

# Welcome to your CDP Climate Change Questionnaire 2022

## C0. Introduction

### C0.1

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

Implats Holdings Limited (Implats) is the second largest platinum-mining producer in the world and one of the leading platinum group metals (PGMs) mining and refining companies, globally. Implats is based in Johannesburg, South Africa, with key operations located in the Bushveld Complex, the Great Dyke of Zimbabwe, and the Canadian Shield. Implats has the advantage of geographical diversification and exploits platiniferous horizons within the Bushveld Complex in South Africa, the Great Dyke in Zimbabwe and the palladium-dominant orebody located in the Lac des Iles Intrusive Complex in Canada. The Bushveld Complex and Great Dyke layered intrusions are unique in terms of size and geological continuity.

The Implats Rustenburg, Marula and Two Rivers (46% share – not managed) mines are based in South Africa, while the Zimplats and Mimosa (50% share – not managed) mines are based in Zimbabwe. Implats produced a total of 2.813 million oz of refined 6E production in this past reporting year, most of which was Platinum (1.35Moz), Palladium (0.89Moz), Ruthenium (0.25Moz) and Rhodium (0.18Moz). Implats also has a refinery based in Springs (Gauteng, South Africa), which processes the ore concentrates and mattes produced at Implats' various operations, alongside materials purchased by Impala Refining Services (IRS) from other companies, to fulfil their excess smelting and refining capacity. Impala Canada, previously known as North American Palladium, is a wholly owned subsidiary of Implats following its acquisition in late 2019. The Lac des Iles Mine (LDI), Impala Canada's single operating asset, is located in the Canadian province of Ontario, north of the City of Thunder Bay. The operation comprises underground and surface mining operations and a concentrator. The LDI underground operations employ long-hole open stope and sub-level shrinkage mining methods. Implats is listed on the Johannesburg Stock Exchange Limited (JSE) and a secondary listing on A2X Markets in South Africa and is also a level 1 American Depositary Receipt programme in the United States of America. Implats establishes stakeholder relationships at each of their individual operations, to most accurately and delicately manage the various economic, social and environmental issues that might arise. Implats' focus on sustainability and wholistic corporate governance, which is governed by the company's corporate governance strategy, is in line with the King IV Code Principles and the JSE Listing Requirements.

In this past reporting year, Implats had maintained 56 180 employees across all their operations. Implats' operations are ISO 14 001:2015 certified, with the exception of the Implats Canada operations. Implats prioritises the health and safety of their employees and the protection of their surrounding environment. An embedded culture of safety awareness, healthy living and respect for the natural environment is a means through which Implats encourages good practices at all levels. Implats has rolled-out compliance standards and regular training sessions on health and safety practices, as well as relevant environmental standards at all of their operations.

Implats has participated in the CDP for the past 14 years (since 2007). In this reporting year, Implats produced 3 644 939 tCO<sub>2</sub>e of greenhouse gas emissions.

In this reporting year, the Scope 2 emissions produced from Implats' electricity consumption makes up approximately 88% of the Scope 1 and 2 emissions produced from Implats' operations. The Scope 1 emissions produced by Implats' operations are mainly generated through the use of coal within their operations.

## 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
Reporting year	July 1, 2020	June 30, 2021	No

## C0.3

**(C0.3) Select the countries/areas in which you operate.**

- Canada
- South Africa
- 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

## C-MM0.7

**(C-MM0.7) Which part of the metals and mining value chain does your organization operate in?**

Row 1

### Mining

- Copper
- Gold
- Platinum group metals
- Nickel
- Other non-ferrous metal mining, please specify  
Cobalt

### Processing metals

- Copper
- Gold
- Platinum group metals
- Nickel
- Other non-ferrous metals, please specify  
Cobalt

## C0.8

**(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?**

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	ISIN: ZAE000083648

## 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
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<p>Board-level committee</p>	<p>Implats' Board distributes duties and mandates to subcommittees, to ensure adequate governance and expertise on all key issues. The health, safety and environment Committee (HSECom) is responsible for governance, monitoring and strategic planning of health, safety, environmental and other risks faced by Implats (including climate-related issues), to ensure harmless operations. Implats Canada aligned with the Group HSE reporting protocols and management methods. Implats identified climate change as a concern impacting all spheres of HSE portfolio and therefore integrated their approach to climate change within the Committee. Implats recently appointed a Group Executive: Sustainability, who oversees climate-related actions. The HSECom monitors and reviews the risk profile and effectiveness of management activities. The Executive Management Team (Exco) supports the board's HSECom, STRCom and audit and risk committee and the HSECom develops strategic business and capital allocation decisions with information from quarterly Exco meetings, and other operational and financial meetings. The HSECom assesses strategic implementation, internal policies, standards and risk management procedures for adequacy and appropriateness, and revises risk management strategies, ensuring all HSE-related impacts can be accounted for and managed accordingly. The Committee is also responsible for monitoring (quarterly) Implats' strategy implementation and risk management and investigates and reviews all major incidents for trouble-shooting and improved management methods. In November 2021, Implats conducted Board and upper management level training on ESG Reporting and board expectations and responsibilities relating to climate change matters (in)directly impacting Implats' strategy, operation, value chain, and surrounding communities. Training included international and local perspectives and governing regulations. In 2021 the HSECom approved the Group's Energy and Decarbonisation Policy, which includes commitments and targets for Group decarbonisation in operating activities, and to reach carbon neutrality by 2050. Aligning with the Group's Environmental Policy Statement 2019, the Energy and Decarbonisation Policy aims for all new mine developments to source at least 30% of energy from renewables. A standalone TCFD inception report will be issued at the end of 2022.</p>
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## 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	<p>Reviewing and guiding strategy</p> <p>Reviewing and guiding major plans of action</p>	<p>Implats' board delegated some of its authority to sub-committees. Each committee oversees and monitor key strategic matters and reports back to the board on their activities quarterly. Committee terms of</p>

	<p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding business plans</p> <p>Setting performance objectives</p> <p>Monitoring implementation and performance of objectives</p> <p>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</p>	<p>reference are reviewed and approved annually, to ensure they are up to date. The board moved oversight of the group risk management framework to the audit and risk (ARCom) committee. At executive level, sustainable development is the responsibility of the executive management team (Exco).</p> <p>A dedicated Group executive is responsible for developing ESG strategies and reviewing performance of the Group's non-financial indicators. The Exco supports the board's Health, Safety and Environment committee (HSECom), the Social, Transformation and Remuneration (STRCom) committee and the ARCom. The ARCom is responsible for reviewing material issues reported to stakeholders, and considers appointment, scope and conclusion of independent assurance providers for those reports. The ARCom reviewed material matters for inclusion in the ESG report, which is jointly recommended to the board by the HSECom and STRCom.</p> <p>Strategies and the board are guided by the King IV Code principles on Corporate Governance (King IV), the Companies Act, the JSE Listings Requirements and applicable laws, standards and codes. The board reviews emission targets and is responsible for Implats' risk identification and management. The HSECom is responsible for monitoring implementation of the HSE strategy to deliver safe production without causing harm to stakeholders or the environment. The ARCom oversees implementation of the Group's risk management framework, which is used to identify its top strategic risks, (including climate change risks), to ensure harmless operations. Groupwide monitoring and reporting of risks and risk mitigation action plans are derived quarterly. Risks and opportunities regarding climate change are reviewed by the HSECom, where material risks that are identified are reported to the board. Furthermore, the Strategy and Investment Committee (SIC) approves capital allocation to address climate change in line with business strategy. Climate-related performance targets form part of the Group's KPI's, with climate change related KPIs comprising of CO2 emissions, in line with the Group's commitments to carbon neutrality, energy consumption, water, and air quality. Furthermore,</p>
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		<p>through performance management programmes, Implats commits to offering remuneration and employment incentives for reaching or maintaining group performance objectives. Sustainability objectives form part of the KPIs against which Implats' management performance is measured. Implats will be introducing ESG metrics into its incentive schemes, to add to the safety parameter (ESG 2021, page 23) Additionally, the CEO's 2022 balanced scorecard includes KPAs covering ESG and integration of renewable energy sources, strategy, leadership and stakeholder engagement (Notice to Shareholders 2021, page 35).</p>
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## C1.1d

**(C1.1d) Does your organization have at least one board member with competence on climate-related issues?**

	<b>Board member(s) have competence on climate-related issues</b>	<b>Criteria used to assess competence of board member(s) on climate-related issues</b>
Row 1	Yes	<p>At board level, HSE board committee is responsible for monitoring (quarterly) the strategy implementation and risk management of Implats including climate-related issues. Within their roles, they are suitably qualified as directors and have extensive business risk management experience and specialist skills including the management of environmental, sustainability and climate change issues. Directors are expected to participate fully, frankly and constructively in board discussions and other activities and to bring the benefit of their particular knowledge, skills and abilities of climate-related issues to the Board.</p> <p>The criteria used to assess competence of the board includes the following:</p> <p>The competency of the board is further evaluated against the King IV principles, particularly principles 7 - relating to appropriate knowledge, skills, experience, diversity and independence which are applied by Impala. The Nomination, Governance and Ethics (NGE) committee assists the board with planning and appointing suitably qualified members with the requisite skills to manage climate-related issues.</p>

## 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
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Energy manager	Other, please specify Development of an Energy and Decarbonization 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).**

Implats' climate-related management structure follows a hierarchical approach. The top-down and bottom-up approach is managed by (i) the Health, Safety, Environment (HSE) board-level committee, (ii) the CEO, (iii) the executive committee (EXCO), (iv) the business unit line management, (v) HSE specialists, (vi) site-level environmental operational teams and operators, and (vii) external consultants. Implats appoints climate change and sustainability consultants, and energy management consultants to support Implats' climate-related management structures.

HSE committee: Directs strategic developments regarding health, safety, environment, risk, and assesses the adequacy and appropriateness of policies and procedures associated with HSE (including those related to climate change). Implats' ESG Report communicates material issues faced by the group, considering climate change and sustainable operations, as well as a platform where Implats' operational performance is monitored and reported to stakeholders. The ESG report is a responsibility of the Social Transformation and Remuneration Committee (STRC), with risk and performance management strategies of committees being reviewed quarterly. EXCO supports the board's HSE, STR and AR committees.

CEO: Holds a board-level position on the HSE and STR committees. The CEO consolidates all sustainable development and environmental management related decisions, and monitors and manages climate-related risks. The CEO is accountable for the implementation of Implats' Carbon and Water Management Strategies, including the goal of mitigating the group's emissions and achieving emission reduction targets.

EXCO: Supports the CEO's climate-related risk management. EXCO implements decisions by the HSE, STR, SET and AR committees, reviews performance in terms of indicators (financial and non-financial) and assists in mitigating GHG emissions.

Executive-Sustainability: Responsible for Group's overall sustainability strategy, including functional strategies such as the Environmental strategy and its material thematic pillars, including climate change.

Line Managers: KPIs indicate the sustainability objectives of Implats' management and executives. KPIs align HSE policy procedures and standards both groupwide and site-specifically. Implementing objectives is managed onsite by line managers, reporting quarterly to HSE on objectives to be met.

HSE specialists: HSE specialists support implementation of strategies and manages and monitors Implats' operational performance.

Environmental Teams and Operators: Implats' environmental team (managers) are closely linked with project management and operation of strategic initiatives. Policy implementation is perpetuated by the Group's ISO14001 certification commitment for environmental management systems. The Group's standards are maintained through regular internal and external compliance audits. Implats operations report to HSE quarterly. HSE is responsible for monitoring trends that impact Implats' emissions production and mitigation strategies that track reduction targets.

Consultants: Monitoring relevant sustainable development indicators is the responsibility of Implats' sustainability consultant. In 2021 Implats engaged independent consultants to analyse and benchmark the Group's disclosures on governance structures, business strategy, risk management practices, and climate-related metrics and targets against TCFD recommendations. The consultant is also responsible for conducting and coordinating Implats' GHG inventory, CDP response, water and climate-related monitoring, TCFD alignment and assisting in the mitigation of Implats' current climate-related impacts.

Group Head-Energy: Reports to Group Executive-Sustainability and is responsible for driving strategic initiatives to optimise energy use, strengthen supply security and consolidate Group projects and reports, and facilitates the development and implementation of Group energy and carbon management plans to meet Implats' decarbonisation targets by developing and implementing communication and awareness plans across the region and sites, ensuring corporate awareness of national and regional energy policies, constraints, plans, and securing Group access to information on new and appropriate energy technologies.

Group Geotechnical specialist - Responsible for providing engineering leadership to ensure cradle-to-grave integrity of all TSFs across the Group. Other duties include engaging with site engineers and specialist consultants in the technical execution of planning and design of TSFs and water management facilities in support of mining activity, providing technical oversight of work performed by specialist consultants, and driving compliance of tailings management standards at all TSFs.

Executive: New Commodities - Responsible for leading the formulation of the Group's potential new commodity focus, helping the Group consider potential entry into new commodities related to the Green economy

## 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	Comment
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	of climate-related issues	
Row 1	Yes	Sustainability objectives form part of Implats' KPIs, where ESG metrics will be introduced into incentive schemes. This includes adding a targeted improvement in Implats' performance in the Dow Jones Sustainability Index (DJSI) assessment, as part of its executive short-term incentive scheme revised bonus parameters (10% weighting), in addition to the safety element (15%) for LTIFR. The CEO's balanced scorecard (BCS) for FY2021 includes KPAs covering ESG, integration of renewable energy sources, strategy, leadership and stakeholder engagement. Short-term KPI focuses on key business metrics with performance outcomes influencing annual executive STI and derived LTI schemes. Senior leaders are incentivised with longer-term awards, provided objectives, in line with shareholders' interests, are met. Implats implements a balanced scorecard against which it measures performance and aims to incentivise behaviour that supports the attainment of business goals.

### 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 incentivized	Comment
Corporate executive team	Monetary reward	Emissions reduction project Efficiency project Company performance against a climate-related sustainability index	Implats' incentive scheme is used for top management and executives as a means by which to motivate them to meet the annual performance targets and Group goals, aligned with the business plans. The STRCom is responsible for ensuring that the remuneration programme for each executive is aligned with the execution of Implats' strategy to deliver long-term sustainable growth in shareholder returns. Implats' Corporate Executive Team or Executive Committee (Exco) are responsible for implementing the decisions posed by the HSE, STR, and audit committees and for reviewing performances in terms of the Group's non-financial indicators.  The STR committee approved

			<p>remuneration and incentive changes for implementation in 2022 and beyond, which includes environmental, social and governance (ESG) measures into variable pay structures. Sustainability objectives form part of the key performance indicators (KPIs) against which Implats' management performance is measured</p> <p>The EXCO's KPIs stipulate that 15% of their 21% short-term incentives are weighted towards the safety and 10% weighted towards the Dow Jones Sustainability Index (DJSI) as the ESG measure (including climate change related) KPI (AGM Report 2021)</p>
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction project Efficiency project Company performance against a climate-related sustainability index	<p>The incentives provided for Implats' CEO is determined relative to several key performance indicators (KPIs) agreed upon between the Social Transformation and Remuneration Committee (STRCom) and the CEO. Responsible corporate stewardship, which includes ESG performance and climate change is a key deliverables for the CEO for FY2021 and have been defined in the CEO's balanced scorecard. Implats' incentive scheme is used for top management and executives as a means by which to motivate them to meet the annual performance targets and Group goals, aligned with the business plans. The STRCom is responsible for ensuring that the remuneration programme for each executive is aligned with the execution of Implats' strategy to deliver long-term sustainable growth in shareholder returns. The CEO is responsible for final approval and high-level implementation of the various sustainability management strategies. This includes plans to minimise the Group's carbon footprint, resulting in the</p>

			<p>Group meeting their emissions reductions targets. In this reporting year, Implats implemented a revised incentive scheme to ensure continuous, sustainable delivery on business objectives. Incentives are calculated according to a percentage of the employee's salary working towards short term incentives, multiplied by the percentage of the short-term incentive dedicated to the environment specific KPI determined. The CEO's KPIs stipulate that 15% of the CEO's 24% short-term incentives are weighted towards the safety and 10% weighted towards the Dow Jones Sustainability Index (DJSI) as the ESG measure (including climate change related) KPI (AGM Report 2021 pages 41 and 46 and the ESG report page 84). Furthermore, the CEO's balanced scorecard (BCS) for 2022 includes KPAs covering ESG and integration of renewable energy sources, strategy, leadership and stakeholder engagement (Full Notice to Shareholders 2021 page 35).</p>
Management group	Monetary reward	Emissions reduction project Emissions reduction target	<p>Implats' incentive scheme is used for top management and executives as a means by which to motivate them to meet the annual performance targets and Group goals, aligned with the business plans. The STRCom is responsible for ensuring that the remuneration programme for each executive is aligned with the execution of Implats' strategy to deliver long-term sustainable growth in shareholder returns. Implats' Management Group is responsible for the formulation and implementation of plans to mitigate the Group's carbon footprint through emissions reduction projects, to meet set targets. The incentives for</p>

			<p>Implats' management group in this reporting year were calculated as a percentage of the employee's salary, provided as a short-term incentive and multiplied by the percentage of the short-term incentive dedicated to safety, at a percentage of 15% and 10% weighted towards the Dow Jones Sustainability Index (DJSI) as the ESG measure (including climate change related) KPI (AGM Report 2021 pages 41 and 46 and the ESG report page 84). including climate change related targets.</p>
Business unit manager	Monetary reward	<p>Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target</p>	<p>Implats' incentive scheme is used for top management and executives as a means by which to motivate them to meet the annual performance targets and Group goals, aligned with the business plans. The STRCom is responsible for ensuring that the remuneration programme for each executive is aligned with the execution of Implats' strategy to deliver long-term sustainable growth in shareholder returns. Implats' Business Unit Managers or Line managers are responsible for the formulation and implementation of plans to mitigate the Group's carbon footprint through emissions reduction projects to meet set targets. The incentives for Implats' line/unit managers in this reporting year were calculated as a percentage of the employee's salary, provided as a short-term incentive and multiplied by the percentage of the short-term incentive dedicated to safety, at a percentage of 15% and 10% weighted towards the Dow Jones Sustainability Index (DJSI) as the ESG measure (including climate change related) KPI (AGM Report 2021 pages 41 and 46 and the ESG report page 84). including climate change related targets</p>

Energy manager	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target	Implats' incentive scheme is used for top management and executives as a means by which to motivate them to meet the annual performance targets and Group goals, aligned with the business plans. The STRCom is responsible for ensuring that the remuneration programme for each executive is aligned with the execution of Implats' strategy to deliver long-term sustainable growth in shareholder returns. Implats' Energy Managers are responsible for the formulation and implementation of plans to mitigate the Group's carbon footprint through emissions reduction projects and energy efficiency measures, to meet set targets. The incentives for Implats' energy managers in this reporting year were calculated as a percentage of the employee's salary, provided as a short-term incentive and multiplied by the percentage of the short-term incentive dedicated to safety, at a percentage of 15% and 10% weighted towards the Dow Jones Sustainability Index (DJSI) as the ESG measure (including climate change related) KPI (AGM Report 2021 pages 41 and 46 and the ESG report page 84). including climate change related targets
Environment/Sustainability manager	Monetary reward	Emissions reduction project	Implats' incentive scheme is used for top management and executives as a means by which to motivate them to meet the annual performance targets and Group goals, aligned with the business plans. The STRCom is responsible for ensuring that the remuneration programme for each executive is aligned with the execution of Implats' strategy to deliver long-term sustainable growth in shareholder returns. Implats' environmental/ sustainability managers refer to the Group's Environmental Team of project managers for Implats' strategic sustainable initiatives. The incentives for Implats' environmental managers in this

			reporting year were calculated as a percentage of the employee's salary, provided as a short-term incentive and multiplied by the percentage of the short-term incentive dedicated to safety, at a percentage of 15% and 10% weighted towards the Dow Jones Sustainability Index (DJSI) as the ESG measure (including climate change related) KPI (AGM Report 2021 pages 41 and 46 and the ESG report page 84). including climate change related targets
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## C2. Risks and opportunities

### C2.1

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

Yes

#### C2.1a

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

	From (years)	To (years)	Comment
Short-term	0	1	This is the Budget Cycle period used within Implats' Group approach.
Medium-term	1	5	This is the Strategic planning cycle timeframe used in Implats' group approach
Long-term	5	30	This is the Life of mine planning used for Implats' group approach

#### C2.1b

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

Through the annual reporting to the CDP since 2007, Implats has established their business definition of a substantive financial risk (referred to as a material financial risk in our reporting) as a risk that poses threat to the sustainability of Implats' operations. These risks range from operational-related hinderances or risk, including water stress leading to operational stoppages, to social unrest leading to strikes and such related stoppages. Implats makes use of a risk

appetite and tolerance framework to identify and manage all risks that could affect the mineral resources and reserves' tolerance levels. The materiality of these risk estimations are based on projections, which vary based on newly available information, various modifying factors, and changing market conditions. Implats also approaches the drafting of its Sustainability Report on the basis of materiality Implats' where our strategy focuses on our performance relating to social, economic and environmental issues that have been identified as having a material impact on the long-term success of the business.

