and reduce payback periods and consequently impact the investment decision. The internal pricing is indicative of the additional costs that would arise and impact BAW from the carbon tax which has now been introduced in South Africa.

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

Other, please specify

Engagement with principals

Details of engagement

Other, please specify

Ongoing engagement with original equipment manufacturers and principals

% of suppliers by number

% total procurement spend (direct and indirect)

52

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

Rationale for the coverage of your engagement

BAW represents and engages with leading international Original Equipment Manufacturers (OEMs) and brands such as Caterpillar, Avis, Budget, Audi, BMW, Ford, Mazda, Mercedes-Benz, Toyota, Volkswagen and others. These suppliers account for the majority (some 52% in FY19) of our procurement spend in the group. Relationships throughout the supply chain are guided and prioritised by BAW's governance framework that includes its Worldwide Code of Conduct, related policies and commitment to legal compliance. Interactions are also informed and prioritised by the group's strategic framework, including the commitment to being a leader in sustainable development and the identification of competitive advantage through offering customer solutions that assist them in achieving their sustainable development objectives, facilitate a transition to lower carbon economies and expanding into related opportunities.

Impact of engagement, including measures of success

BAW engages with all principals on an ongoing basis. The material issues raised during engagements include product issues and innovation; market positioning; financial and other performance review; customer issues and satisfaction; sustainable development and climate change matters (energy efficiency, use of fossil fuels and related emissions); market information and supply chain empowerment.

Comment

Methods of engagement include dealer, dealer council and licensee meetings; principals' conferences; formal reporting and appropriate information sharing; ongoing informal contact and product launches.

C12.1b

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

Type of engagement

Other, please specify

Details of engagement

Other, please specify

Ongoing Engagement

% of customers by number

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

100

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

Customers are engaged on an ongoing basis which informs the basis of the group's customer value proposition and integrated solutions. Such engagement includes extensive surveys, personal contact and engagement, site visits and open communication platforms. BAW strives to provide customer solutions that assist customers achieve their own sustainable development objectives including energy and emission

efficiency improvements. Success is measured by the outcomes of these engagements. Positive outcomes resulting from engagements include successful relationships with mutual value maximised; leading products, services and customer solutions; retained distribution rights; mitigation of any identified key risks, supply chain optimisation and expanded preferential procurement and empowerment. Stakeholder requirements, commercial sensibility, practicability, organisational sustainability and responsible corporate citizenship are some of the aspects considered in prioritizing engagements.

Impact of engagement, including measures of success

Avis Rent a car operations in South Africa, Namibia, Swaziland and Botswana, as well as Equipment's have an ISO 9001 accreditation which covers aspects the car rental process and addresses customer satisfaction and feedback processes, emphasising the focus on customer satisfaction. Quality and customer satisfaction are elements of the ISO 9001 quality management system certification which is in place in a number of operations. Importantly, the operations use this information to improve performance and improve customer experience and loyalty; performance is also formally reported in management and executive and divisional board meetings. Equipment southern Africa has adopted a three year Customer Experience Strategy focused on improving the Net Loyalty Score (NLS) and Customer and Employee Satisfaction Indices and keeping us as the most advanced CEM dealer in the EAME region. Avis Fleet Services monitors customer satisfaction levels. Logistics' engagement with industry allows for key insights of their clients supply chain. This is then used to ensure alignment of its clients' strategic business objectives with its clients' supply chain. Logistics' marketing team, client services teams and external service providers conduct regular client satisfaction surveys and client feedback sessions with the relevant parties. These assessments utilise client surveys and market perception surveys to evaluate customer satisfaction levels. Quality and customer satisfaction are elements of the ISO 9001 quality management system certification which is in place in a number of operations. Importantly, the operations use this information to improve performance and improve customer experience and loyalty; performance is also formally reported in management and executive and divisional board meetings.

C12.3

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

Direct engagement with policy makers
Trade associations
Funding research organizations
Other

C12.3a

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

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Energy efficiency	Support	How BAW is engaging: BAW is concerned about climate change and appreciates the causal link between greenhouse gas emissions and global warming. BAW believes that improving energy efficiency, particularly non-renewable fossil fuels, benefits climate change and related policies. Accordingly, BAW was an early signatory to South Africa's Energy Efficiency Accord (EEA) with the South African Department of Minerals and Energy, and subsequently a signatory of the South African National Business Initiative's (NBI) Energy Efficiency Leadership Network's (EELN) Energy Efficiency Pledge. Other pledge signatories include Business Unity South Africa (BUSA) and the Department of Energy. Name of Legislation: Various energy efficiency related initiatives and legislation that include the National Energy Efficiency Strategy, and Mandatory emissions reporting. Geographies applicable: Predominately South Africa, but also in other geographies where BAW operates.	Through signing the EELN Pledge, BAW commits to: - Developing a Road map/ plan for improving energy efficiency in its operations, supported by the implementation of an appropriate energy management system. - Developing internal energy efficiency targets that are appropriate to its operations and activities and which respond proactively to, and are aligned with appropriate Government policies and strategies. - Reporting appropriately on efforts to promote energy efficiency and progress made towards set energy improvement targets in its operations within the parameters of national legislation. - Working with stakeholders on energy efficiency related issues to build capacity and develop the required skills to implement energy efficiency programmes and drive the required behavioural changes. These activities are preparing BAW for compliance with anticipated legislation. In 2015, BAW participated in the Private Sector Energy Efficiency (PSEE) initiative coordinated by the NBI. The NBI consists of companies that provide leadership and peer support in achieving energy efficiencies and reducing emissions. The association also provides a platform for shared learning and best practice for example through its Thought Leadership Series workshops.

