

# Welcome to your CDP Water Security Questionnaire 2022

### **W0.** Introduction

### W<sub>0.1</sub>

#### (W0.1) Give a general description of and introduction to your organization.

The core business of Impala Platinum Holdings Limited (Implats) is the mining, refining and marketing of platinum group metals (PGMs). Implats is one of the world's foremost producers of platinum group metals. Implats is currently structured around six main operations with a total of 20 underground shafts, as well as the Impala Refining Services, a toll-refining business. Implats holds mining interests in both the Bushveld Complex in South Africa and the Great Dyke in Zimbabwe, which are the two most significant PGM-bearing orebodies in the world, and the Canadian Shield (Lac des Iles intrusive Complex in Ontario, Canada), an igneous domain for PGMs.

During the 2021 reporting period, Implats produced 1.5 million oz of platinum and 3.27 million oz of PGMs. Implats markets and sells products in South Africa, Japan, China, India, the USA and Europe. The metals produced by Implats are the key to making many industrial, medical, and electronic items, as well as contributing to a cleaner, greener world. The Group has a workforce of 57,718 people across its operations in South Africa, Zimbabwe and Canada.

During the 2021 reporting period, the group reported on four mining operations, as well as the Refinery, located in South Africa, Zimbabwe and Canada. Implats acquired Impala Canada during the 2020 reporting period. Therefore, this is the second year in which Impala Canada will be reported on. The South African operations include Impala Rustenburg and Marula, as well as the Impala Refining Services. The mining operations based in Zimbabwe include Zimplats, while the mining operations in Canada include Impala Canada. The Impala Refining Services (IRS) is based in Springs in Gauteng, South Africa. The IRS processes the concentrate and matte produced from the various operations, as well as the material purchased from third party companies. Impala Platinum's excess smelting and refining capacity is used to refine on behalf of other companies.

The structure of Implats' operating framework allows for each of its operations to establish and maintain close relationships with our stakeholders, while operating within a Group-wide approach to managing economic, social and environmental aspects of sustainability. The King IV Code on Corporate Governance guides the principles by which the Group's strategy is



implemented. Implats has a group-wide water strategy which focuses on water consumption and water management initiatives. It also proposes a framework for operation-specific water conservation strategies, that is in-line with the Group's commitment to reduce its levels of potable water usage and increase water recycling on site. In addition, Impala Platinum works closely with a broad range of stakeholders to ensure security of supply for its operations and the surrounding communities.

Responsible stewardship of natural resources, mitigating the environmental impact of Implats' activities and going beyond compliance of regulatory standards are key Group policies. All of Implats' operations, with the exception of Impala Canada, are certified against ISO 14001:2015 environmental standards. The Implats environmental policy outlines the Group's commitment to effective management of resources, reduced impacts on the environment and host communities, as well as compliance to legal requirements.

Water remains a key environmental concern given the water-scarce operating environments in South Africa and Zimbabwe, which has been exacerbated by droughts. Scarcity of water impacts the Group's ability to operate effectively and consistently. Growing regulatory and societal pressures, increasing demands for limited natural resources and the changing of costs of energy and water all highlight the business imperative of responsible environmental management. Impala Platinum has participated in the CDP since 2007.

#### W-MM0.1a

# (W-MM0.1a) Which activities in the metals and mining sector does your organization engage in?

Activity	Details of activity
Mining	Copper
	Gold
	Platinum group metals
	Nickel
	Other non-ferrous metal mining
Processing	Copper
	Gold
	Platinum group metals
	Nickel
	Other non-ferrous materials processing, please specify
	Cobalt

#### W<sub>0.2</sub>

(W0.2) State the start and end date of the year for which you are reporting data.

Start date	End date
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Reporting year	July 1, 2020	June 30, 2021	
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#### W<sub>0.3</sub>

(W0.3) Select the countries/areas in which you operate.

Canada

South Africa

Zimbabwe

☐ Implats concluded the acquisition of Impala Canada in December 2019

#### W<sub>0.4</sub>

(W0.4) Select the currency used for all financial information disclosed throughout your response.

ZAR

### **W0.5**

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Companies, entities or groups over which financial control is exercised

#### **W0.6**

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

Yes

#### W0.6a

#### (W0.6a) Please report the exclusions.

Exclusion	Please explain
Two Rivers Operation	Reporting is only undertaken for operations over which Impala Platinum has financial control. Two Rivers is a joint venture between African Rainbow Minerals (54%) and Implats (46%). As a result, Implats does not exercise financial control over the Two Rivers Operation and consequently it is excluded from the reporting boundary.
Mimosa	Although Mimosa is jointly held by Implats (50%) and Sibanye-Stillwater (50%), it no longer falls under the financial control of Implats, thus it is listed as an exclusion from the applicable reporting boundary.