Substantive risks also include the revocation of Implats' environmental and other compliance-related licences. Without the relevant licences to operate, Implats' operations will be hindered, and this poses a substantive financial and strategic impact to the group. Implats defines as substantive financial risk to their operations as the loss of one day's production at an average Implats mine site, and the associated monetary implications. These substantive risks are identified in relation to the life of mine of Implats' mining operations, as well as in relation to the rehabilitation timeframes considered for the various operations. Post-mine life rehabilitation requires Implats' investment in community development and support, thus all risks identified are considered in Implats' risk planning and awareness.

A structured internal risk management process has assisted Implats in identifying their strategic objectives and material sustainability focus areas.

Implats' HSE committee identifies water stress in South Africa, environmental impacts of shaft closures and tailings dams spillages, particularly in Zimbabwe as key substantive financial risks to their operations.

The risk management processes followed by Implats to identify and manage substantive financial and strategic impacts aligns with the principles stipulated in the ISO 31000 international risk management standard. Implats has identified the possible impacts of climate change on the security of water supply, rising energy costs and increasing energy insecurity as a material risk to the long-term success, sustainability, and continuity of their operations. This is because these impacts could result in operational stoppages, which is considered substantive or material to Implats' business operations.

In respect of each Impala operation, one day of revenue will equate to the following :

Canada = R 24,578,082 (8 971 000 000/365)

Marula = R 25,504,110 (9 309 000 000/365)

Mimosa = R29,509,589 (10 771 000 000/365)

Refineries = R188,753,425 (68 895 000 000/365)

Rustenburg = R140,802,740 (51 393 000 000/365)

Two Rivers = R 32,854,795 (11 992 000 000/365)

Zimplats = R 54,942,466 (20 054 000 000/365)

The loss of one day's operations could result in a range of revenue losses, depending on the operation which is experiencing a stoppage. Implats acknowledges that one day of lost revenue can be a substantial sum of money to their operations, and that is a substantive financial impact.

Implats' Enterprise Risk Management process aims to find a balance between minimising risks associated with business activity while maximising the potential rewards. Using this risk management process, Implats is able to identify the risks which may pose substantive financial impact to the company and establishes the most appropriate response to mitigate the impacts of each identified risk.

The Group reviews and updates their risk profile on a quarterly basis. Annually, ten key risks are identified and ranked to ensure optimum awareness and key focus on minimising these risks throughout the year. These identified and ranked risks include both direct operational risks, as well as value chain related risks. Implats considers the impacts on both its direct operations, as well as its value chain, that could pose significant impact to its overall business model.

## C2.2

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

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### **Value chain stage(s) covered**

Direct operations

### **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**

Implats' process to determine which climate-related risks and opportunities could have a substantive financial impact is an integrated, multi-disciplinary approach as the process covers Implats' complete operations, from exploration to mine closures, including the final sale of products. All environmental (including climate change), health, safety, social and financial impacts are considered in this risk management process comprising of the following steps:

1. Identification of operational objectives (linked to Implats' strategy)
2. Establishing the context: We consider the nature of the internal and external operating context (reviewed in our Integrated Report) and the views and interests of our stakeholders.
3. Identifying the risk: We establish the cause of the risk and evaluate all possible impacts (both positive and negative)
4. Analysing and evaluating the risk: With the aid of risk information management systems (CURA and ISOMETRIX), we identify and assess what this means for the achievement of our objectives, determine the risk rating (by severity and likelihood), identify and assess the controls (both existing or new).



5. Treating the risk: We consider all options to establish the most appropriate response for each identified risk.

6. Monitoring and reviewing the risk: We interrogate both the internal and external environment for material changes, monitor progress of risk treatment actions to assess their effectiveness in improving the risk rating.

7. Reporting the risk: Each board subcommittee takes responsibility for the risks relevant to it, although overall oversight is vested in the HSE and Audit and Risk Committees.

Quarterly committee reports to the board include a formal risk review. Climate change risks are included as part of this process and are included in the corporate risk register, are reported to the executive committee monthly and to the HSE and Audit and Risk Committees of the Board quarterly. Risks are ranked by the product of the severity and the likelihood within the Annual Integrated Report. In addition, risks at Implats are managed in alignment with the ISO 31000 standard. Similarly, Implats identifies opportunities through risk appetite and risk tolerance levels. To identify and implement an opportunity with adequate backing, a risk assessment process is followed on the opportunity to ensure that the risks associated with the opportunity are outweighed by the benefits of the opportunity. Furthermore, each business unit is encouraged to identify and control immediate risks. However, monitoring and reporting of larger-scale climate-related risks and opportunities are allocated to be managed by the group's Environmental Manager. The risk management process steps can be seen in the following physical and transitional risk identification processes.

Physical risk case study:

1. Implats' strategic vision is to be the world's best PGM producer, sustainably delivering superior value to all stakeholders.

2. This includes becoming more resilient to the physical risks associated with climate change.

3. However, Implats' operations rely on the security of water supply for South Africa and Zimplat operations, and the effect of climate change on water security remains a business risk, Impacts of drought events for example will have an impact on the water level flow at hydropower stations at Zimplat operations.

4. Applying risk management tools, Implats has been able to confirm that Eskom's unreliable water security poses a material risk to business, resulting in business interruptions and production losses.

5. Implats has identified alternate water sources for usage and storage as a response to this risk. Implats also planned storage capacity reservoirs to address droughts.

6. As part of the Business Plan for 2021, Implats are developing water conservation and demand management plans, incorporating water resource conservation and management.

7. As in the IAR 2021, Implats reported this risk and also provided a response to the risk as part of public reporting. The relevant committee monitors progress to address the risk and reports to the Board quarterly.

Transitional Risk case study:

1. Identification of operational objectives: As part of the Business Plan, Implats will ensure continued implementation of all legal requirements by assessing compliance to all applicable legislation at a defined frequency, including the Carbon Tax Act and the

tabled Climate Change Bill.

2. Establishing the context: Implats uses coal peas which make up the majority of direct emissions. In addition, the minimum reporting threshold for reporting generator greenhouse emissions to the Department of Forestry, Fisheries and the Environment is 10 MW (thermal energy). Implats Limited has generators which exceed the 10 MW (thermal energy) capacity whilst Marula Platinum does not, implying that Implats Limited (Rustenburg and Refineries operations) will be the entity to be liable to pay direct carbon tax.

3. Identifying the risk: The Rustenburg and Refineries operations direct carbon emissions arise from the combustion of a variety of fuels (e.g., coal, industrial burning oil, diesel, natural gas) during operations. Implats's net carbon tax liability for its first submission in the 2020 carbon tax year was approximately R12 million. Going forward, the cumulative annual carbon tax liability for the Impala Rustenburg and Impala Springs operations is estimated at R14 million, after applying allowances. This poses a significant financial risk to Implats in 2021, as well as in years ahead. However, Implats recognises that post 2025, the carbon tax relief mechanisms will be phased out. The uncertainty surrounding the phase out remains a key risk for the company.

4. Analysing and evaluating the risk: Implats has assessed the impact of the escalating carbon tax on the business in the publicly available Business Plan. Implats will continue to calculate its carbon tax liability for future years in order to put the necessary measures in place to reduce the financial impact of the carbon tax on our business.

5. Treating the risk: Implats assessed the potential carbon tax liability and continue to evaluate its approach to reducing emissions. Implats will optimise energy use to reduce its carbon tax liability. Implats also engages with the South African government on carbon tax matters through entities such as the Minerals Council of South Africa.

6. Monitoring and reviewing the risk: Implats will continue to assess and plan for its carbon tax liability going forward to ensure that they comply with the provisions of the Carbon Tax Act.

7. Reporting the risk: Implats progressively integrates climate change mitigation into its core business activities and are aligning its processes with climate change and GHG emission reduction policies and legislation. This enables Implats to report on such matters on an annual basis in its publicly available mainstream filings.

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**Value chain stage(s) covered**

Upstream

**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

Implats process to determine which climate-related risks and opportunities could have a substantive financial impact is an integrated, multi-disciplinary approach as the process covers Implats' complete operations, from exploration to mine closures, including the final sale of products. All environmental (including climate change), health, safety, social and financial impacts are considered in this risk management process which comprises of the following steps:

1. Identification of operational objectives (linked to Implats strategy)
2. Establishing the context: Implats considers the nature of the internal and external operating context and the views and interests of stakeholders.
3. Identifying the risk: Implats establishes the cause of the risk and evaluates all possible impacts (both positive and negative)
4. Analysing and evaluating the risk: With the aid of risk information management systems (CURA and ISOMETRIX), Implats identifies and assesses what this means for the achievement of its objectives, determines the risk rating (by severity and likelihood), identify and assess the controls (both existing or new).
5. Treating the risk: Implats considers all options to establish the most appropriate response for each identified risk.
6. Monitoring and reviewing the risk: Implats interrogates both the internal and external environment for material changes, monitors the progress of risk treatment actions to assess their effectiveness in improving the risk rating.
7. Reporting the risk: Each board subcommittee takes responsibility for the risks relevant to it, although overall oversight is vested in the HSE and Audit and Risk Committees.

Quarterly committee reports to the board include a formal risk review. Climate change risks are included as part of the aforementioned process and are included in the corporate risk register and are reported to the executive committee monthly and to the Health, Safety and Environment Committee of the Board quarterly. The risks are ranked by the product of the severity and the likelihood within the Annual Integrated Report. In addition, risks at Implats are managed in alignment with the ISO 31000 standard. Similarly, Implats identifies their opportunities through their risk appetite and risk tolerance levels. To identify and implement an opportunity with adequate backing, a risk assessment process is followed on the opportunity to ensure that the risks associated with the opportunity are outweighed by the benefits of the opportunity. Furthermore, each business unit is encouraged to identify and control immediate risks. However, the monitoring and reporting of larger-scale climate-related risks and opportunities are allocated to be managed by the group's Environmental Manager. The risk management process steps can be seen in the following physical and transitional risk identification processes.

Physical risk case study:

1. Implats' strategic vision is to be the world's best PGM producer, sustainably delivering superior value to all our stakeholders.
2. This includes the context of reducing the carbon footprint and becoming more resilient

to climate change.

3. However, Implats' reliance on Eskom's unreliable coal fired power not only increases the carbon footprint, but also poses operational downtime risks to mines during load shedding.

4. Applying the risk management tools, Implats can confirm that Eskom's unreliable coal-fired generation fleet poses a material risk to the business as it results in business interruptions and increased emissions.

5. Implats has however identified renewable energy options as a response to this risk and views renewables as an opportunity to lower the carbon footprint.

6. As part of the Business Plan for 2021, Implats are in the process of quantifying avoided carbon emissions through renewable energy utilization and continuously monitoring regulatory measures that will enable the Group to implement more renewable energy at operations.

7. Implats has reported this risk and provided a response to the risk as part of public reporting. The relevant committee monitors progress to address the risk and reports to the Board on a quarterly basis.

Transitional Risk case study:

1. Identification of operational objectives: As part of the Business Plan, Implats will ensure continued implementation of all legal requirements by assessing compliance to all applicable legislation at a defined frequency, including the Carbon Tax Act and the tabled Climate Change Bill.

2. Establishing the context: Implats uses coal peas which make up the majority of the direct emissions. In addition, the minimum reporting threshold for reporting generator greenhouse emissions to the Department of Forestry, Fisheries and the Environment is 10 MW (thermal energy). Implats Limited has generators which exceed the 10 MW (thermal energy) capacity whilst Marula Platinum does not which implies that Implats Limited (Rustenburg and Refineries operations) will be the entity that will be liable to pay direct carbon tax.

3. Identifying the risk: The Rustenburg and Refineries operations direct carbon emissions arise from the combustion of a variety of fuels (e.g., coal, industrial burning oil, diesel, natural gas) during operations. Implats's net carbon tax liability for the 2020 carbon tax year was approximately R12 million. Going forward, the cumulative annual carbon tax liability for the Impala Rustenburg and Impala Springs operations is estimated at R14 million, after applying allowances. This poses a significant financial risk to Implats in 2021, as well as in years ahead. However, Implats recognises that post 2025, the carbon tax relief mechanisms will be phased out. The uncertainty surrounding the phase out remains a key risk for the company.

4. Analysing and evaluating the risk: Implats has assessed the impact of the escalating carbon tax on the business in the publicly available Business Plan. Implats will continue to calculate its carbon tax liability for future years to put the necessary measures in place to reduce the financial impact of the carbon tax on business.

5. Treating the risk: Implats assessed the potential carbon tax liability and continue to evaluate its approach to reducing emissions. Implats will optimise energy use to reduce its carbon tax liability. Implats also engages with the South African government on carbon tax matters through entities such as the Minerals Council of South Africa.

6. Monitoring and reviewing the risk: Implats will continue to assess and plan for its

carbon tax liability going forward to ensure compliance with the provisions of the Carbon Tax Act.

7. Reporting the risk: Implats are progressively integrating climate change mitigation into its core business activities and are aligning its processes with climate change and GHG emission reduction policies and legislation. This enables Implats to report on such matters annually in its publicly available mainstream filings.

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**Value chain stage(s) covered**

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**

Medium-term

Long-term

**Description of process**

Implats process to determine which climate-related risks and opportunities could have a substantive financial impact is an integrated, multi-disciplinary approach as the process covers Implats' complete operations, from exploration to mine closures, including the final sale of products. All environmental (including climate change), health, safety, social and financial impacts are considered in this risk management process which comprises of the following steps:

1. Identification of operational objectives (linked to Implats strategy)
2. Establishing the context: Implats considers the nature of the internal and external operating context and the views and interests of stakeholders.
3. Identifying the risk: Implats establishes the cause of the risk and evaluates all possible impacts (both positive and negative)
4. Analysing and evaluating the risk: With the aid of risk information management systems (CURA and ISOMETRIX), Implats identifies and assesses what this means for the achievement of its objectives, determines the risk rating (by severity and likelihood), identify and assess the controls (both existing or new).
5. Treating the risk: Implats considers all options to establish the most appropriate response for each identified risk.
6. Monitoring and reviewing the risk: Implats interrogates both the internal and external environment for material changes, monitors the progress of risk treatment actions to assess their effectiveness in improving the risk rating.
7. Reporting the risk: Each board subcommittee takes responsibility for the risks relevant to it, although overall oversight is vested in the HSE and Audit and Risk

#### Committees.

Quarterly committee reports to the board include a formal risk review. Climate change risks are included as part of the aforementioned process and are included in the corporate risk register and are reported to the executive committee monthly and to the Health, Safety and Environment Committee of the Board quarterly. The risks are ranked by the product of the severity and the likelihood within the Annual Integrated Report. In addition, risks at Implats are managed in alignment with the ISO 31000 standard. Similarly, Implats identifies their opportunities through their risk appetite and risk tolerance levels. To identify and implement an opportunity with adequate backing, a risk assessment process is followed on the opportunity to ensure that the risks associated with the opportunity are outweighed by the benefits of the opportunity. Furthermore, each business unit is encouraged to identify and control immediate risks. However, the monitoring and reporting of larger-scale climate-related risks and opportunities are allocated to be managed by the group's Environmental Manager. The risk management process steps can be seen in the following physical and transitional risk identification processes.

#### Physical risk case study:

1. Implats' strategic vision is to be the world's best PGM producer, sustainably delivering superior value to all our stakeholders.
2. This includes the context of reducing the carbon footprint and becoming more resilient to climate change.
3. However, Implats' reliance on Eskom's unreliable coal fired power not only increases the carbon footprint, but also poses operational downtime risks to mines during load shedding.
4. Applying the risk management tools, Implats can confirm that Eskom's unreliable coal-fired generation fleet poses a material risk to the business as it results in business interruptions and increased emissions.
5. Implats has however identified renewable energy options as a response to this risk and views renewables as an opportunity to lower the carbon footprint.
6. As part of the Business Plan for 2021, Implats are in the process of quantifying avoided carbon emissions through renewable energy utilization and continuously monitoring regulatory measures that will enable the Group to implement more renewable energy at operations.
7. Implats has reported this risk and provided a response to the risk as part of public reporting. The relevant committee monitors progress to address the risk and reports to the Board on a quarterly basis.

#### Transitional Risk case study:

1. Identification of operational objectives: As part of the Business Plan, Implats will ensure continued implementation of all legal requirements by assessing compliance to all applicable legislation at a defined frequency, including the Carbon Tax Act and the tabled Climate Change Bill.
2. Establishing the context: Implats uses coal peas which make up the majority of the direct emissions. In addition, the minimum reporting threshold for reporting generator greenhouse emissions to the Department of Forestry, Fisheries and the Environment is 10 MW (thermal energy). Implats Limited has generators which exceed the 10 MW (thermal energy) capacity whilst Marula Platinum does not which implies that Implats

Limited (Rustenburg and Refineries operations) will be the entity that will be liable to pay direct carbon tax.

3. Identifying the risk: The Rustenburg and Refineries operations direct carbon emissions arise from the combustion of a variety of fuels (e.g., coal, industrial burning oil, diesel, natural gas) during operations. Implats's net carbon tax liability for the 2020 carbon tax year was approximately R12 million. Going forward, the cumulative annual carbon tax liability for the Impala Rustenburg and Impala Springs operations is estimated at R14 million, after applying allowances. This poses a significant financial risk to Implats in 2021, as well as in years ahead. However, Implats recognises that post 2025, the carbon tax relief mechanisms will be phased out. The uncertainty surrounding the phase out remains a key risk for the company.