Carbon tax	Support with minor exceptions	How BAW is engaging: BAW is supportive of the drive to reduce emissions. However, BAW is equally mindful of the risks posed by the introduction of a carbon price and BAW seeks to engage constructively with government on this issue through Business Unity South Africa's Environment committee. Similarly BAW also engages through this forum on the alignment of the various proposed carbon management mechanisms, namely the Carbon Tax, Carbon Budgets, Pollution Prevention Plans and Mandatory GHG Reporting. BAW participates in this committee that presents the consolidated views of business to government. Name of Legislation: Carbon Tax, Geographies applicable: South Africa.	The introduction of the carbon tax in South Africa in June 2019. BAW is supportive of the need to drive emission reductions in South Africa, but believes that the design of the carbon tax needs to be carefully considered to avoid adverse impacts on competitiveness, growth and jobs. Consideration must be given to the alignment between the proposed Carbon Tax and other carbon management strategies e.g. Carbon Budgets and Pollution Prevention Plans.
Mandatory carbon reporting	Support	How BAW has engaged: BAW is aware that the national Greenhouse Gas Emission Reporting Regulations were published in April 2017. Barloworld is supportive of the introduction of a single national reporting system for greenhouse gas emissions. BAW has been engaging constructively with DEA and through BUSA's Environment committee. Name of Legislation: National Greenhouse Gas Emission Reporting Regulation, Geographies applicable: South Africa.	The National Greenhouse Gas Emission Reporting Regulation was introduced in April 2017. BAW is supportive of the need for a single national reporting system for greenhouse gas emissions.

C12.3b

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

Yes

C12.3c

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

Trade association

Road Freight Association (RFA) (Board member)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Road Freight Association (RFA) is a facilitating body which influences the state of the industry, rates, upkeep of the road infrastructure, road safety, freight security, driver interests, cross-border transport, development funding for emerging operators, education, health, the fuel price, law enforcement, labour relations and many other issues related to road freight transport. One of the core values is sustainability and sustainable transport practices of which climate change forms a component thereof. The RFA acknowledges the need to reduce emissions and curb climate change. However, it is also mindful of the fact that the transportation industry in South Africa would be negatively impacted by the introduction of a carbon tax and cannot afford any additional taxes.

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

BAW is represented on the board as well as in the carbon tax committee of this association. BAW's engagement at these levels include input on sustainable transport and carbon reduction initiatives for the industry to consider. BAW is supportive of the position adopted by the RFA and contributes by engaging in discussions, commentary and debates on carbon reduction initiatives and sustainable transport. BAW is increasingly moving beyond merely climate change compliance towards identifying and extracting commercial and non-commercial value for all its stakeholders.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

Yes

C12.3e

(C12.3e) Provide details of the other engagement activities that you undertake.

NBI: In 2016, BAW participated in the Private Sector Energy Efficiency (PSEE) initiative coordinated by the NBI.

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?

BAW ensures that all engagements are consistent with its overall climate change strategy through ensuring that all relevant employees within the group understand and are aligned with BAW's position on climate change. BAW representatives on the various committees are appropriately mandated prior to engagement to ensure consistency. Internal meetings with these representatives are held on a regular basis (including individual discussions, monthly sustainability champion meetings, executive and management meetings). These meetings provide an opportunity for the representatives to provide feedback and to be informed on any changes to the group's position (if new regulation is released etc.). In this way, the representatives participate in structured feedback processes, are kept informed of the group's approach, and are able to communicate the group's position and strategy on climate change. Also, the BAW Climate Change Policy has been widely distributed across the group and is publicly available. 'Sustainability' is one of the Values in the BAW Worldwide Code of Conduct and is widely communicated and all employees are expected to uphold them. Additionally, climate change related issues are integrated into our business objectives and strategy through our responsible citizenship programme, and elements of Natural capital.

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

2002 Barloworld Integrated Report.pdf

Page/Section reference

Refer Barloworld 2019 Integrated Report, pages 4, 12, 24, 28, 50, 108-113, 184, 185.

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Publication

In mainstream reports

Status

Attach the document

Page/Section reference

Web version: Refer GRI Risk, Governance and Environmental responses: https://www.barloworld-reports.co.za/integrated-reports/ir-2019/gri-index/index.php

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Publication

In voluntary communications

Status

Complete

Attach the document

barloworld_climate_change_policy.pdf

Page/Section reference

Refer Barloworld Climate Change Policy.

Content elements

Governance

Strategy
Risks & opportunities
Emission targets

Comment

Publication
In voluntary communications

Status
Complete

Attach the document

barloworld_energy_efficiency_policy.pdf

Page/Section reference
Refer Barloworld Energy Efficiency Policy.

Content elements
Governance
Strategy
Risks & opportunities
Emission targets

Comment

Publication

In voluntary communications

Status

Complete

Attach the document

barloworld_environmental_policy.pdf

Page/Section reference

Refer Barloworld Environmental Policy.

Content elements

Governance
Strategy
Risks & opportunities
Emission targets

Comment

Publication

In voluntary communications

Status

Complete

Attach the document

barloworld-waste-management-policy.pdf

Page/Section reference

Refer Barloworld Waste Management policy.

Content elements

Governance
Strategy
Risks & opportunities

Comment

Publication

In voluntary communications

Status

Complete

Attach the document

worldwide_code_of_conduct.pdf

Page/Section reference

Refer Barloworld Code of Conduct: Pages 22-25

Content elements

Governance
Strategy
Risks & opportunities

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	Group Sustainability Manager	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