4. Analysing and evaluating the risk: Implats has assessed the impact of the escalating carbon tax on the business in the publicly available Business Plan. Implats will continue to calculate its carbon tax liability for future years to put the necessary measures in place to reduce the financial impact of the carbon tax on business.

5. Treating the risk: Implats assessed the potential carbon tax liability and continue to evaluate its approach to reducing emissions. Implats will optimise energy use to reduce its carbon tax liability. Implats also engages with the South African government on carbon tax matters through entities such as the Minerals Council of South Africa.

6. Monitoring and reviewing the risk: Implats will continue to assess and plan for its carbon tax liability going forward to ensure compliance with the provisions of the Carbon Tax Act.

7. Reporting the risk: Implats are progressively integrating climate change mitigation into its core business activities and are aligning its processes with climate change and GHG emission reduction policies and legislation. This enables Implats to report on such matters annually in its publicly available mainstream filings.

## 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	Implats operates in South Africa (SA), Zimbabwe and Canada, all of which pose different regulatory requirements to Implats when it comes to climate change and related impacts. Implats thus remains consistently aware of regulations that they are required to follow in order to operate in these respective countries, to ensure that all regulatory requirements are adhered to and that they maintain their license to operate within these regions. Implats considers existing/current regulations in SA, Zimbabwe and Canada as relevant risks to the continuity of their operations since adhering to the relevant

		<p>regulations poses additional costs, increased monitoring requirements and other such implications and risks. An example of a current regulatory risk for Implats' business process is the SA requirement for mandatory reporting of greenhouse gas emissions and the Carbon Tax Act associated with the mandatory reporting. These regulations require companies who participate in certain activities to report on their emissions and these companies are then liable to pay a tax on emissions. The Carbon Tax Act and the GHG Reporting Regulations are included in Implats' risk assessment processes to ensure that they remain abreast of all regulatory actions with which they must comply. In 2020, the Department of Forestry, Fisheries and the Environment in South Africa introduced amendments to the Carbon Tax Act in the Taxation Laws Amendment Act. Government also published updates to the Greenhouse Gas Reporting Regulations. The Amendments to these Regulations were noted by Implats' legal teams and Implats adjusted its reporting and carbon tax calculations to reflect these changes. In Canada, climate change legislation continues to evolve and Implats Canada adjusts its practices accordingly. In Zimbabwe, there is no carbon tax, however Implats continues to monitor environmental legislations in order to ensure it maintains its licences to operate in the country</p>
<p>Emerging regulation</p>	<p>Relevant, always included</p>	<p>Implats operates in South Africa (SA), Zimbabwe and Canada, all of which pose different regulatory requirements to Implats when it comes to climate change and related impacts. Implats thus remains consistently aware of various regulations anticipated to occur within these regions which would impact on their operations. This allows Implats to remain abreast the incoming regulations to which they would be required to adhere to, to maintain their license to operate. Implats considers emerging regulations in SA, Zimbabwe and Canada as relevant risks to the continuity of their operations, since having to adhere to upcoming regulations will pose additional costs, increased monitoring requirements and/or other such implications, for which Implats must make provision. An example of a risk posed by emerging regulations to Implats is the incoming Climate Change Bill of SA. The Climate Change Bill is currently tabled at Parliament and the commenting period for the Bill has come to an end. Once enacted, this Bill will require companies to draft and submit carbon budgets. The carbon budgets will therefore change from being voluntary to being mandated. The platinum mining sector may be included in the second phase of the carbon budgeting process, post 2022. This will mean that Implats may be required to compile a carbon budget and therefore increase expenditure on renewable energy and associated infrastructure in order to meet its carbon budget commitments. This</p>



		<p>may also result in increased spending on energy efficiency and could therefore affect the company's expenditures and capital. Implats is actively engaged in discussions with the relevant stakeholders on how the carbon budgeting system should work.</p>
Technology	Relevant, always included	<p>All Implats' operations make use of mining monitoring technologies, which are assessed and managed under Implats' risk management processes. Risks (including climate-related risks) are identified, monitored and minimised through design adjustments. We recognise the global shift towards low carbon technologies as an opportunity for business strategy and investments. Implats invested in fuel cell technology research in line with the low-carbon economy transition. Increased interest in this technology has afforded Implats opportunities considering platinum production. Implats began developing an energy security and decarbonisation roadmap to achieve carbon neutrality by 2050. Delivering on these goals requires significant capital investment in new technologies. Implats' products will realise opportunities to transition to a low-carbon world through hydrogen-powered fuel cell vehicles and producing green hydrogen via electrolysis.</p> <p>Achieving our targets will entail rapid adoption of technologies for reducing energy consumption through innovative mining methods and increasing renewables and low-carbon alternatives into its energy mix. Implats installed a 1.5kW fuel cell for testing under realistic load conditions at the Springs Refineries. This testing follows the successful implementation of a fully operational mobile hydrogen fuel cell-powered forklift. Implats donated 16ha of its land at Impala Springs to develop a special economic zone (SEZ), aimed at driving local fuel cell manufacturing. The commercialisation of fuel cell technology continues to be reviewed for economic viability in conjunction with the project partners. The project, in partnership with government, is a longer-term strategic investment to facilitate platinum beneficiation. Infrastructure includes the availability of pure hydrogen gas and natural gas on site. The Group aims to review its fuel cell roadmap and seeks to engage strategic partners to develop and optimise Implats' participation.</p>
Legal	Relevant, always included	<p>Implats continuously monitors legal developments both domestically as well as internationally. As an example, in South Africa, there has been legal developments in the climate change litigation space. In Earthlife Africa Johannesburg v Minister of Environmental Affairs, the High Court was called to pronounce on the necessity of a climate change impact assessment to be included in an environmental impact assessment (EIA) for the impact that the proposed coal-fired power station will have</p>

		<p>on the environment. Since this judgement, it has become common practice to include climate change impact assessments as part of the EIA process in accordance with international best practice. Implats has noted this legal development and will ensure that any new operations requiring an environmental impact assessment will consider the impacts of climate change going forward. In addition to the above, Implats is also aware of the fact that many countries around the world are putting mechanisms in place to ban the sale of new cars with internal combustion engines in order to cut emissions. Although most of these bans relate to future dates beyond 2030, we understand that such countries include China, Japan, the UK, South Korea, Iceland, Denmark, Sweden, Norway, Slovenia, Germany, France, the Netherlands, Spain, Portugal, Canada, the 12 U.S. states that adhered to California's Zero-Emission Vehicle (ZEV) Program, Sri Lanka, Cabo Verde, and Costa Rica. As Implats' key downstream market is the automotive sector, we continuously monitor these legal risks in order to have contingency plans, such as fuel cell developments in place, to hedge the risk associated with the ban of internal combustion engines.</p>
Market	Relevant, always included	<p>Implats remains continuously aware of how uncertainties in future market trends pose a significant risk to its sustainability. An example of a market risk for Implats is the uncertainty around the future demand for jewellery and the continuous shift in vehicle technologies towards electric vehicles and away from diesel engines. Both of these market related aspects pose significant risks to the demand for the PGMs, Implats' primary product. The changing demand for these products may be driven by climate change sentiments and the desire to move away from energy-intensive products and services. These market uncertainties pose risk or opportunities for PGM producers like Implats, based on increase climate vulnerability awareness. This forms part of Implats' climate-related risks to be considered in the near future for possible variations. These climate-related risks are managed and anticipated through continuous assessment and monitoring of mitigation measures for the risks. Markets are regularly monitored and, through engaging with relevant industrial bodies regarding market and technology changes that are influenced by climate change impacts, Implats is consistently aware of possible future market risks they may face based on climate-related changes</p>
Reputation	Relevant, always included	<p>Implats acknowledges the importance of maintaining a positive reputation since the Group's share price is subject to reputational risks, which is directly related to investor perceptions. In more recent years, Implats has noted investor trends, which take interest in environmental,</p>

		<p>social and governance indicators (as evident with the update of the King IV Report on Corporate Governance) and other such efforts. These indicators of interest for investors includes climate change mitigation and adaptation efforts of the company and combatting social vulnerabilities. An example of a reputational risk that Implats has identified as relevant is how Implats' perceived response to climate change and climate-related risks may influence investor behaviour (positively or negatively). Implats' response and mitigation efforts in light of climate change impacts can either evoke confidence by investors or could result in investors withdrawing support if they do not feel that Implats is adequately prepared to combat the anticipated impacts of climate change. These perceptions by investors of Implats' climate change awareness may have knock-on impacts on the company's reputation and share price. Implats is aware that responsible product stewardship is crucial for preserving its reputation and ability to market its products. Implats' approach focuses on ensuring responsible production, meeting regulatory obligations, and responding to growing demand from its customers for assurance that the minerals and metals they buy are produced responsibly. Each year an independent verification is conducted on selected social projects, based on the financial, legal and reputational risk as well as to determine impact, progress and potential remedial action where a project's sustainability is at risk Thus, climate-related risk assessments are conducted throughout Implats' operations, since reputational risks rely on the information obtained from these assessments and reputation risks. As such, these reputational risks are (1) managed and (2) anticipated. These risks are anticipated through: (a) continuous improvements of assessment and mitigation monitoring methods of Implats' climate-related risks; and (b) consistent awareness of the climate change mitigation measures of their fellow mining companies. Implats strives to match, if not exceed, the climate-related adaptation measures in place across the mining industry's operations.</p>
Acute physical	Relevant, always included	<p>Acute physical risks are relevant because climate change impacts, such as increased extreme weather events (e.g. flooding or droughts) affect the physical operations of mines, the wellbeing of communities surrounding the Implats' operational areas, as well as the wellbeing of the company's workforce. The principal climate-related risk for Implats is the potential impact of physical climate change on water security for the organisation and host communities, including water supply for the hydro-power schemes that electrify some of the operations.</p> <p>An example of how acute physical risks may impact Implats' business operations is through the increased occurrences of drought. Both South Africa and Zimbabwe are considered water stressed regions. Implats'</p>

		<p>operations within these regions thus face increased risk in light of climate change impacts and the anticipated increase in drought occurrences. Increased drought events will result in a higher strain on water resources in areas surrounding Implats' operations. Prolonged periods of drought will pose major risk to the continuity of Implats' operations in those areas (since the mining operations are dependent on water availability). This may result in Implats having to decrease their production or stop production altogether. These events are significant to Implats' strategic planning since these are noted to pose material risk/ substantive impacts to the company (i.e. could result in production stoppages). Implats has, over recent times, attempted to minimise their risks posed by climate related impacts through various methods, including freshwater recycling initiatives and the installation of more water efficient technologies, to minimise their freshwater consumption and in turn, minimise the possible impacts that a decrease in freshwater availability could pose. Acute physical risks are included in all climate-related risk assessments, and these are integrated into all Implats' business strategies. Climate-change risks and opportunities assessments form part of Implats' investment design, which includes the adaptation required for extreme weather and long-term climate change.</p>
<p>Chronic physical</p>	<p>Relevant, always included</p>	<p>Climate change directly refers to the long-term changes in average atmospheric temperatures. Thus, chronic physical risks such as increased ambient temperatures would pose a relevant and significant impact to Implats' operations. Extreme temperature changes can result in power disruptions due to inefficiencies of thermal power plants during higher temperatures. The increase in daily temperature, and more frequent and longer heatwaves may increase the demand on an already limited electrical power supply possibly leading to increase in blackouts and brownouts.</p> <p>These chronic risks are included in the climate-related risk assessments though constant assessment and monitoring of mitigation measures. Through regularly consistent water monitoring and efficiency measurements, Implats maintains awareness of their operation pattern changes and the implications thereof on operating costs, employee health and other such impacts.</p>

### 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.**

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### Identifier

Risk 1

### Where in the value chain does the risk driver occur?

Direct operations

### Risk type & Primary climate-related risk driver

Technology

Unsuccessful investment in new technologies

### Primary potential financial impact

Decreased revenues due to reduced production capacity

### Company-specific description

Both Zimplats and Impala Canada use renewable energy sources. However, Implats' South African operations are supplied with electricity by Eskom primarily from its Ararat Main Transmission sub-station (MTS). The total installed capacity at Ararat MTS amounts to 945MVA. Furthermore, the existing mines and villages surrounding Impala's operations are also supplied with electricity by Eskom. Impala recognises that in South Africa, power supply interruptions from power utility Eskom, poses operational risks to our operations. In fact, the impact of load shedding due to constrained electricity supply capacity resulting in business interruptions (in RSA and Zimbabwean operations) is ranked as the company's 2nd most threatening residual risk in 2021. Mining, mineral processing, and refining operations have a critical dependency on and are major consumers of electricity.

The tight reserve margin in electricity generation capacity makes the national and regional grids more susceptible to extreme weather events and changes in demand for electricity due to climate change. Any abnormal conditions may result in power outages. Disruptions in its supply negatively impacts Implats' ability to operate effectively and limits our capacity to deliver sustained value to our stakeholders. Furthermore, Eskom's failure to adopt and implement more renewable energy technologies as part of the generation fleet, has resulted in the South African energy grid being an emission intensive system, which results in entities like Implats to have significant Scope 2 emissions. Eskom's unsuccessful investment in new technologies and the delays in rollout of renewable energy in South Africa is also the result of historical regulatory provisions which aided the development of more coal-base generation capacity

**Time horizon**

Medium-term

**Likelihood**

Likely

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

472,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

The value provided is the revenue that would be lost per day from operations in the regions exposed to electricity shortages. Revenue from Zimbabwe and South Africa in 2021 was 172.4 billion Rand. Revenue divided by the number of days in the year gives 472 million Rand lost per day of load shedding

**Cost of response to risk**

40,000,000

**Description of response and explanation of cost calculation**

Implats views this risk as an emerging opportunity, especially when considering the recent regulatory developments taking place in South Africa whereby it was announced that entities will be able to build energy generation plants with a capacity of up to 100MW for own use without having to license such facilities with the National Energy Regulator of South Africa (NERSA). The recent announcement by the South African government, as mentioned above, significantly reduces the administrative burden of generating electricity for own use. This provides Implats with an opportunity to build our own renewable energy plants to power our operations, whilst also driving down our scope 2 emissions. A study to supply solar energy to our Marula Mine is in its early stages and continued work in this regard will be prioritised. Furthermore, we engage with ZESA (Zimbabwean utility) and Eskom (South African utility) to secure stable power supply and to review of power tariffs while exploring solar power as an alternative sustainable source. As a response to the shortages from Eskom, we have put in place a load shedding power reduction schedule that includes a revised low-electricity supply business planning cycle, back-up generators for emergency systems and simulation of electricity outages and their impact on our operations. We also engage with municipalities to identify opportunities to increase our renewable energy procurement, not only to benefit our direct operations, but also our surrounding communities.

Increasing our share in renewables is also an integral part of our Group Environmental Business Plan for 2021 which states that Impala will continue to implement projects aimed at harnessing renewable energy. Such efforts will be set out in a decarbonisation/renewable energy strategy and an ESG strategy which is currently under development. In this regard, we have completed studies at our Zimplats operations for a 110MW solar plant in order to power our Zimplats operations with potential for excess generated power to be channelled to Zimbabwe's national grid. Calculation of cost: The short-term means to mitigate against the reliability of the national utilities in Southern Africa is to use backup generators. Diesel generators cost approximately R4.36/kWh to operate. Impala used 3.56 TWh or an average of 9 733 MWh per day in 2020.  $R4.36 \times 9\,733 \text{ MWh} = 40 \text{ Million rand per day to run backup generators.}$

## Comment

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### Identifier

Risk 2

### Where in the value chain does the risk driver occur?

Direct operations

### Risk type & Primary climate-related risk driver

Reputation

Increased stakeholder concern or negative stakeholder feedback

### Primary potential financial impact

Other, please specify

Decreased access to capital due to negatively impacting share prices

### Company-specific description

Impala has identified the maintenance of our social licence to operate and good stakeholder relations as a top 10 residual risk. More specifically, Impala considers the inability to secure and maintain a social licence as a result of the company's failure to provide value enhancing sustainability initiatives and maintain good stakeholder relationships as a key risk. The 'Social License to Operate' (SLO) generally refers to the informal acceptance or approval by local communities and other stakeholders of Impala's operations. However, climate change is an existential threat to the Impala's operations and the ability of the company to keep and maintain its social license to operate. The mining and metals sector is facing greater scrutiny from end consumers, demanding a transparent, ethical supply chain, as well as a lower carbon footprint. We believe our efforts towards effectively reducing our emissions and engaging with our surrounding communities will be key to keeping our social licence to operate, as the

jurisdictions we operate in become more involved in curbing risks associated with climate change. Increased stakeholder pressure and the rise of ethical (environmental, social and governance, or ESG) investing continues to keep our license to operate top of mind

**Time horizon**

Medium-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)**

181,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

In the event where Implats' Social License to Operate is compromised through reputational damage, it can lead to significant financial impacts for the company. Even a 0.1% decrease in revenue as a result of a damaged reputation can lead to a loss of R181 million rand (based on our revenue of R181 billion as at the end of 2021).

**Cost of response to risk**

161,400,000

**Description of response and explanation of cost calculation**

Impala aims to develop, protect and strengthen our license to operate through industry leading ESG performance. Impala monitors and reviews the potential physical implications of climate change for our operations and neighbouring communities and implements appropriate adaptation responses. The main risks relate to changes in ambient temperature, precipitation and prolonged droughts, impacting water security and supply. Without proper management, all of these aspects threaten our social license to operate. In order to improve the resilience of our surrounding communities against climate change and maintain our social license to operate, we have spent R126 million at our SA operations, R32 million at our Zimbabwe operations and R3.4 million at our Canadian operations on social and development projects. The total spend is therefore R161.4 million.

Examples aimed at increasing resilience to climate change impacts include:

Investing in upgrading community infrastructure in Freedom Park, building roads and



water channels in Luka and Kanana, undertaking a water project in Luna and investing in the Boitekong Attenuation Dam Rehabilitation project. In addition to the infrastructure expenditure mentioned above, Zimplats installed solar powered boreholes and storage tanks at two schools and in a village. This will ensure improved access to clean water for up to 650 pupils, providing a safer learning environment and will support nutrition gardens to mitigate hunger in the communities. The borehole sites also serve as watering points for livestock. Zimplats' planned 110MW solar plant would also supply 80MW of power required at the Zimplats Mine, reducing the demand on the national power grid and could potentially channel excess power generated to surrounding communities, providing communities with clean energy. Zimplats, Marula and the Refineries also implement site-specific biodiversity management plan which cost the group. The Refineries is near the Cowles dam that feeds into the Blesbokspruit, a designated Ramsar Convention wetland of international importance that is deemed under threat. Although the Refineries is not seen to have any direct impact on this ecosystem and the microclimate in the area, it continues to partner in environmental education and conservation initiatives in the area to educate communities on environmental matters and climate change.

## Comment

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### Identifier

Risk 3

### Where in the value chain does the risk driver occur?

Direct operations

### Risk type & Primary climate-related risk driver

Current regulation

Carbon pricing mechanisms

### Primary potential financial impact

Increased indirect (operating) costs

### Company-specific description

As part of South Africa's climate change commitments, the country introduced the Carbon Tax Act 15 of 2019 in June 2019. The carbon tax poses the following significant risks to Implats' operations. Approximately 88% of the Group's GHG emissions (3 646 kilotonnes) are associated with electricity consumption, with the balance (approximately 493 kilotonnes) mostly associated with the direct use of coal and diesel in mining operations (such as generating heat for drying concentrate and generating steam). These activities are exposed to the carbon tax liability and will have an impact on Implats' income statement. 1) Carbon tax was set at R120/tCO<sub>2</sub>e for the 2019 tax year, increasing by CPI +2% until 2022 and CPI thereafter. The carbon tax return for 2021 is

due by 29 July 2022 and is based on a carbon tax rate of R134.00/tCO<sub>2</sub>e. Not only will Implats be required to pay carbon tax directly to the South African Revenue Services, but Implats will also be subject to carbon tax passthrough costs as a result of suppliers' direct carbon tax liabilities. This will materially increase Implats' operating costs. The expected pass-through cost of electricity from 2023 onwards is anticipated to reach as much as R0.16/kWh by 2030. This will materially increase Implats' operating costs in the medium- to long-term. Furthermore, liquid fuels (diesel and petrol) prices increased due to carbon taxes imposed at when purchasing the fuel. Diesel increased by R0.09/litre and petrol increased by R0.08/litre on the introduction of the tax. Prices are likely to increase further and seeing as Implats used in excess of 36 625 kilolitres of diesel in 2021, the indirect carbon tax payable on the group's diesel usage will be significant. The relief mechanisms provided to carbon taxable entities in Part II of the Carbon Tax Act, (Allowance for fossil fuel combustion, 8. Allowance for industrial process emissions, Allowance in respect of fugitive emissions, Trade exposure allowance, Performance allowance, Carbon budget Allowance, Offset allowance) will be phased out from 2023 onwards. The way in which the mechanism will be phased out is still unclear and the uncertainties surrounding such phase out pose a risk to Implats in terms of the company's projected carbon tax liability

**Time horizon**

Medium-term

**Likelihood**

Virtually certain

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

80,000,000

**Potential financial impact figure – maximum (currency)**

620,000,000

**Explanation of financial impact figure**

In the interim (up to 2030), the potential financial impact related to indirect carbon tax costs is estimated to fall between R74 million and R572 million, based on FY2021 information. Calculations on indirect carbon tax on diesel and petrol: In FY2021, Implats consumed 36 625 kilolitres of diesel and 811 kilolitres of petrol. Assuming that the same levels of fuel consumption are used in FY2021, Implats can expect increased operating costs of R2 million for calendar year 2022. However, during the second phase of the carbon tax from 2022-2030, there is a risk that carbon tax on these fuels will be increased. Calculations on indirect carbon tax on electricity: Although there are currently

no pass-through costs on electricity, the indirect cost are anticipated to increase between 2023 and 2030. If relief mechanisms for carbon tax are removed by 2030 and the carbon tax on electricity could increase electricity costs by between R0.02/kWh (lower range estimate) to R0.16/kWh (higher range estimate). Assuming the same electricity consumption level as in FY2021 in 2023 (3 863 703 MWh), electricity costs could increase by between R 80 million and R620 million. The potential financial impact range was calculated by summing all of the abovementioned costs and using the lower range electricity price increase for the “minimum” and the higher range electricity price estimate for the “maximum” calculations

### **Cost of response to risk**

117,000

### **Description of response and explanation of cost calculation**

In order to reduce our emissions associated with diesel usage, but to also reduce the amount of indirect carbon tax that Implats' pays as a result of diesel combustion, the group's current focus is on developing opportunities to replace diesel with low-carbon fuels and the potential application of solar photovoltaic (PV) technology to generate electricity. The rate of carbon tax will also be subject to the applicable tax-free allowances as provided for in the Carbon Tax Act. Section 11 of the Carbon Tax Act sets out the formula to be used by taxpayers to calculate the applicable performance allowance. For a tax period, taxpayers that perform better than an approved sector or subsector GHG emissions intensity benchmarks will qualify for a performance allowance. The performance allowance seeks to encourage firms to reduce the carbon intensity of their production processes relative to their peers and promote the competitiveness of local products. A project has been initiated to ascertain if Impala Platinum would qualify for a performance benchmark allowance as per regulations gazetted on the 19th June 2020. The project cost the group R50 000.00 If the study finds that Impala is in fact performing better than its peers, the company will be eligible to receive a maximum allowance of 5 %. Implats conducts an annual GHG emissions assessment, to identify areas for emissions mitigation and room for improvement. In FY2021, Implats' annual GHG emissions assessment costed R 67 000. The costs above amount to R117000.00 Implats is also reducing electricity consumption (through energy conservation programmes), which will decrease operating costs related to Eskom's carbon tax passthrough costs. Initiatives implemented across the Group include underground energy-efficient lighting, optimised use of underground compressed air systems, installation of power factor correction equipment, and diesel performance management. The monetary annual saving is R34 million per year in terms of the planned initiatives. At Zimplats, our focus is on installing energy efficient equipment and increasing the uptake of solar lighting and heating

### **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.**

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**Identifier**

Opp1

**Where in the value chain does the opportunity occur?**

Downstream

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

**Primary potential financial impact**

Increased revenues through access to new and emerging markets

**Company-specific description**

Climate change and the effects thereof are being considered by countries throughout the world, in efforts to minimise global climate change. Implats recognises that its PGM products will aid the world in the low carbon transition. PGMs are used in air and water purification processes and are poised to unlock the versatility of green hydrogen in both stationary power generation and transport, where hydrogen can be used with PGMs in fuel cells. Although the bulk of PGMs are currently being used in autocatalysis, the potential of PGMs to be used in fuel cells is currently being explored by Implats as an opportunity related to the transition of the global economy to a low-carbon future. The pressure to address climate change has resulted in innovative energy solutions such as the use of hydrogen fuel cell technologies. According to the International Renewable Energy Agency (IRENA), this transition will transform the global energy sector from fossil fuels to zero-carbon energy by the second half of this century and hydrogen will play a central role within the world's new energy mix. According to the Hydrogen Council, 18 countries already have roadmaps or strategy documents setting out their intentions to use hydrogen as a source of alternative energy in the future. As such, while PGM-based catalysts are expected to benefit from the fuel cell electric vehicle technology within the hydrogen economy, their application extend way beyond just powering a new generation of vehicles. Platinum will assume a particularly important role in the production of hydrogen as a clean energy carrier. It is the catalyst material

used in the proton exchange membrane (PEM) electrolysis process to produce green hydrogen if the electricity input is harnessed from green renewable energy sources. Hydrogen can also decarbonise numerous other processes that currently rely on fossil fuels. Important applications include the potential use of hydrogen gas instead of coke in steel production. As the cost of producing hydrogen continues to decline in line with the declining cost of renewable energy production and large-scale adoption of electrolysis technologies, other new applications are likely to emerge. As such, the potential for hydrogen to decarbonise not only the transport sector but a broader proportion of the energy sector, is extremely promising and may be a game changer for sustained demand for PGMs

**Time horizon**

Long-term

**Likelihood**

More likely than not

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

48,900,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

The demand for PGMs and therefore revenues, specifically palladium and rhodium, increased in FY2021 and is expected to increase further in future with the increasing demand for fuel cell technologies (emerging markets). According to the PGM Market Report of February 2020 by Johnson Matthey, the potential long-term financial impact based on the increase demand for palladium and rhodium (which makes up 32% and 42% of Implats' PGMs in FY2021 respectively) could be an increase of 14% each. The potential financial impact was calculated by increasing the current market values of Implats' palladium and rhodium products by the 14% increase in demand estimated in the February 2020 PGM Market Report by Johnson Matthey. The rhodium price increased by 96% in 2021. The market values estimated revenues for palladium and rhodium are expected to increase by approximately R32.1 million and R16.8 million per year respectively, the sum of which gives the potential financial impact figure of R48.9 million in additional revenues per year.

### **Cost to realize opportunity**

10,925,000,000

### **Strategy to realize opportunity and explanation of cost calculation**

Implats is proud to be at the forefront of technology developments related to the hydrogen economy via our research and development of fuel cells. They offer higher efficiencies than conventional technologies, operate quietly and can be economically scaled to fit many applications. The global focus on decarbonisation has been intensified by Covid-19, which has accelerated the mainstreaming of hydrogen and the varied applications of fuel cells. In order to realise the opportunities of PGMs related to fuel cells, Implats will leverage the special economic zone for fuel cell development to develop skills capacity and support fuel cell manufacturing and deployment. Since 2015, Implats has spent R25 million in developing the fuel cell initiative in collaboration with academic institutions and commercial partners. In switching to low-carbon energy sources, our current focus is on developing opportunities to replace diesel with hydro-fuel technology and using solar photovoltaic (PV) cells to generate electricity. We have conducted a feasibility exercise to assess the opportunities and challenges associated with power self-generation. In 2016, we developed and successfully implemented the first hydrogen fuel-cell powered forklift and hydrogen refuelling station in Africa, at the base metals refinery at Implats Springs. The commercialisation of this technology continues to be reviewed for economic viability in conjunction with the project partners. We believe these efforts should be aligned with the special economic zone (SEZ) for fuel cell development that is under development in the Springs region, aimed at driving local mineral beneficiation. In the longer term, the application of fuel cells at Implats's operations will provide energy storage options to clip peak demand and cleaner underground operation of equipment. The Group also acquired 100% of North America Palladium (now operating as Implats Canada) in December 2019. The Group paid a total purchase consideration of R10.9 billion. This acquisition will allow the group to supply the increased demand for the metal due to its use in catalytic converters. The palladium market has been in a production deficit for several years, and tighter pollution standards in Europe and China are spurring demand for the metal from automakers

### **Comment**

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#### **Identifier**

Opp2

#### **Where in the value chain does the opportunity occur?**

Direct operations

#### **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**

Although Implats' main focus and revenue drivers is the PGM spectrum of metals, we also have gold and copper reserves that we mine as part of our PGM operations. The potential impacts of climate change on the geopolitical environment can be seen in the World Economic Forum's Global Risk report for 2021. Gold has traditionally been a hedge against geopolitical uncertainty. The growing significance of gold as an investment (and risk management) asset may well offset any negative impacts that climate change may have in gold's value chain as well as act as a hedge against potential demand decreases for PGMs. In the face of potential geopolitical unrest related to climate change, the stability of gold prices and Implats gold reserves will stabilise the company's revenue stream and can therefore be considered as a potential opportunity related to climate change. Our platinum revenues have also benefited from gold's risk management properties and investment sentiments related to gold, as Platinum prices are largely linked to gold prices. Investment activity in platinum has been supported by its price discount to palladium and a rise in gold investment action. Implats's small copper reserves also present opportunities related to the development of the renewable energy sector. The price of copper has overwhelming been on an upward trend since the early 2000's. Since electricity transformed modern life, copper has been prized for its conductive properties. It is the material building block of power grids, electrical systems in buildings, and energy generators, both clean and dirty. As a result of the increased use of copper in energy technologies, and more specifically, renewable energy technologies, the demand for copper is set to increase significantly, especially in the infrastructure sector.

**Time horizon**

Long-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)**

119,000,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

By 2030, the gold price is expected to reach approximately US\$4700 per troy ounce which represents a 150% increase from a gold price of US\$1 468. Based on Implats' current attributable Moz of gold (2.56Moz), such a price increase will result in significant increase in the value of our gold reserves from approximately US\$3.8 billion in 2021 to US\$12 billion in 2030 when considering the gold price increase applied to our gold reserves. This represents an increase of US\$8.2 billion (or R119 billion based on a R14.5/US\$ exchange rate) The demand increase and associated increase in copper price by 2030 (projected by the world bank to reach US\$7935/mt) will also result in a significant increase in the value of Implats' copper reserves. Implats is however still in the process of calculating what the exact financial impact related to the copper price increase will be.

**Cost to realize opportunity**

446,700,000

**Strategy to realize opportunity and explanation of cost calculation**

In FY2021, Implats had a gold output of 94.4koz. In FY2018, Implats purchased a 15% interest in the Waterberg project for US\$30 million (R446700000), situated in the Blouberg Municipal/Administrative District in the Limpopo province on the northern limb of the Bushveld Complex. Implats also acquired a right of first refusal for concentrate offtake. A mining right application was submitted in FY2019 under DMRE reference number LP30/5/1/1/2/10161MR, covering an area of 22 397.79 hectares, for the following minerals: PGMs, chrome, cobalt, copper, gold, iron, lead, molybdenum, nickel, rare earths, silver, vanadium and zinc. The application is still being processed by the DMRE.

**Comment**

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**Identifier**

Opp3

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**



Resilience

**Primary climate-related opportunity driver**

Other, please specify

Increased resilience of post-mine closure landscape to climate change

**Primary potential financial impact**

Increased value of fixed assets

**Company-specific description**

Implats recognises land management practices and land rehabilitation is an essential part of our operations and their legacy. We acknowledge that the land we mine will provide principal bases for human livelihoods and well-being including the supply of food, freshwater and multiple other ecosystem services, as well as biodiversity post-mine closure. Land ecosystems and biodiversity are vulnerable to ongoing climate change, and weather and climate extremes, to different extents. Sustainable land management can contribute to reducing the negative impacts of multiple stressors, including climate change, on ecosystems and societies. Ensuring effective rehabilitation is an important regulatory, financial and reputational issue for the Company. The Group strategy for land rehabilitation is to ensure a sustainable and functional post closure landscape. We continuously investigate alternative post closure land uses which are aligned with our host communities' expectations and supportive of economic opportunities after mining. Land management is therefore an opportunity for the group to contribute to the climate resilience of the environment and communities in and surrounding Implats' operations

**Time horizon**

Long-term

**Likelihood**

Very likely

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

5,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact figure**

The Group strategy towards land rehabilitation is to entrench the concept of “design for closure” throughout the operations by ensuring that all aspects of rehabilitation are defined at the project planning phase. By implementing our biodiversity management plans properly, we reduce unexpected expenditures on land management practices.

### **Cost to realize opportunity**

315,000

### **Strategy to realize opportunity and explanation of cost calculation**

Landscape Function Analysis (LFA), which is aimed at measuring functionality and sustainability, is currently used as a monitoring tool at the rehabilitated opencast sites at the Rustenburg operations as well as the rehabilitated tailings side slopes at Marula. Furthermore, we determine the biodiversity impacts of our mining operations through our environmental authorisation processes, and we manage these according to site-specific biodiversity management plans and standards. Implats Rustenburg monitors and measures its performance against a formal biodiversity management plan that was informed by the Mining and Biodiversity Guideline developed by the South African National Biodiversity Institute. These processes all consider the impact of climate change on land management aspects such as erosion and vegetation changes. Our re-vegetation practices therefore take into account the impacts of climate change and aims to equip surrounding communities with ecosystem services which are climate resilient. The costs associated with the monitoring of the biodiversity management plans amounted to R315 000 in 2021. Our mining rehab also has a strong social aspect and Implats’ operations actively engages in environmental awareness and conservation initiatives in their communities, with a focus on educating the youth. For example, we spent a day with learners at Rasimone Primary School in the Rasimone village. The aim was to create awareness around the importance of planting indigenous trees to sustain the country’s natural environment, and to educate about alien plant species. The Group planted indigenous trees at the school with the learners and showed them how to look after them. We believe these engagements not only improves the conservation of the biodiversity in areas in which we operate, but also contributes to the resilience of our surrounding communities to climate change. The implementation of our rehabilitation plans is ongoing and incorporated into our operation expenses. Therefore, the total cost of the response is R315 000.

### **Comment**

## C3. Business Strategy

### C3.1

**(C3.1) Does your organization’s strategy include a transition plan that aligns with a 1.5°C world?**

Row 1

#### Transition plan

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a transition plan within two years

#### Explain why your organization does not have a transition plan that aligns with a 1.5°C world and any plans to develop one in the future

We have high-level interim goals for 2025 and 2030, and a 2050 neutrality goal, which is publicly available in our 2021 ESG Report. This year we began developing an energy security and decarbonisation roadmap aimed at achieving carbon neutrality by 2050, which aligns with the goals of the Paris Agreement. We do not have a feedback mechanism in place, but once the finalised decarbonisation roadmap is public, shareholders can comment on it at AGMs or through any feedback mechanism (Investor relations).

### C3.2

**(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?**

Use of climate-related scenario analysis to inform strategy	
Row 1	Yes, qualitative, but we plan to add quantitative in the next two years

### C3.2a

**(C3.2a) Provide details of your organization’s use of climate-related scenario analysis.**

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios RCP 4.5	Company-wide		Physical climate risks can be driven by both: i) Acute / extreme weather and climate-related events (e.g., flood events, droughts), and ii) chronic, longer-term changes in climate patterns (e.g., sustained higher ambient temperatures, rising sea levels). Examples of such risks for Implats includes tailing dams and other water storage areas overflowing during extreme rainfall events, or, under high temperatures, Implats will experience a decreased efficiency of machinery and an

			increased demand for air insulation and space cooling of buildings for critical equipment e.g. control centres, people, compressors and ventilations system to cool underground mines
Physical climate scenarios RCP 8.5	Company-wide		Climate hazards projected to experience the greatest change by the 2030s under the worse-case emission scenario, RCP 8.5. Physical climate risks can be driven by both: i) Acute / extreme weather and climate-related events (e.g., flood events, droughts), and ii) chronic, longer-term changes in climate patterns (e.g., sustained higher ambient temperatures, rising sea levels). Examples of such risks for Implats includes tailing dams and other water storage areas overflowing during extreme rainfall events, or, under high temperatures, Implats will experience a decreased efficiency of machinery and an increased demand for air insulation and space cooling of buildings for critical equipment e.g. control centres, people, compressors and ventilations system to cool underground mines

### C3.2b

**(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.**

#### Row 1

##### **Focal questions**

What are the potential physical climate related risks that are related to our business that need to be explored?

What are potential impacts that will affect our business operations and performance?

##### **Results of the climate-related scenario analysis with respect to the focal questions**

Response to focal question 1

Risks (negative impacts) and opportunities (positive impacts) driven or intensified by weather, climate variability and climate change. They include:

Current risks that are driven by current weather and climate conditions;

Current risks that are expected to be intensified by future climate change, and

New emerging risks driven by climate change.

It is important to recognise in the context of Impala that climate change does not necessarily create 'new' risks or opportunities; often it changes existing risk profiles, by

altering the frequency of occurrence, severity of consequence and / or spatial distribution.

Response to focal question 2

Extreme temperature

Disruption to power supply due to inefficiency of thermal power plants during higher temperatures

Increased heat stress for outdoor working and risk of breaching workforce health and safety regulation

Disruption to power supply due to nationwide increased energy demand during higher temperatures

Decreased efficiency of machinery and increase demand for cooling under higher temperatures

Rehabilitation-related risks

Uncertainty around what post-closure landscape will be under future climate scenarios

On-site water management risks

Decrease in water level giving rise to issues with effluent treatment equipment

Reduced water availability from the Vaal Dam due to higher evaporation and water stress

Lower availability of water in backup storage ponds due to higher temperatures and evaporation rates

### C3.3

**(C3.3) 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	As a producer of platinum group metals (PGM), the global transition towards electro-mobility is noted as a risk contributing to the decline in metal prices for a protracted period of time. Platinum, whose demand is primarily derived from its use in auto catalyts, is at risk in terms of declining market value. Implats is aware that this decline in demand for platinum will impact profitability, and thus includes these considerations in their risk and opportunities evaluation processes, for the business strategy. The risks associated with the low-carbon shift toward EVs has been integrated into Implats' business strategy through climate-related risk assessments. At Implats, the key operational risks, and risks which impact the sustainability of their business, are ranked and reviewed annually to determine the most pressing risks.

		<p>As a case study of how the risk has been incorporated into our strategy, we continue to assess and respond to product risks and opportunities, as demand for platinum from the re-emergence of fuel cell and hydrogen sectors continue to rise in the global transition to a low-carbon future through the drive for lower vehicle GHG emissions standards and cost-competitive renewable energy technologies in the form of green hydrogen. In addressing the global decarbonisation challenge, there are increasing opportunities to use platinum-catalysed fuel cells that provide zero-emitting, carbon-free energy, in electricity and mobile applications. The commercialisation of this technology forms part of our business strategy and continues to be reviewed for economic viability. The Group aims to review its fuel cell road map and will seek to engage strategic partners to develop and optimise participation in the value chain and contribute to the low carbon transition. Time horizons associated with the assessment of the risks and opportunities posed by Implats' product and market-related considerations are revisited/ reassessed annually. Annual reviews of business governance processes, and all operations are conducted, taking cognisance of climate change and other related risks, including market value.</p>
Supply chain and/or value chain	Yes	<p>Implats has identified that its main risks and opportunities regarding its supply chain will stem from (i) the anticipated increase in energy, fuel and electricity costs, and (ii) decreased water availability. For Implats' South African operations, the cost of electricity has increased due to tighter environmental regulations for electricity generation and is expected to increase more with the current Eskom loadshedding issues. Implats has integrated the potential impact of increased electricity prices into their business strategy through a cost-benefit analysis of all projects. This is a case study of Implats' strategic decision made to combat climate-related impacts. In addition, several monitoring and mitigation measures (like energy efficiency programmes) have been carried out throughout Implats' operations. These have been implemented to minimise the impacts of carbon tax costs from electricity use. In the long term, Implats will also minimise its exposure to carbon tax pass through costs, as its decarbonisation strategy will reduce its dependency on the national utility, Eskom. An example of minimising exposure is shown in the way Impala Rustenburg has taken its Tailings Scavenger Plant offices,</p>

		<p>change houses and engineering facility off the Eskom power grid during the daytime and instituted a renewable power system which comprises of solar panels to charge lithium battery cells and a power inverter as backup for these operations.</p> <p>Implats focus on developing opportunities to replace diesel with low-carbon fuels and the potential application of solar photovoltaic (PV) technology to generate electricity, such as Impala Rustenburg, which has installed a 251kW solar system with battery energy storage, that will generate 100% of daytime electricity needs for offices and conferencing facilities at Siesta.</p> <p>Regarding time horizons, these strategic decisions are revisited on an annual basis and evaluated in the short term. However, the long-term impact of carbon pricing is also a key aspect considered by Implats. Annually, Implats establishes their most pressing risks and opportunities anticipated to impact their operation and sustainability in the short, medium and long-term. These risks and opportunities are informed by quarterly meetings and assessments conducted.</p>
Investment in R&D	Yes	<p>Implats invests in research and development (R&amp;D) to identify sustainable, forward-thinking business opportunities on which to develop their business model. This research is steered greatly by the impacts of climate change. In light of identified climate-related risks as well as the anticipated shift in customer demands, Implats has invested in the Hydrogen South Africa (HydroSA) programme, which was initiated by the South African government, in the interest of platinum beneficiation. This is an example/ case study of how Implats' strategic decisions are influenced by the various climate-related risks and opportunities they have identified. With input and assistance from HydroSA, Implats is researching the development of fuel cell technologies as a possible key contributor to alternative markets for PGM production.</p> <p>Implats has thus invested in fuel cell technology research, which will promote the fuel cells and assist in developing technologies which will improve efficiency and reduce waste heat produced underground, by making use of Implats' key products. Since 2015, we have spent R25 million in developing the fuel cell initiative in collaboration with academic institutions and commercial partners. The group is also working with government and key partners to develop a</p>

		<p>special economic zone (SEZ) focussed on the commercialisation of hydrogen technologies. The SEZ comprises 16 hectares of land donated by Implats, adjacent to Implats Springs. The project in partnership with various government departments is a longer-term strategic investment to facilitate platinum beneficiation. Implats intends to manage the risks posed by the declining catalyst market by providing alternative uses for platinum group metals. Implats is developing fuel cell technologies to develop an alternative market. The magnitude of this impact is high and is anticipated to have a long-term strategic impact on Implats' business strategy. The time horizons for the assessment of the risks and opportunities as identified by Implats, regarding their R&amp;D investments and the changing market, are revisited annually. The current R&amp;D research aims to contribute to the fuel cell market in the medium to long term.</p>
Operations	Yes	<p>In light of the anticipated impacts of climate change, Implats considers the various risks that will impact the productivity of their operations, based on extreme weather occurrences. One specific physical risk is the impact of acute and chronic climate change impacts, such as drought and extreme weather events on our water availability and infrastructure. An example of such a risk is the impact of low rainfall on the water availability at operations in the North West region of South Africa and in Zimbabwe. Water is the most significant environmental concern. The principal risks to Implats are, increased water stress leading to potential operational disruptions, uncontrolled dirty water discharges into the environment, increasing costs associated with water supply and management, local community discontent and reputational risks. However, as part of its business strategy, and to manage the climate change risks associated with water, Implats has implemented a water strategy. At executive management level, the Group Executive: Safety, Health and Environment is responsible for the water strategy and water management initiatives. At board level, the Health, Safety, Environment and Risk board sub-committee is responsible for monitoring our water strategy and risk.</p>



## C3.4

### (C3.4) 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 allocation	<p>The implementation of the Carbon Tax Act in 2019 poses significant financial risks to Implats. Not only is the group liable to pay carbon tax directly, but they will also be impacted by the tax indirectly as a result of the pass through of the tax from key suppliers. The second phase of the tax scheme (2026 to 2030) may present real exposure risk for Implats as the state-owned electricity supplier, Eskom generates electricity from coal and will pass the carbon tax to electricity consumers. Electricity use accounts for the overwhelming majority of Implats' exposure to carbon tax costs from 2026 onward. As such, as a strategic response, Implats will reduce its dependency on Eskom by implementing its decarbonisation plan which is currently under development. Implats will focus on the potential application of solar photovoltaic (PV) technology to generate electricity, especially in the light of the recent announcements that would exempt Implats from applying for an electricity generation license for installation smaller than 100MW. This will reduce our indirect carbon tax liability, whilst also driving down our emissions. The time horizon associated with the implementation of our decarbonisation plan is linked to the medium-to-long-term. Considering the transition to a low-carbon economy and society, Implats believes that the use of platinum in green hydrogen technologies will assist in such a transition, and we are committed to investing in and allocating capital towards the development of the hydrogen and fuel cell markets.</p> <p>With our partners, we have installed a 1.5kW fuel cell for testing under realistic load conditions at our Springs Refineries, where grey hydrogen is already piped. The testing of the stationary fuel cell follows the already successful implementation of a fully operational mobile hydrogen fuel cell-powered forklift at the refinery, which emits zero air pollution. Implats donated 16ha of its land for fuel cell manufacture at Impala Springs for the development of a special economic zone (SEZ), aimed at driving local fuel cell manufacturing.</p> <p>We expect the donation of the land will result in technological advancements in the fuel cell industry and benefit Implats' income statement and balance sheet in the medium-to-long term. Numerous climate-related factors could result in work stoppages, including lack of freshwater supply, heat fatigue, insufficient cooling, the withdrawal of a social license to operate, as well as an act of non-compliance or other</p>

		<p>regulatory limitations.</p> <p>Work stoppages can last for some time, depending on the extent of climate-related impacts experienced. Implats' operations are at risk of losing between R8 million and R60 million revenue per day, which is considered a substantive impact on Implats' revenue due to direct impacts. The direct market impact of climate change on PGM demand has not yet been quantified. The increased uptake of fuels cell, particularly in the industrial sector, has contributed to an increased demand for PGMs in this sector increasing revenue. The financial planning regarding revenue influences is considered in Implats' long-term strategic plans.</p>
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## C4. Targets and performance

### C4.1

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

Absolute target

#### C4.1a

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

---

**Target reference number**

Abs 1

**Year target was set**

2016

**Target coverage**

Company-wide

**Scope(s)**

Scope 2

**Scope 2 accounting method**

Location-based

**Scope 3 category(ies)**

**Base year**

2015

**Base year Scope 1 emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 2 emissions covered by target (metric tons CO<sub>2</sub>e)**

2,896,704

**Base year Scope 3 emissions covered by target (metric tons CO<sub>2</sub>e)**

**Total base year emissions covered by target in all selected Scopes (metric tons CO<sub>2</sub>e)**

2,896,704

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

100

**Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

100

**Target year**

2030

**Targeted reduction from base year (%)**

35

**Total emissions in target year covered by target in all selected Scopes (metric tons CO<sub>2</sub>e) [auto-calculated]**

1,882,857.6

**Scope 1 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Scope 2 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

3,646,484

**Scope 3 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO<sub>2</sub>e)**

3,646,484

**% of target achieved relative to base year [auto-calculated]**

-73.9540032889

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, but we are reporting another target that is science-based

**Target ambition**

**Please explain target coverage and identify any exclusions**

In FY2021, the total Scope 2 emissions posted by Implats' operations were 3646484 tCO<sub>2</sub>e which is an increase from FY2020 (3225570 tCO<sub>2</sub>e). This target is linked to the South African national utility's uptake of renewable energy which is in turn is linked to South Africa's peak-plateau-decline emissions trajectory commitments 35% reduction by 2030. In this reporting year, Implats' Scope 2 emissions have increased as a result of as a result of increased production at Impala Canada and that the bulk of Impala Platinum's scope 1 emissions arise through the combustion of coal peas in its industrial processes. These emissions are still higher than the base year of this target.

**Plan for achieving target, and progress made to the end of the reporting year**

Plans for achieving these targets includes energy efficiency initiatives such as refrigeration, ventilation, compressed air and hot water supply systems on the mine, the execution and planning of solar projects on the Zimplats and Marula sites with capacity of 35 MW and 33MW respectively. Furthermore, Implats is looking into a 1MW hydrogen plant and a power purchase agreement for renewable energy wheeling concept

**List the emissions reduction initiatives which contributed most to achieving this target**

---

**Target reference number**

Abs 2

**Year target was set**

2016

**Target coverage**

Company-wide

**Scope(s)**

Scope 2

**Scope 2 accounting method**

Location-based

**Scope 3 category(ies)**

**Base year**

2015

**Base year Scope 1 emissions covered by target (metric tons CO2e)**

**Base year Scope 2 emissions covered by target (metric tons CO2e)**

2,896,704

**Base year Scope 3 emissions covered by target (metric tons CO2e)**

**Total base year emissions covered by target in all selected Scopes (metric tons CO2e)**

2,897,000

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

100

**Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

100

**Target year**

2040

**Targeted reduction from base year (%)**

63

**Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]**

1,071,890

**Scope 1 emissions in reporting year covered by target (metric tons CO2e)**

**Scope 2 emissions in reporting year covered by target (metric tons CO2e)**

3,646,484

**Scope 3 emissions in reporting year covered by target (metric tons CO2e)**

**Total emissions in reporting year covered by target in all selected scopes  
(metric tons CO2e)**

3,646,484

**% of target achieved relative to base year [auto-calculated]**

-41.0651412792

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, but we are reporting another target that is science-based

**Target ambition**

**Please explain target coverage and identify any exclusions**

In FY2021, the total Scope 2 emissions posted by Implats' operations were 3646484 tCO2e which is an increase from FY2020 (3225570 tCO2e). This target is a science based because it is linked to the national utilities uptake of renewable energy which is in turn is linked to South Africa's peak-plateau-decline emissions trajectory commitments 63% reduction by 2040, equivalent to 1071 ktCO2 absolute emissions. In this reporting year, Implats' Scope 2 emissions have increased as a result of increased production. These emissions are still higher than the base year of this target.

**Plan for achieving target, and progress made to the end of the reporting year**

Plans for achieving these targets includes energy efficiency initiatives such as refrigeration, ventilation, compressed air and hot water supply systems on the mine, the execution and planning of solar projects on the Zimplats and Marula sites with capacity of 35 MW and 33MW respectively. Furthermore, Implats is looking into a 1MW hydrogen plant and a power purchase agreement for renewable energy wheeling concept

**List the emissions reduction initiatives which contributed most to achieving this target**

---

**Target reference number**

Abs 3

**Year target was set**

2020

**Target coverage**

Company-wide

**Scope(s)**

Scope 2

**Scope 2 accounting method**

Location-based

**Scope 3 category(ies)**

**Base year**

2022

**Base year Scope 1 emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 2 emissions covered by target (metric tons CO<sub>2</sub>e)**

575,284

**Base year Scope 3 emissions covered by target (metric tons CO<sub>2</sub>e)**

**Total base year emissions covered by target in all selected Scopes (metric tons CO<sub>2</sub>e)**

575,284

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

100

**Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

100

**Target year**

2025

**Targeted reduction from base year (%)**

5

**Total emissions in target year covered by target in all selected Scopes (metric tons CO<sub>2</sub>e) [auto-calculated]**

546,519.8

**Scope 1 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Scope 2 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

3,646,484

**Scope 3 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO<sub>2</sub>e)**

3,646,484

**% of target achieved relative to base year [auto-calculated]**

-10,677.1611934279

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, but we are reporting another target that is science-based

**Target ambition**

**Please explain target coverage and identify any exclusions**

This target replaces the short term Scope 2 emissions target which expired last year

**Plan for achieving target, and progress made to the end of the reporting year**

Plans for achieving these targets includes the implemented energy efficiency initiatives such as refrigeration, ventilation, compressed air and hot water supply systems on the mine. Implats is in the execution and planning process of solar projects on the Zimplats and Marula sites with capacities of 35 MW and 33MW respectively. Furthermore, Implats is looking into a 1MW hydrogen plant and a power purchase agreement for renewable energy wheeling

**List the emissions reduction initiatives which contributed most to achieving this target**

---

**Target reference number**

Abs 4



**Year target was set**

2020

**Target coverage**

Company-wide

**Scope(s)**

Scope 1

**Scope 2 accounting method**

**Scope 3 category(ies)**

**Base year**

2017

**Base year Scope 1 emissions covered by target (metric tons CO<sub>2</sub>e)**

392,000

**Base year Scope 2 emissions covered by target (metric tons CO<sub>2</sub>e)**

**Base year Scope 3 emissions covered by target (metric tons CO<sub>2</sub>e)**

**Total base year emissions covered by target in all selected Scopes (metric tons CO<sub>2</sub>e)**

392,000

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

100

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

**Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

100

**Target year**

2025

**Targeted reduction from base year (%)**

3

**Total emissions in target year covered by target in all selected Scopes (metric tons CO<sub>2</sub>e) [auto-calculated]**

380,240

**Scope 1 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

492,945

**Scope 2 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Scope 3 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO<sub>2</sub>e)**

492,945

**% of target achieved relative to base year [auto-calculated]**

-858.3758503401

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, but we are reporting another target that is science-based

**Target ambition**

**Please explain target coverage and identify any exclusions**

In FY2021, the total Scope 1 emissions from Implats was calculated to be 492945 tCO<sub>2</sub>e. This is an increase in Scope 1 emissions since last year (which reported 419367 ktCO<sub>2</sub>e). This is an increase of 10% from the previous reporting year, mainly from increased production.

**Plan for achieving target, and progress made to the end of the reporting year**

In 2022, site specific projects and targets will be developed, looking at switching our electricity supply sources to renewable types, driving energy efficiency programmes and progressively reducing our coal usage. We have also been increasing production at our Canada operations, which uses propane instead of coal for heat applications.

**List the emissions reduction initiatives which contributed most to achieving this target**

**Target reference number**

Abs 5

**Year target was set**

2021

**Target coverage**

Company-wide

**Scope(s)**

Scope 1

Scope 2

**Scope 2 accounting method**

Location-based

**Scope 3 category(ies)**

**Base year**

2021

**Base year Scope 1 emissions covered by target (metric tons CO<sub>2</sub>e)**

492,945

**Base year Scope 2 emissions covered by target (metric tons CO<sub>2</sub>e)**

3,646,484

**Base year Scope 3 emissions covered by target (metric tons CO<sub>2</sub>e)**

**Total base year emissions covered by target in all selected Scopes (metric tons CO<sub>2</sub>e)**

4,139,429

**Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1**

100

**Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2**

100

**Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)**

**Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes**

100

**Target year**

2050

**Targeted reduction from base year (%)**

100

**Total emissions in target year covered by target in all selected Scopes (metric tons CO<sub>2</sub>e) [auto-calculated]**

0

**Scope 1 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

492,945

**Scope 2 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

3,646,484

**Scope 3 emissions in reporting year covered by target (metric tons CO<sub>2</sub>e)**

**Total emissions in reporting year covered by target in all selected scopes (metric tons CO<sub>2</sub>e)**

4,139,429

**% of target achieved relative to base year [auto-calculated]**

0

**Target status in reporting year**

New

**Is this a science-based target?**

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

**Target ambition**

Other, please specify

Carbon neutrality by 2050

**Please explain target coverage and identify any exclusions**

This target covers scope 1 plus scope 2. In FY2021, the total scope 1 emissions from Implats were 492945, which is an increase in scope 1 emissions from last year, 2020, which was 419367. Scope 2 emissions were 3646484 tCO<sub>2</sub>e which is an increase from 3225570 tCO<sub>2</sub>e in 2020. Scope 1 plus scope 2 was 4139429 tCO<sub>2</sub>e in 2021 compared to 3 644 937 in 2020, a 13.6% increase. This increase was mainly from increased production. We believe that the target is science-based because it is aligned to the Paris Agreement. We have not sent an official commitment to the Science-based Target Initiative for this target and we are considering other methods of verification, such as the PAS2060.

**Plan for achieving target, and progress made to the end of the reporting year**

Plans for achieving these targets of scope 1 and 2 emissions includes switching our electricity supply sources to renewable types, driving energy efficiency programmes and progressively reducing our coal usage. We have also been increasing production at our Canada operations, which uses propane instead of coal for heat applications. In addition, Implats has implemented energy efficiency initiatives such as refrigeration, ventilation, compressed air and hot water supply systems on the mine. Implats is in the execution and planning process of solar projects on the Zimplats and Marula sites with capacities of 35 MW and 33MW respectively. Furthermore, Implats is looking into a 1MW hydrogen plant and a power purchase agreement for renewable energy wheeling

**List the emissions reduction initiatives which contributed most to achieving this target**

## C4.2

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

Target(s) to increase low-carbon energy consumption or production  
Other climate-related target(s)

## C4.2a

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

---

**Target reference number**

Low 1

**Year target was set**

2021

**Target coverage**

Company-wide

**Target type: energy carrier**

Electricity

**Target type: activity**

Consumption

**Target type: energy source**

Renewable energy source(s) only

**Base year**

2019

**Consumption or production of selected energy carrier in base year (MWh)**

285,211

**% share of low-carbon or renewable energy in base year**

8.3

**Target year**

2025

**% share of low-carbon or renewable energy in target year**

35

**% share of low-carbon or renewable energy in reporting year**

17.98

**% of target achieved relative to base year [auto-calculated]**

36.2546816479

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

CO2 emissions reduction (scope 1 and 2) relative to 2019

Baseline will be 100% reduced by 2050, achieving carbon neutrality with offsets.

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

Other, please specify

Carbon Neutrality

**Please explain target coverage and identify any exclusions**

This target covers all of the scope 1 plus scope 2 emissions from the Group

**Plan for achieving target, and progress made to the end of the reporting year**

Initiatives implemented across the Group include underground energy-efficient lighting, optimised use of underground compressed air systems, installation of power factor correction equipment, and diesel consumption management, which also includes fitting diesel particulate filters to reduce health impacts of emissions. Furthermore, Implats has installed a 1.5kW fuel cell for testing under realistic load conditions at our Springs Refineries, where grey

hydrogen is already piped. The testing of the stationary fuel cell follows the already successful implementation of a fully operational mobile hydrogen fuel cell-powered forklift at the refinery, which emits zero air pollution

**List the actions which contributed most to achieving this target**

---

**Target reference number**

Low 2

**Year target was set**

2021

**Target coverage**

Company-wide

**Target type: energy carrier**

Electricity

**Target type: activity**

Consumption

**Target type: energy source**

Renewable energy source(s) only

**Base year**

2019

**Consumption or production of selected energy carrier in base year (MWh)**

285,211

**% share of low-carbon or renewable energy in base year**

8.3

**Target year**

2030

**% share of low-carbon or renewable energy in target year**

**% share of low-carbon or renewable energy in reporting year**

17.98

**% of target achieved relative to base year [auto-calculated]**

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

CO2 emissions reduction (scope 1 and 2) relative to 2019

Baseline will be 100% reduced by 2050, achieving carbon neutrality with offsets

**Is this target part of an overarching initiative?**

Other, please specify

**Please explain target coverage and identify any exclusions**

This target covers all of the scope 1 plus scope 2 emissions from the Group

**Plan for achieving target, and progress made to the end of the reporting year**

Implats is still considering a number of emission reduction projects. Implats is in the planning stage of a solar project with Capacity/Energy of 33 MW / 61 GWh to reduce emissions by 66 000 tCO<sub>2</sub>e. We are also considering the feasibility of a 1MW hydrogen plant and the concept of renewable energy wheeling through a PPA with a Capacity/Energy of 370MW / 100 GWh

**List the actions which contributed most to achieving this target**

---

**Target reference number**

Low 3

**Year target was set**

2021

**Target coverage**

Company-wide

**Target type: energy carrier**

Electricity

**Target type: activity**

Consumption

**Target type: energy source**

Renewable energy source(s) only

**Base year**

2019

**Consumption or production of selected energy carrier in base year (MWh)**

285,211

**% share of low-carbon or renewable energy in base year**

8.3

**Target year**

2050

**% share of low-carbon or renewable energy in target year**

100

**% share of low-carbon or renewable energy in reporting year**

17.98



**% of target achieved relative to base year [auto-calculated]**

10.5561613959

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

CO2 emissions reduction (scope 1 and 2) relative to 2019  
Baseline will be 100% reduced by 2050, achieving carbon neutrality with offsets

**Is this target part of an overarching initiative?**

Other, please specify  
Carbon Neutrality

**Please explain target coverage and identify any exclusions**

This target covers all of the scope 1 plus scope 2 emissions from the Group

**Plan for achieving target, and progress made to the end of the reporting year**

Implats is still considering a number of emission reduction projects. Implats is in the planning stage of a solar project with Capacity/Energy of 33 MW / 61 GWh to reduce emissions by 66 000 tCO2e. We are also considering the feasibility of a 1MW hydrogen plant and the concept of renewable energy wheeling through a PPA with a Capacity/Energy of 370MW / 100 GWh

**List the actions which contributed most to achieving this target**

## C4.2b

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

## C4.3

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

Yes

## C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
--	-----------------------	--

Under investigation	5	0
To be implemented*	1	66,000
Implementation commenced*	1	312,000
Implemented*	8	36,958
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 production processes  
Compressed air

### Estimated annual CO2e savings (metric tonnes CO2e)

11,474

### Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

### Voluntary/Mandatory

Voluntary

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

10,898,883

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

0

### Payback period

<1 year

### Estimated lifetime of the initiative

Ongoing

### Comment

Compressed air demand optimisation - South Ring. The duration of the projects are expected to be the equivalent of the remaining life of the mines

---

### Initiative category & Initiative type

Energy efficiency in production processes  
Compressed air

**Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)**

21,685

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

10,898,883

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

0

**Payback period**

<1 year

**Estimated lifetime of the initiative**

Ongoing

**Comment**

Compressed air demand optimisation - North Ring. The duration of the projects are expected to be the equivalent of the remaining life of the mines

---

**Initiative category & Initiative type**

Energy efficiency in production processes  
Cooling technology

**Estimated annual CO<sub>2</sub>e savings (metric tonnes CO<sub>2</sub>e)**

859

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

19,775,391

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

0

**Payback period**

<1 year

**Estimated lifetime of the initiative**

Ongoing

**Comment**

Ventilation optimisation - 11 Shaft. The duration of the projects are expected to be the equivalent of the remaining life of the mines

---

**Initiative category & Initiative type**

Energy efficiency in production processes  
Cooling technology

**Estimated annual CO2e savings (metric tonnes CO2e)**

114

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

714,160

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

0

**Payback period**

<1 year

**Estimated lifetime of the initiative**

Ongoing

**Comment**

Ventilation optimisation - 4 Shaft. Active from March-21 to May-21

---

**Initiative category & Initiative type**

Energy efficiency in production processes  
Cooling technology

**Estimated annual CO2e savings (metric tonnes CO2e)**

1,725

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

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

1,573,078

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

0

**Payback period**

<1 year

**Estimated lifetime of the initiative**

Ongoing

**Comment**

The duration of the projects are expected to be the equivalent of the remaining life of the mines

---

**Initiative category & Initiative type**

Energy efficiency in production processes

Cooling technology

**Estimated annual CO2e savings (metric tonnes CO2e)**

142

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

135,980

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

0

**Payback period**

<1 year

**Estimated lifetime of the initiative**

Ongoing

**Comment**

Bulk air Cooler optimisation - 1 Shaft. The duration of the projects are expected to be the equivalent of the remaining life of the mines

---

**Initiative category & Initiative type**

Energy efficiency in production processes

Smart control system

**Estimated annual CO2e savings (metric tonnes CO2e)**

414

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

407,928

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

0

**Payback period**

<1 year

**Estimated lifetime of the initiative**

Ongoing

**Comment**

Change house optimisation - 14 Shaft. Active from December-20 to June-21

---

**Initiative category & Initiative type**

Energy efficiency in production processes

Cooling technology

**Estimated annual CO2e savings (metric tonnes CO2e)**

545

**Scope(s) or Scope 3 category(ies) where emissions savings occur**

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

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

600,270

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

0

**Payback period**

<1 year

**Estimated lifetime of the initiative**

Ongoing

**Comment**

Water reticulation - 14 Shaft. The duration of the projects are expected to be the equivalent of the remaining life of the mines

### C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	<p>Implats' operations are consistently compliant with the laws and regulations stipulated for the various countries wherein it operates, as well as with the internationally recognised ISO14001 Environmental Management standard. In South Africa, GHG mandatory reporting regulations and a Carbon Tax are in place. 2019 was the first reporting year in which Implats was liable to pay carbon tax. Similarly, Implats has been required to report their GHG emissions as per the National Greenhouse Gas Emissions Reporting Regulations from April 2019. Through these regulations, Implats is encouraged to invest further in the reduction of their emissions. An example of such is the greater push towards energy efficiency and energy conservation to decrease the impact of carbon taxes being passed through in energy prices. These cost increases are anticipated to impact on Implats' operations in the second stage of carbon tax implementation in South Africa from 2025</p>
Dedicated budget for energy efficiency	<p>Through their energy management strategy, Implats has focused their investments on key energy efficiency measures. Initiatives implemented across the Group include underground energy-efficient lighting, optimised use of underground compressed air systems, installation of power factor correction equipment, and diesel consumption management, which also includes fitting diesel particulate filters to reduce health impacts of emissions. The Impala Rustenburg operation accounts for approximately 60% of the Group's energy usage. The site established a partnership with an energy services company in 2019 to identify and pursue energy-saving initiatives. The savings realised are quantified and independently verified by a third party on a quarterly basis. The initiative has primarily targeted refrigeration, ventilation, compressed air and hot water supply systems on the mine.</p>

<p>Partnering with governments on technology development</p>	<p>Measures include group-wide initiatives such as underground energy efficient lighting, optimising compressed air systems and power-factor correction equipment. In addition, Implats has invested in AP Ventures to advance technologies in the fuel cell, hydrogen and energy-storage value chain. Implats has invested around R25 million in targeted fuel cell development in South Africa in collaboration with government and academic institutions to help promote local technology development, as well as develop local skills and fuel cell manufacturing and deployment. With partners of Implats, Implats has installed a 1.5kW fuel cell for testing under realistic load conditions at its Springs Refineries, where grey hydrogen is already piped. The testing of the stationary fuel cell follows the already successful implementation of a fully operational mobile hydrogen fuel cell-powered forklift at the refinery, which emits zero air pollution. Implats donated 16ha of its land for fuel cell manufacture at Impala Springs for the development of a special economic zone (SEZ), aimed at driving local fuel cell manufacturing.</p>
<p>Internal incentives/recognition programs</p>	<p>One of the stated aims of Implats' remuneration policy is to promote and ensure compliance with an evolving regulatory environment, with a specific emphasis on the long-term sustainability of the Group. Implats has short term and long-term employee incentives. The short-term incentives include an allocation of employees' key performance indicators, including those related to health, safety and the environment.</p>

## C4.5

**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?**

No

## C5. Emissions methodology

### C5.1

**(C5.1) Is this your first year of reporting emissions data to CDP?**

No

### C5.1a

**(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?**

Row 1



**Has there been a structural change?**

No

**C5.1b**

**(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?**

	<b>Change(s) in methodology, boundary, and/or reporting year definition?</b>	<b>Details of methodology, boundary, and/or reporting year definition change(s)</b>
Row 1	Yes, a change in boundary Yes, a change in reporting year definition	Implats included more scope 3 emission reporting in this reporting year and therefore adding additional scope 3 emissions changes the boundary and reporting year definition. We changed the base year because historical information is not available for all the scope 3 emission sources now considered.

**C5.1c**

**(C5.1c) Have your organization’s base year emissions been recalculated as result of the changes or errors reported in C5.1a and C5.1b?**

	<b>Base year recalculation</b>	<b>Base year emissions recalculation policy, including significance threshold</b>
Row 1	Yes	Base year changed to 2021. Implats recalculated its base year emissions when a significant change to Implats’ base year emissions would be set at more than 5%. Scope 3 emissions have increased from 365,000 tCO2 in FY2020 to 575,284 tCO2 in FY2021, which is more than a 5% increase and the base year emission calculation has been changed to FY2021 of 575,284 tCO2

**C5.2**

**(C5.2) Provide your base year and base year emissions.**

**Scope 1**

**Base year start**

July 1, 2007

**Base year end**

June 30, 2008

**Base year emissions (metric tons CO2e)**

392,000

## Comment

### Scope 2 (location-based)

---

#### Base year start

July 1, 2007

#### Base year end

June 30, 2008

#### Base year emissions (metric tons CO<sub>2</sub>e)

2,568,000

#### Comment

The Scope 2 market-based value for Implats' operations are quantified as equal to that of their location-based emissions value

### Scope 2 (market-based)

---

#### Base year start

July 1, 2016

#### Base year end

June 30, 2017

#### Base year emissions (metric tons CO<sub>2</sub>e)

2,568,000

#### Comment

The Scope 2 market-based value for Implats' operations are quantified as equal to that of their location-based emissions value

### Scope 3 category 1: Purchased goods and services

---

#### Base year start

July 1, 2020

#### Base year end

June 30, 2021

#### Base year emissions (metric tons CO<sub>2</sub>e)

116,211

#### Comment

### Scope 3 category 2: Capital goods

---

#### Base year start

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)**

---

**Base year start**

July 1, 2020

**Base year end**

June 30, 2021

**Base year emissions (metric tons CO2e)**

287,781

**Comment**

**Scope 3 category 4: Upstream transportation and distribution**

---

**Base year start**

July 1, 2020

**Base year end**

June 30, 2021

**Base year emissions (metric tons CO2e)**

5,623

**Comment**

**Scope 3 category 5: Waste generated in operations**

---

**Base year start**

July 1, 2020

**Base year end**

June 30, 2021

**Base year emissions (metric tons CO2e)**

17

**Comment**

### Scope 3 category 6: Business travel

---

**Base year start**

July 1, 2020

**Base year end**

June 30, 2021

**Base year emissions (metric tons CO<sub>2</sub>e)**

311

**Comment**

### Scope 3 category 7: Employee commuting

---

**Base year start**

July 1, 2020

**Base year end**

June 30, 2021

**Base year emissions (metric tons CO<sub>2</sub>e)**

21,939

**Comment**

### Scope 3 category 8: Upstream leased assets

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

### Scope 3 category 9: Downstream transportation and distribution

---

**Base year start**

July 1, 2020

**Base year end**

June 30, 2021

**Base year emissions (metric tons CO<sub>2</sub>e)**

562

**Comment**

**Scope 3 category 10: Processing of sold products**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

**Scope 3 category 11: Use of sold products**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

**Scope 3 category 12: End of life treatment of sold products**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

**Scope 3 category 13: Downstream leased assets**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 14: Franchises**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 15: Investments**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3: Other (upstream)**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3: Other (downstream)**

---

**Base year start**

**Base year end**

**Base year emissions (metric tons CO<sub>2</sub>e)**

**Comment**

## C5.3

**(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance, 2019

IEA CO<sub>2</sub> Emissions from Fuel Combustion

IPCC Guidelines for National Greenhouse Gas Inventories, 2006

ISO 14064-1

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 CO<sub>2</sub>e?**

**Reporting year**

---

**Gross global Scope 1 emissions (metric tons CO<sub>2</sub>e)**

492,946

**Comment**

This is an increase of 10% from the previous reporting year, mainly from increased production.

### C6.2

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

**Row 1**

---

**Scope 2, location-based**

We are reporting a Scope 2, location-based figure

**Scope 2, market-based**

We are reporting a Scope 2, market-based figure

### Comment

Implats operates in countries where regulated central electricity utilities operate and control the market. Since Implats' gets all their purchased electricity from the national electricity grid, the location-based and market-based approach for Implats' Scope 2 emission are the same.

## C6.3

**(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO<sub>2</sub>e?**

### Reporting year

---

#### Scope 2, location-based

3,646,484

#### Scope 2, market-based (if applicable)

3,646,484

### Comment

## C6.4

**(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?**

Yes

## C6.4a

**(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.**

---

### Source

Implats Head Office

### Relevance of Scope 1 emissions from this source

Emissions are not relevant

### Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

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

Emissions are not relevant

### Explain why this source is excluded



The only scope 1 emissions from Implats' head office may be due to backup generator emissions. These are immaterial / insignificant compared to the company wide emissions. Scope 2 emissions from head office are less than 100t and are also insignificant to the overall scope 2 emissions.

**Estimated percentage of total Scope 1+2 emissions this excluded source represents**

0

**Explain how you estimated the percentage of emissions this excluded source represents**

Impala head office has 87 employees which are in commercial office space. The electricity emissions for head office were 46tCO<sub>2</sub>e. As a percentage of the total Scope 2 emissions of 3646484 tCO<sub>2</sub>e is 0.00%.

## C6.5

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

### Purchased goods and services

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO<sub>2</sub>e)**

116,211

**Emissions calculation methodology**

Supplier-specific method  
Hybrid method  
Average data method  
Spend-based method

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

50

**Please explain**

This category's emission contribution was calculated using the purchased water, lime, steel, timber and cement by Implats. The emissions associated with water are attributed to the upstream pumping, storage and distribution of the water received from the various suppliers.

### Capital goods

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Capital Goods emissions were not material in the reporting year.

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

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

287,781

**Emissions calculation methodology**

Supplier-specific method  
Average data method

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

100

**Please explain**

Calculated from well to tank emissions related to fuels consumed by Implats, including Diesel, petrol, LPG, Heavy Fuel Oil, Natural Gas, Acetylene and transmission and distribution losses from electricity. The emission factors were obtained from DEFRA and multiplied by the quantities of fuels used.

**Upstream transportation and distribution**

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

5,623

**Emissions calculation methodology**

Spend-based method  
Fuel-based method  
Distance-based method

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

50

**Please explain**

Implats' GHG handbook provides a high-level assessment of scope 3 emissions to determine their materiality on overall emissions. This estimate accounts for the transport of the following purchased goods to site: - Steel, cement, timber, graphite, lime, silica, reagents, tyres, nickel sulphate, calcium oxide, ammonia, nitric acid, lubricants,

hydrochloric acid, - Diesel, Petrol, Oxygen, LPG, Coal, Natural Gas and HFO -  
Acetylene - Explosives

### Waste generated in operations

---

**Evaluation status**

Not relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

17

**Emissions calculation methodology**

Waste-type-specific method

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

50

**Please explain**

Emissions related to management of waste in terms of recycling, incineration and incineration with heat recovery. The emission factors were based on DEFRA Factors 2021 for waste disposal.

### Business travel

---

**Evaluation status**

Not relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

311

**Emissions calculation methodology**

Spend-based method  
Fuel-based method  
Distance-based method

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

100

**Please explain**

Includes emissions related to flights and hotel accommodation based on DEFRA emission factors for travel and estimated distances of travel.

### Employee commuting

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

21,939

**Emissions calculation methodology**

Average spend-based method

Fuel-based method

Distance-based method

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

100

**Please explain**

Implats' GHG handbook provides a high-level assessment of scope 3 emissions to determine their materiality on overall emissions. Employee commuting can be estimated based on the total number of employees and assumptions relating to transport. Implats can assume that 20% of employees travel to work with their own vehicle and 80% travel to work with public transport. Using the Scope 3 emission factors for vehicles and public transport, emissions for Implats' employee commuting are estimated at around 21939 tCO<sub>2</sub>e per year. This amounts to around 3% of the company's scope 3 emissions. Following the less than 5% material criteria, this category is deemed immaterial to Implats' scope 3 emissions

**Upstream leased assets**

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Implats has no material upstream leased assets

**Downstream transportation and distribution**

---

**Evaluation status**

Not relevant, calculated

**Emissions in reporting year (metric tons CO<sub>2</sub>e)**

562

**Emissions calculation methodology**

Spend-based method

Fuel-based method

Distance-based method

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

100

**Please explain**

The emissions from the transportation and distribution of converter matte and concentrate. This total scope 3 emissions amount to 562 tCO<sub>2</sub>e. The total scope 3

emissions for this category is less than 1 % of the company's overall scope 3 emissions and is thus deemed immaterial

### Processing of sold products

---

**Evaluation status**

Not evaluated

**Please explain**

### Use of sold products

---

**Evaluation status**

Not evaluated

**Please explain**

### End of life treatment of sold products

---

**Evaluation status**

Not evaluated

**Please explain**

### Downstream leased assets

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Implats has no material downstream leased assets

### Franchises

---

**Evaluation status**

Not relevant, explanation provided

**Please explain**

Implats does not participate in any franchises

### Investments

---

**Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

142,798

### **Emissions calculation methodology**

Supplier-specific method

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

#### **Please explain**

Implats has investment on the Two River and Mimosa mines. The emissions from these investments are reported here in proportion to the shareholding

### **Other (upstream)**

---

#### **Evaluation status**

Not relevant, explanation provided

#### **Please explain**

There are no other upstream emissions relevant to Implats

### **Other (downstream)**

---

#### **Evaluation status**

Not relevant, explanation provided

#### **Please explain**

There are no other downstream emissions relevant to Implats

## **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 CO<sub>2</sub>e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**

---

#### **Intensity figure**

0.0000319462

#### **Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

4,139,429

#### **Metric denominator**

unit total revenue

**Metric denominator: Unit total**

129,575,000,000

**Scope 2 figure used**

Location-based

**% change from previous year**

38.78

**Direction of change**

Decreased

**Reason for change**

The reason why the emissions intensity (of tCO<sub>2</sub>e/ ZAR earned) has decreased when compared to the previous year, can be attributed to the large increase in revenue earned in FY2021 despite the increase in emissions in FY2021 due to increasing energy requirements. The revenue earned in FY2021 was 86% higher than that earned in FY2020. This is a large jump in year-on-year revenue changes. The FY2020 value used to calculate this change was R 69.9 billion (AIR 2020).

---

**Intensity figure**

111.85

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

4,139,429

**Metric denominator**

full time equivalent (FTE) employee

**Metric denominator: Unit total**

37,009

**Scope 2 figure used**

Location-based

**% change from previous year**

11.03

**Direction of change**

Increased

**Reason for change**

The emissions intensity (of tCO<sub>2</sub>e / FTE employee) changed because there was a 2.29% increase in the number of full-time employees from FY2020 to FY2021, and the

combined Scope 1 and 2 emissions increase of 13.57%. The intensity metric increased by 11%.

## 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 CO <sub>2</sub> e)	GWP Reference
CO <sub>2</sub>	479,397	IPCC Fifth Assessment Report (AR5 – 100 year)
CH <sub>4</sub>	887	IPCC Fifth Assessment Report (AR5 – 100 year)
N <sub>2</sub> O	1,966	IPCC Fifth Assessment Report (AR5 – 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 CO <sub>2</sub> e)
South Africa	375,928
Zimbabwe	62,416
Canada	54,602

### C7.3

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

By facility

#### C7.3b

**(C7.3b) Break down your total gross global Scope 1 emissions by business facility.**

Facility	Scope 1 emissions (metric tons CO <sub>2</sub> e)	Latitude	Longitude
----------	---	----------	-----------



Impala Platinum - Rustenburg	184,583	-25.542118	27.177813
Impala Platinum - Refineries	184,485	-26.22416	28.439913
Marula Platinum	6,860	-24.503593	30.074902
Zimplats	62,416	-18.664262	30.352324
Impala Canada	54,602	49.170396	-89.592892

## C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

**(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO<sub>2</sub>e.**

	Gross Scope 1 emissions, metric tons CO <sub>2</sub> e	Comment
Metals and mining production activities	492,946	Implats direct emissions arise from the combustion of a variety of fuels during the course of its operations. These include coal peas; diesel; explosives; heavy fuel oil; petrol; natural gas and LPG etc. Direct emissions also arose from landfilled waste at the Implats - Rustenburg facility, where Implats owns and manages the onsite solid waste site. Implats largest contributor of direct emissions from operations in FY 2021 resulted from the combustion of coal peas in industrial processes. Industrial processes accounted for 83% of the group's scope 1 emissions

## C7.5

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

Country/Region	Scope 2, location-based (metric tons CO <sub>2</sub> e)	Scope 2, market-based (metric tons CO <sub>2</sub> e)
South Africa	3,273,509	3,273,509
Zimbabwe	359,590	359,590
Canada	13,385	13,385

## C7.6

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

By facility

## C7.6b

**(C7.6b) Break down your total gross global Scope 2 emissions by business facility.**

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Impala Platinum - Rustenburg	2,873,848	2,873,848
Impala Platinum - Refineries	162,458	162,458
Marula Platinum	237,203	237,203
Zimplats	359,590	359,590
Impala Canada	13,385	13,385

## C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

**(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.**

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Metals and mining production activities	3,646,484	3,646,484	Scope 2 emissions for all of Implats' operations arise from the purchasing of electricity from the South African (SA), Zimbabwean national grids and Canadian regional grid. The emissions are associated with the generation of purchased electricity. Implats' electricity, for their South African operations, is produced from a predominantly coal-fired power stations which feed the South African national energy grid. Thus, this electricity has very high emissions production associated to the generation of each MWh (i.e., the South African grid has a very high grid emission factor). In Zimbabwe hydropower makes up about half of the generation capacity, which does not emit any carbon dioxide during operation. Most of Implats Canada's electricity comes from the Ontario grid which is predominantly hydro power. For all Implats' operations, the only current sources of electricity are

			purchases from the local national/provincial grids, thus the location- and market-based Scope 2 approaches are equal. The Scope 2 emissions in FY2021 account for the majority (81%) of the total emissions
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## C7.9

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

Increased

### C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	292,518	Decreased	2.4	A larger share of renewable energy was consumed by the Implats group in 2021 due to Impala Canada and Zimplats. Implats Canada used 311 261 MWh of renewable electricity. Had this electricity been used at the other operation this would have resulted in a 292 518 tCO2e at an average emission factor of 0.94 tCO2e/MWh (311 261 MWh x 0.94 tCO2e/MWh = 292 518 tCO2e).
Other emissions reduction activities	36,958	Decreased	1	The following energy efficiency projects have contribute to the emissions reductions: South Ring Compressed Air, North Ring Compressed Air, 14# change house, 11# Ventilation fans, 4# Ventilation Favs, 16# Fridge Plant, 4# Fridge Plant, and 1# Bulk Air Cooler Fans. These make up 36 958 tCO2e of the emissions reductions
Divestment				
Acquisitions				
Mergers				

Change in output	639,760	Increased	15	In FY2020 19 575 kilotons of ore was milled ex-mine, while in FY2021, 23 210 kilotons were milled. There was an increase of 3 635 kt for Implats in FY2021. The increased output resulted in a 639 760 tCO <sub>2</sub> e increase in emissions based on the 2020 baseline emission factor (3635000 t x 0.176tCO <sub>2</sub> e/t milled). The emissions value was calculated as the percentage of “change in emissions” of 639 760 tCO <sub>2</sub> e in relation to the total Scope 1+2 values as reported in FY2021 which was 4 139 430 tCO <sub>2</sub> e (492 946 tCO <sub>2</sub> e and 3 646 484 tCO <sub>2</sub> e respectively). Thus, the percentage increase was 15%.
Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified	184,207	Increased	4.5	The total difference (increase) in the combined scope 1 and 2 emissions between 2020 and 2021 was 494 491 tCO <sub>2</sub> e. Based on the identified metrics 15508 tCO <sub>2</sub> e emissions reduction occurred due to identified reasons (-494 491 – (-292 518 – 36958 + 639760) = 184 207) (-ve is a decrease in emissions, +ve in an increase in emissions). This represents 4.5% of the total emissions in 2021 (184 207 tCO <sub>2</sub> e /4 139 430 tCO <sub>2</sub> e = 4.5%).
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 10% but less than or equal to 15%

### 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	1,895,657	1,895,657
Consumption of purchased or acquired electricity		694,730	2,857,669	3,552,399

Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		694,730	4,753,326	5,448,056

## C-MM8.2a

**(C-MM8.2a) Report your organization's energy consumption totals (excluding feedstocks) for metals and mining production activities in MWh.**

	Heating value	Total MWh
Consumption of fuel (excluding feedstocks)	LHV (lower heating value)	1,895,657
Consumption of purchased or acquired electricity		3,552,399
Consumption of self-generated non-fuel renewable energy		0
Total energy consumption		5,448,056

## 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.**

### Sustainable biomass

Heating value

LHV

Total fuel MWh consumed by the organization

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

#### **Other biomass**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

#### **Other renewable fuels (e.g. renewable hydrogen)**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

#### **Coal**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

2,810

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

1,129,561

**Comment**

Use of coal peas for thermal processes in operations

**Oil**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

32,719

**MWh fuel consumed for self-generation of electricity**

4,617

**MWh fuel consumed for self-generation of heat**

28,102

**Comment**

Oil products used in operations

**Gas**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

9,357

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

9,357

**Comment**

Natural gas used for thermal processes in operations

**Other non-renewable fuels (e.g. non-renewable hydrogen)**

---

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**



0

**MWh fuel consumed for self-generation of heat**

0

**Comment**

**Total fuel**

**Heating value**

LHV

**Total fuel MWh consumed by the organization**

1,171,637

**MWh fuel consumed for self-generation of electricity**

4,617

**MWh fuel consumed for self-generation of heat**

1,195,122

**Comment**

## C8.2d

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

	<b>Total Gross generation (MWh)</b>	<b>Generation that is consumed by the organization (MWh)</b>	<b>Gross generation from renewable sources (MWh)</b>	<b>Generation from renewable sources that is consumed by the organization (MWh)</b>
Electricity	1,662	1,662	0	0
Heat	1,215,513	1,215,513	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

## C-MM8.2d

**(C-MM8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed for metals and mining production activities.**

	<b>Total gross generation (MWh) inside metals and mining sector boundary</b>	<b>Generation that is consumed (MWh) inside metals and mining sector boundary</b>
Electricity	1,662	1,662

Heat	1,215,513	1,215,513
Steam	0	0
Cooling	0	0

## C8.2e

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

### Sourcing method

Direct procurement from an off-site grid- connected generator e.g. Power purchase agreement (PPA)

### Energy carrier

Electricity

### Low-carbon technology type

Hydropower (capacity unknown)

### Country/area of low-carbon energy consumption

Zimbabwe

### Tracking instrument used

Contract

### Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

260,686

### Country/area of origin (generation) of the low-carbon energy or energy attribute

Zimbabwe

### Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2,017

### Comment

### Sourcing method

Direct procurement from an off-site grid- connected generator e.g. Power purchase agreement (PPA)

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

**Country/area of low-carbon energy consumption**

Canada

**Tracking instrument used**

Contract

**Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)**

311,260

**Country/area of origin (generation) of the low-carbon energy or energy attribute**

Canada

**Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)**

2,002

**Comment**

## C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

---

**Country/area**

Canada

**Consumption of electricity (MWh)**

311,260

**Consumption of heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

311,260

---

**Country/area**

Zimbabwe

**Consumption of electricity (MWh)**

521,372

**Consumption of heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

521,372

---

**Country/area**

South Africa

**Consumption of electricity (MWh)**

3,031,027

**Consumption of heat, steam, and cooling (MWh)**

0

**Total non-fuel energy consumption (MWh) [Auto-calculated]**

3,031,027

## C9. Additional metrics

### C9.1

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

---

**Description**

Energy usage

**Metric value**

0.16

**Metric numerator**

MWh

**Metric denominator (intensity metric only)**

Tonnes milled

**% change from previous year**

2.4

**Direction of change**

Decreased

**Please explain**

In FY2021, Implats has had a decrease in the amount of electricity purchased per tonne of material milled due to increased production with the relaxation of COVID-19 regulations and the full year inclusion of Impala Canada. In FY2021, the sum of all electricity used across all Implats operations was 3 863 703 MWh and a total of 23 210 kilotons were milled resulting an intensity of 0.166 MWh/tonnes milled. In 2020, 3 339 000 MWh of electricity was used while 19 576 kilotons milled – with an intensity of 0.17 MWh/tonnes milled. This resulted in an intensity decrease of 2.4% from FY2020 to FY2021.

---

**Description**

Energy usage

**Metric value**

0.84

**Metric numerator**

GJ

**Metric denominator (intensity metric only)**

Tons Milled

**% change from previous year**

1

**Direction of change**

Decreased

**Please explain**

In FY2021, Implats has had a decrease in the amount of electricity used per tonne of material milled due to increased production with the relaxation of COVID-19 regulations and the full year inclusion of Impala Canada. In FY2021, the total energy consumption was 19 613GJ across all Implats operations 23 210 kilotons were milled resulting an intensity of 0.845GJ/tonnes milled. In 2020, 16 778GJ of energy was consumed while 19 576 kilotons milled – with an intensity of 0.857GJ/tonnes milled. This resulted in an intensity decrease of just over 1% from FY2020 to FY2021.

## C-MM9.3a

**(C-MM9.3a) Provide details on the commodities relevant to the mining production activities of your organization.**

---

**Output product**

Platinum group metals

**Capacity, metric tons**

222.13

**Production, metric tons**

106.07

**Production, copper-equivalent units (metric tons)**

789,781

**Scope 1 emissions**

495,587

**Scope 2 emissions**

3,646,484

**Scope 2 emissions approach**

Location-based

**Pricing methodology for copper-equivalent figure**

The outputs are net present value, the internal rate of return, annual free cash flow, project payback period and funding requirements. Metal price and exchange rate forecasts are regularly updated by the marketing department of Implats. As at June 2021, a real long-term forecast for 6E basket revenue per 6E ounce sold of R24 445 (US\$1 211) was used. Specific real long-term forecasts in today's money include: – Platinum = 1087 (US\$/oz) – Palladium = 1 194 (US\$/oz) – Rhodium = 8624 (US\$/oz) – Ruthenium = 294 (US\$/oz) – Iridium = 3012 (US\$/oz) – Gold = 1468 (US\$/oz) – Nickel = 16318 (US\$/t) – Copper = 6 952 (US\$/t) – Exchange rate = R 14.51/USD

**Comment**

For FY 2021, Implats' mining-related emissions were calculated by using the Scope 1 (495 587 tCO<sub>2</sub>e) and Scope 2 (3 646 484 tCO<sub>2</sub>e) emissions for mining operations only. The production and capacity values here are based on the tonnes of ore milled in FY2021. The PGM equivalent of this value was calculated based on the average 6E grade of Implats, Marula, Zimplats and Implats Canada. Capacity of tonnes milled was estimated from projected life of mine Pt production rate to give a total capacity of 23,210 kilotonnes milled. Similarly, the tonnes milled were converted to PGM equivalent through the 6E ore grade.

## C-MM9.3b

**(C-MM9.3b) Provide details on the commodities relevant to the metals production activities of your organization.**

---

**Output product**

Platinum group metals

**Capacity (metric tons)**

233.89

**Production (metric tons)**

107.74

**Annual production in copper-equivalent units (thousand tons)**

614.73

**Scope 1 emissions (metric tons CO<sub>2</sub>e)**

191,909

**Scope 2 emissions (metric tons CO<sub>2</sub>e)**

162,458

**Scope 2 emissions approach**

Location-based

**Pricing methodology for-copper equivalent figure**

The outputs are net present value, the internal rate of return, annual free cash flow, project payback period and funding requirements. Metal price and exchange rate forecasts are regularly updated by the marketing department of Implats. As at June 2021, a real long-term forecast for 6E basket revenue per 6E ounce sold of R24 445 (US\$1 211) was used. Specific real long-term forecasts in today's money include: – Platinum = 1087 (US\$/oz) – Palladium = 1 194 (US\$/oz) – Rhodium = 8624 (US\$/oz) – Ruthenium = 294 (US\$/oz) – Iridium = 3012 (US\$/oz) – Gold = 1468 (US\$/oz) – Nickel = 16318 (US\$/t) – Copper = 6 952 (US\$/t) – Exchange rate = R 14.51/USD

**Comment**

The production value was calculated based on the volumes of PGMs produced at Implats' Springs Refinery. This was then calculated as tonnes of Cu equivalent based on the commodity prices in the Mineral Resource and Mineral Reserve Statement. All Implats' other operations provide PGM concentrates which are still required to be refined prior to end use, reported in previous question (C-M9.3a). Capacity of the refinery is based on the environmental approval

## C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	Implats has over several years worked with government and various academic institutions on developing fuel cell technologies which utilised PGMs as alternative energy sources. Fuel cell technologies provide clean electricity for underground use, to provide ventilation. In addition, the research extended to commercial development of prototype fuel cell driven LHD and bus technologies, which are currently being tested at Implats' Rustenburg mine. These have been used in Forklifts as a prototype since October 2015.

### C-MM9.6a

(C-MM9.6a) Provide details of your organization's investments in low-carbon R&D for metals and mining production activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Other, please specify Low carbon energy alternatives using platinum as a key base material	Small scale commercial deployment	≤20%	301,645	Implats has invested around R25 million in targets fuel cell development in South Africa, in collaboration with government and academic institutions to help promote local technology development, as well as develop local skills and fuel cell manufacturing and deployment. However, the only expenditure in FY2021 was for piloting (i.e., piping infrastructure for a demonstration stationary fuel cell unit) where R 301,645-00 was spent.



				<p>There is a key focus on market research and development to predict, sustain and grow demand for the primary products of Implats. This includes leveraging and integrating a relationship with AP Ventures in relation to the Group’s hydrogen strategy, and Implats’ partnership with BASF on a tri-metal catalyst. The Strategy and Investment Committee recommended the investment of more than R1 billion in AP Ventures Fund to get access to an innovation hub that may lead to new markets for PGMs</p>
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## C10. Verification

### C10.1

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

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

### C10.1a

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

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

 esg-report-2021.pdf

**Page/ section reference**

page 138

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

## C10.1b

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

---

**Scope 2 approach**

Scope 2 location-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

 esg-report-2021.pdf

**Page/ section reference**

Page 138

**Relevant standard**

ISAE 3410

**Proportion of reported emissions verified (%)**

100

## C10.2

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

Yes

### C10.2a

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

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C8. Energy	Energy consumption	ISAE 3000 (Revised), and ISAE 3410 and SANS 50 010 - measurement and verification of energy savings and energy efficiency	Implats had this data verified by Nexia SAB&T, giving a reasonable assurance engagement in accordance with ISAE 3000 (Revised), and ISAE 3410, which involves performing procedures to obtain evidence about the measurement of the selected sustainability performance information and related disclosures in the report.

## 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.**

Canada federal fuel charge

Canada federal Output Based Pricing System (OBPS) - ETS

South Africa carbon tax

#### C11.1b

**(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.**

Canada federal OBPS - ETS

**% of Scope 1 emissions covered by the ETS**

100

**% of Scope 2 emissions covered by the ETS**

100

**Period start date**

July 1, 2020

**Period end date**

June 30, 2021

**Allowances allocated**

0

**Allowances purchased**

0

**Verified Scope 1 emissions in metric tons CO<sub>2</sub>e**

54,602

**Verified Scope 2 emissions in metric tons CO<sub>2</sub>e**

13,385

**Details of ownership**

Facilities we own and operate

**Comment**

## C11.1c

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

**Canada federal fuel charge**

---

**Period start date**

July 1, 2020

**Period end date**

June 30, 2021

**% of total Scope 1 emissions covered by tax**

100

**Total cost of tax paid**

2,479,138.2

**Comment**

The amount paid during the financial year was CAD\$214,830.00 and the exchange rate of 1 CAD\$ = R11.54 was used. This exchange rate is published on page 18 of the Annual Financial statement FY21

### South Africa carbon tax

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**Period start date**

July 1, 2020

**Period end date**

June 30, 2021

**% of total Scope 1 emissions covered by tax**

100

**Total cost of tax paid**

15,404,794.44

**Comment**

The design of the carbon tax provides for significant tax-free emissions allowances ranging from 60% to 95% for the first phase. This means that in a worst-case scenario, only 40% of Implats' direct emission are taxed during the first phase of the carbon tax (1 June 2019 to 31 December 2021).

## C11.1d

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

The Carbon Tax Act was officially promulgated in South Africa (SA) on 1 June 2019, and thus Implats has been complying with the provisions of the Act tax since this date. Over the past years, Implats was aware of the pending carbon tax introduction and thus Implats noted it as a key incoming risk. The minimum reporting threshold for reporting greenhouse emissions to the Department of Forestry Fisheries and Environment (DFFE) is 10 MW (thermal energy). Companies that produce direct emissions above this threshold are liable to pay carbon tax. In Implats case, Implats Limited produces direct emissions above 10 MW (thermal energy) whilst Marula Platinum does not which implies that Implats Limited (Rustenburg and Refineries operations) will be the facilities that will be liable to pay direct carbon tax. The calculated tax for FY21 was 15,404,794.44.

Carbon tax is not yet legislated in Zimbabwe.

In Canada, the federal carbon tax scheme has been amended. Impala Canada is not a major producer of CO<sub>2</sub> emissions. While increases have been applied to the Greenhouse Gas Pollution Pricing Act, the absolute value of the financial impact in five to seven years is not considered to be material. The tax paid in FY2021 is CAN\$ 214,830.

## C11.2

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

No

## C11.3

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

Yes

## C11.3a

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

---

### **Objective for implementing an internal carbon price**

Stress test investments

### **GHG Scope**

Scope 1

### **Application**

During FY21, Implats had placed an internal price on carbon, to adequately prepare for the years carbon tax liability. This internal price on carbon assisted Implats in evaluating the feasibility of projects related to energy efficiency and emissions mitigation. Implats made use of the price stipulated in the South African Carbon Tax Act (which was promulgated in May 2019). Implats was aware of their liability to pay direct carbon tax based on its coal, natural gas, HFO and process emissions. For FY2021, the rate of R 134 per tonne CO<sub>2</sub>e applies with a 60% tax free threshold, with an additional carbon offsetting allowance for mining. Fuel cell projects at Implats Rustenburg and the Springs refinery are used to reduce Scope 1 emissions and improve local and underground air quality. An internal price on carbon was used to assess the benefit of these technologies

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

134

### **Variance of price(s) used**

Uniform pricing is used by Implats for South Africa based on the introduction of the Carbon Tax Act of 2019.

### **Type of internal carbon price**

Shadow price

### Impact & implication

Through adequate awareness and planning, Implats anticipated their carbon tax liability, prior to the promulgation of the South African Carbon Tax Act. In preparation of the carbon tax, Implats uses their internal carbon price to: 1) remain aware of their pending liability associated with their direct activities and plan for the increase in operating costs, 2) become aware of possible pass-through costs that could be incurred from diesel, petrol and electricity purchases, as well as from other suppliers. From the onset of the carbon tax in 2019, Implats utilised their internal carbon pricing scheme which mirrored that of the Carbon Tax Act. Thus, their internal carbon pricing was used as a means of managing their risks and opportunities associated with the Carbon Tax Act. In light of their carbon pricing scheme, Implats has, over the past 8 years, invested in energy conservation initiatives, including energy efficient underground lighting, compressed air systems, power correction factor equipment, diesel performance management technologies and solar projects. The fuel cell project at the Implats Refinery in Springs is an example of where a carbon price is used in the calculation of the financial viability of the project. Initiatives which are under investigation and form part of a larger fuel cell strategy include an 8MW (possibly increasing to between 22 and 30MW) fuel cell installation that aims to take the refineries off the grid, switching all diesel forklifts and load haul dumpers to fuel-cell units. These projects will not only reduce GHG emissions but will also improve air quality, reduce noise and lower waste heat underground.

## C12. Engagement

### C12.1

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

Yes, our customers/clients

Yes, other partners in the value chain

### C12.1b

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

---

#### Type of engagement & Details of engagement

Collaboration & innovation

Run a campaign to encourage innovation to reduce climate change impacts

#### % of customers by number

100

#### % 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**

In FY2021, Implats placed focus on attracting and retaining PGM customers through innovation and providing good quality products. We strive to ensure a competitive advantage by differentiating our product suite in the market based on product quality, reliability of supply, and a willingness to adapt to changing customer needs. This group of customers were selected for three key reasons. These are: (1) Majority of the customers being engaged in these discussions constitute 100% of Implats' customer group in terms of tonnes of products purchased. These customers are engaged with to discuss the sustainable and reliable delivery of products, tender process and requirements, customer feedback and reputational surveys (including climate-related efforts). (2) Climate change impacts and the changing market demands are resulting in changes in industrial practices and market preferences. Engagements with some of Implats' customers assists Implats in understanding the trend forecasts and market vulnerabilities which will affect the PGM markets and in turn, and overall profitability/feasibility of Implats' operations. The scope of these engagements discuss the future trends these customers pre-empt, and the supply and demand associated with the PGM market. (3) Implats' investment in fuel cell technology research has resulted in a need to engage the possible customers of these technologies. There is an emerging market in the field of fuel cells for uses related to energy storage and catalysis production, particularly in the industrial field. These possible customers are being engaged to understand the needs of fuel cells technology and the possible demand for the technology and the associated market related prices to be considered competitive. All three of the abovementioned reasons form part of why Implats embarks on extensive engagements with their key customer groups

**Impact of engagement, including measures of success**

The results of our latest biennial customer satisfaction survey reflect an encouraging positive overall outcome, in line with the high-performance results of the 2015 and 2017 surveys, indicating an ongoing strong partnership between Implats and its customers. Implats defines a measure of success for their customer engagements to be realised in one of two situations: (1) The demand for their key commodities remains strong. (2) The technologies developed/ invested in by Implats' research (i.e. fuel cell technology developments) becomes widely accessible and feasible for general industry uptake. These climate-related engagements would have the following impacts on Implats' strategy, namely: (1) A high demand for PGMs would imply that all climate-related engagements on platinum-use in internal combustion engines and the increased interest in palladium and rhodium in the developmental shift towards a low-carbon economy are recognised. Thereafter, opportunities and risks should be realised. Implats utilises these customer trends, based on climate-related changes, to forecast their future business model. (2) Implats' investment in fuel cell technology is closely monitored and our customer engagement has established there is a demand to develop a special economic zone (SEZ) for fuel cell development. In response to the demand for the development of the fuel cell sector, Implats donated SEZ 16 hectares of land adjacent to the refineries in the Springs region for the development of the SEZ. We intend to use the



SEZ platform to build on our current partnership initiatives, develop skills capacity and leverage our infrastructure for fuel cell manufacturing and deployment. The project in partnership with various government departments is a longer-term strategic investment to facilitate platinum beneficiation.

## C12.1d

### **(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.**

Other partners with whom Implats' engages on climate-related risks and their climate strategy are employees and employee unions, government, shareholders and investors, local communities, and the media. Implats engages these stakeholders because the group recognises that all stakeholders are important in achieving a uniform approach to climate change resilience and mitigating climate-related risks. Since each of these stakeholders has a material bearing on the success of the business, Implats prioritises these stakeholders.

Methods of engagement:

Implats employees and unions are engaged with through direct and internal communication, workplace forums, forum meetings, as well as through general department meetings. Meetings with officials from local, provincial and national government, compliance audits, Minerals Council South Africa Parliamentary Portfolio committee, Mining Industry Growth, Development and Employment Task Team (MIGDETT) and the Mining Phakisa are channels through which government is engaged. Shareholders and investors are engaged with through road shows, results presentations, investor conferences and one-on-one meetings. Implats communicates and gets involved with local communities through community leadership engagement meetings, community trust meetings and one-on-one meetings. The media is engaged with through social media platforms. Other channels of engagement include the World Platinum Investment Council, Industry Associations such as the Chamber of Mines, the National Business Initiative, the International Platinum Association and the North West Air Pollution Control Forum.

Case study:

We employ financial capital to contribute to the development of platinum demand by supporting the Platinum Guild International (PGI), World Platinum Investment Council (WPIC), Platinum Jewellery Development Association (PJDA) and International Platinum Association (IPA) through marketing spend and the development of intellectual capital needed to grow new markets and formulate a way forward for the platinum industry. Implats held strategic review meetings for both the World Platinum Investment Council (WPIC) and the Platinum Jewellery Development Association (PJDA, holding Company for PGI). The meetings were to identify gaps in the current strategies and to formulate a way forward. Implats is also a signatory to the principles of the United Nations Global Compact (UNGC) and the ESG report serves as our advanced level UNGC Communication on Progress (CoP), outlining our support for its broader development objectives and our work on implementing the principles.

Furthermore, energy supply, rising energy prices and climate change impacts significantly impact Implats' direct operations, as well as the operations of their value chain partners. Implats thus encourages ongoing engagements with government and government entities to maintain awareness and plan accordingly. The South African National Electricity Utility, Eskom,

experiences major uncertainties and operational strains in light of climate change impacts causing increased water stress and increasing ambient temperatures which affects the efficiency of the coal-fired power stations and in turn, affects Eskom's ability to provide stable electricity to Implats' operations.

Energy risks faced by Eskom, conjunction with the recent introduction of the Carbon Tax Act which will impose price hikes on electricity usage, remain material risks for Implats' operations in South Africa. Implats' engagements with government and policy developers through organisations such as Minerals Council South Africa assists Implats in preparing to combat these risks posed. Through Implats' engagements with the Minerals Council of South Africa, Implats is able to continually monitor the impacts of carbon tax pass-through costs from Eskom. At this point, the pass-through carbon tax costs anticipated to be charged (from 2023 onward) has been estimated to be between R128 million and R341 million. Implats will continue to support this process during FY2021 through our participation at the Minerals Council of South Africa.

## C12.2

### **(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?**

No, but we plan to introduce climate-related requirements within the next two years

## C12.3

### **(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?**

Row 1

#### **Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate**

Yes, we engage directly with policy makers

Yes, we engage indirectly through trade associations

Yes, we engage indirectly by funding other organizations whose activities may influence policy, law, or regulation that may significantly impact the climate

#### **Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?**

Yes

#### **Attach commitment or position statement(s)**

In line with the Paris Agreement's commitments and our sustainability strategy, we have developed a roadmap to reach carbon neutrality at our operations by 2050. The strategy focuses primarily on reducing our energy intensity and changing the energy mix to lower-carbon options (ESG report p40).

**Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy**

Implats, through the Minerals Council South Africa (MCSA), is participating in the ICMM led initiative to revise the current legislation guiding the design and management of tailings storage facilities (TSF), globally. Implats fully supports in the ICMM initiative, which proposed new guidelines for the design, management and risk identification processed regarding TSF. Increasing TSF resilience through improved policies has led Implats to invest in the construction of a new TSF at their Marula mine, which will align with the proposed legislation and comply with international best practice. Our approach includes building internal agility and resilience to climate change, understanding and responding to risks and opportunities related to the carbon lifecycle of our products, and developing and implementing collaborative solutions with our stakeholders, which includes being transparent and constructive in interactions with stakeholders

## C12.3a

**(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?**

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**Focus of policy, law, or regulation that may impact the climate**

Carbon tax

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

Carbon Tax Act

**Policy, law, or regulation geographic coverage**

National

**Country/region the policy, law, or regulation applies to**

South Africa

**Your organization's position on the policy, law, or regulation**

Neutral

**Description of engagement with policy makers**

Implats engages with the Chemical and Allied Industries Association (CAIA) in South Africa (SA) regarding the Carbon Tax Act and related greenhouse gas reporting regulations. Implats Refineries belongs to CAIA, who manages the Responsible Care for SA. Implats engages with CAIA to remain abreast of all carbon tax and mandatory reporting information which may impact on their operations and sustainability. CAIA may engage directly with policy makers regarding climate change policies, or as part of Business Unity South Africa (BUSA). CAIA fees are dependent on the Refineries

turnover, which is normally 0.01% of the turnover and fees range between R40,000-00 to R55,000-00 per year.

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

**Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?**

No, we have not evaluated

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**Focus of policy, law, or regulation that may impact the climate**

Mandatory climate-related reporting

**Specify the policy, law, or regulation on which your organization is engaging with policy makers**

GHG Reporting Regulations and Climate Change Bill

**Policy, law, or regulation geographic coverage**

National

**Country/region the policy, law, or regulation applies to**

South Africa

**Your organization's position on the policy, law, or regulation**

Neutral

**Description of engagement with policy makers**

Implats engages with government on matters related to climate change legislation (such as the implementation of the Climate Change Bill and the GHG Reporting Regulations). Implats is able to engage with government on matters such as carbon budgets and how the methodologies related to the application of the carbon budgeting system should be applied.

**Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation**

**Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?**

No, we have not evaluated

## C12.3b

**(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.**

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### Trade association

Other, please specify  
Minerals Council

### Is your organization's position on climate change consistent with theirs?

Consistent

### Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

### State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

The Minerals Council South Africa (MCSA) recognizes that climate change is caused by anthropogenic factors and that significant action is required at global and local levels to combat the negative impact of climate change. It supports South Africa's commitment to lowering its GHG emissions through the National Climate Change Response White Paper and the National Development Plan. The MCSA provides strategic support and advisory input to its members in the field of climate change. It facilitates interaction among mining companies to examine policy issues and other matters of mutual concern to define desirable industry level inputs and outcomes.

### Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

1,400,000

### Describe the aim of your organization's funding

Implats is a member of the Minerals Council South Africa (MSCA) and contributes to MCSA industry-related meetings (at CEO and working group level). Participation in the MCSA is used to ensure that the platinum industry is adequately represented, and to maintain legislative- and trade-related relevance in light of policy development and industry awareness.

### Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

No, we have not evaluated

**Trade association**

Other, please specify

North West Air Pollution Control Forum (NAPCOF)

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

The North West Air Pollution Control Forum (NAPCOF) has developed across industries in the NWP; with members/participants from all scheduled processes in the province – ferrochrome industry, cement industry, vanadium industry, fertilizer industry and pesticide industry and others. The aim of this forum is to share experience and technologies, always striving towards continuous improvement and cleaner air for everyone. This includes addressing climate change and encouraging climate change adaptation actions to increase the resilience of the communities within the

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

8,598.57

**Describe the aim of your organization's funding**

Implats was part of the executive committee for NAPCOF and participated in the meetings. Implats participates in the forum to ensure the interests of the company and industry are heard by the other North West Air Pollution Control Forum members. As a member of NAPCOF, Implats engages with government on matters related to climate change legislation (such as the implementing Climate Change Bill). Through the platform provided by the NAPCOF, Implats is able to engage with government on matters such as carbon budgets and how the methodologies related to the application of the carbon budgeting system should be applied.

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

No, we have not evaluated

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**Trade association**

Other, please specify

Energy Intensive User Group

**Is your organization's position on climate change consistent with theirs?**

Consistent

**Has your organization influenced, or is your organization attempting to influence their position?**

We publicly promote their current position

**State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)**

The Energy Intensive User Group (EIUG) is a consumer-led organization that works with government and other stakeholders to ensure South Africa's energy intensive industries (including Implats) are supplied with reliable electricity, at an acceptable quality and at competitive prices. The Energy Intensive User Group (EIUG) of Southern Africa and its associated organisation, the Industry Task Team on Climate Change (ITTCC) focuses on the areas of environmental management, climate change and energy.

**Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)**

120,907,000

**Describe the aim of your organization's funding**

Implats engages with EIUG on numerous climate change related issues, including energy efficiency and renewable energy alternatives.

**Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?**

No, we have not evaluated

## C12.3c

**(C12.3c) Provide details of the funding you provided to other organizations in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.**

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**Type of organization**

Trust or foundation

**State the organization to which you provided funding**

Impala Pollution Control, Rehabilitation and Closure Trust Fund

**Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)**

305,000,000

**Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate**

The funds in the Impala Pollution Control, Rehabilitation and Closure Trust Fund are available to the Department of Mineral Resources to satisfy the requirements of the

National Environmental Management Act with respect to environmental rehabilitation.  
The rehabilitation done mainly consists of concurrent rehabilitation of shaft infrastructure  
at Impala and Zimplats open cast rehabilitation

**Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?**

Yes, we have evaluated, and it is not aligned

## 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).**

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**Publication**

In mainstream reports

**Status**

Complete

**Attach the document**

 esg-report-2021.pdf

**Page/Section reference**

Pages 19 and 39 to 48

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets

**Comment**

Implats outlines the highlights, challenges and focus areas related to climate change and energy management in its ESG Report. The ESG Report also sets out Implats' emission figures as well as its strategy to contribute to a low carbon economy through the strategic application and contribution to fuel cell technologies



## C15. Biodiversity

### C15.1

**(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?**

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	Responsibility for financial provisioning lies with the Group CFO and our HSE committee oversees our approach and performance in managing mine closure, rehabilitation, and biodiversity impacts. Implats determines biodiversity impacts of its mining operations through its environmental authorisation processes. Implats manages these according to site-specific biodiversity management plans and standards.

### C15.2

**(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?**

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species Other, please specify Protect, restore and promote sustainable use of terrestrial ecosystems, • Promoting Biodiversity through environmental responsible practices	SDG

### C15.3

**(C15.3) Does your organization assess the impact of its value chain on biodiversity?**

Does your organization assess the impact of its value chain on biodiversity?
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Row 1	Yes, we assess impacts on biodiversity in both our upstream and downstream value chain
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## C15.4

**(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?**

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity-related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Species management Education & awareness Law & policy


## C15.5


**(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?**

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	State and benefit indicators Pressure indicators Response indicators

## C15.6

**(C15.6) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In mainstream financial reports	Content of biodiversity-related policies or commitments Governance Impacts on biodiversity Risks and opportunities Biodiversity strategy	Pages 56-59  1

 1esg-report-2021.pdf

## C16. 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.**

Implats acquired Impala Canada during the 2020 reporting period. Consequently, that year was the first year in which Impala Canada was reported on. Impala Canada data was only for the last 6 months of the financial year 2020.

In this submission Impala Canada's reported values are for a full year FY2021. eported FY2020.

### C16.1

**(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

	Job title	Corresponding job category
Row 1	CEO: Implats	Chief Executive Officer (CEO)

## Submit your response

**In which language are you submitting your response?**

English

**Please confirm how your response should be handled by CDP**

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

**Please confirm below**

I have read and accept the applicable Terms