#### W0.7

(W0.7) 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

# W1. Current state

# W1.1

# (W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Important	Primary use:  -Direct operations: freshwater is crucial for the optimal and successful functioning of all Implats' operations. Freshwater is vital for both domestic and operational purposes within the mining industry. The primary use of freshwater is for the processing of mined ore, aiding in the transport of ore slurries, underground cooling and dust suppression on site. The utilization of a hydrometallurgical process during platinum processing results in the consumption of vast quantities of freshwater. The fresh water made available for Implats' employees and the surrounding communities for health and sanitation purposes must comply with strict quality standards at all times. In this context, Implats considers sufficient amounts of good quality freshwater vital for continued operation, for the integrity of production, as well as for the health and safety of employees.  -Indirect operations: several value chain partners supply essential products to Implats. Freshwater is primarily used to manufacture and produce a broad range of materials required for refinery operations within the mining industry, including cement; steel; concrete; catalysts; additives and leaching agents. In addition, freshwater is used in the production of electricity in South Africa.
			-Freshwater is vital in direct operations during



			nearly every stage of an operational mine's life. It is also crucial for Implats to manage water usage and disposal responsibly to uphold the social and environmental viability of host communities, which are vitally important for the continued viability of Implats' business.  -Freshwater is important for the continuous supply of essential products to Implats, such as electricity, cement and steel.  Future water dependency: the need for freshwater for direct and indirect use will not differ in the future as it remains vital for production on site and important for production throughout the supply and value chain.
Sufficient amounts of recycled, brackish and/or produced water available for use	Vital	Important	Primary use:  - Direct operations: recycled water is vitally important for a number of mining operations and procedures. The primary use of recycled water relates to the processing of mined ore and to the transport of ore slurries at Implats' operations.  - Indirect operations: Although value chain partners and host communities are highly reliant on freshwater, they are not as reliant on brackish, produced or recycled water. Consequently, recycled/or produced water is important, but not vital, for indirect operations.
			Importance rating for direct and indirect operations:  - Recycled water is classified as vital for Implats' operations as platinum mining and refining require vast quantities of water, which is obliged to comply with strict water quality standards.  - Additionally, recycled water suppliers play an important role in South Africa due to the country facing water scarcity. Consequently, Implats' operations are expanding and improving recycling procedures and infrastructure to ensure production continues during water shortages. Recycled water is important to Implats to reduce the amount of freshwater used where possible.  Future water dependency: for the supply and use of recycled/or produced water is expected to remain vital in direct operations and increase in importance in indirect operations, as Implats



operates in water stressed areas and there is an
increasing need to source alternative sources of
water. Water stress is likely to increase as a result
of climate change. Consequently, Implats is
actively working on water efficiency methods to
lower our water consumption. Simultaneously,
Implats intends to increase overall production in
the future which will, thus, increase our water use.
The trade-off between increased production and
increased water efficiency will result in water use
remaining approximately unchanged in the future,
unless drought resumes or worsens which could
decrease supply.
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# W1.2

# (W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	Scope: all operations owned by Implats (100%) are required to measure, monitor and report the total volume of water withdrawn. The term "operations" applies to all Implats' mines as well as the Refinery. Water aspects that are monitored include fresh surface water, renewable groundwater, municipal water and municipal wastewater.  Reason for monitoring: to ensure that Implats complies with both the group's water-use licences and water management targets set for the FY2021 reporting period.  Frequency: Volumes are continuously monitored, with surface and groundwater monitoring at each operation and annual water risk assessments conducted. Implats conducts an annual renewal of our water use licences, rehabilitation strategies and implementation plans, as well as our integrated water and waste management plans.
		Method for measurement: use of meters in a monitoring network. Measurements for water



		sources are aggregated on a regular basis to track performance throughout the year.
Water withdrawals – volumes by source	100%	Scope of monitoring: Implats measures and monitors all withdrawals (100%) per abstraction source. The term "operations" applies to all Implats' mines as well as the Refinery. Sources consist of fresh surface water, renewable groundwater, municipal water and municipal wastewater.
		Reason for monitoring: to ensure compliance with water-use licences. Implats makes use of the measured and monitored data to track progress on water management and withdrawal targets per operation.
		Volumes are continuously monitored, with surface and groundwater monitoring at each operation and annual water risk assessments conducted accordingly. Implats conducts an annual renewal of their water use licences, Rehabilitation Strategies and Implementation Plans, as well as their Integrated Water and Waste Management Plans.
		Methods for measurement: include the use of meters in a monitoring network.  Measurements for these water sources are aggregated on a regular basis to track performance throughout the year.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	Not relevant	Entrained water is not relevant: Raw materials mined by Implats' mining operations do not contain water. The term "operations" applies to all Impala Platinum's mines as well as the Refinery. Water that enters Impala Platinum's boundary is fissure water, which is as a result of mining into water bodies. Groundwater monitoring networks are managed at each operation.
		Expected relevance in the future: entrained water is not expected to be measured and monitored in the future, as Implats' mining operations do not entail the production of



		water in the raw materials that are mined.
Water withdrawals quality	100%	Scope: Implats measures and monitors the water quality of all withdrawals (100% of operations). The term "operations" applies to all Implats' mines as well as the Refinery. Sources consist of fresh surface water, renewable groundwater, municipal water and municipal wastewater.  Reason for monitoring: to ensure that the withdrawn water complies with the quality required for operational use.  Frequency: volumes are continuously monitored, with surface and groundwater
		monitoring at each operation and annual water risk assessments conducted accordingly. Implats conducts an annual renewal of our water use licences, rehabilitation strategies and implementation plans, as well as our integrated water and waste management plans.
		Method for measurement: Implats' operations make use of monitoring methods such as quality standards to measure and monitor the quality of withdrawn water. Measurements for the water sources are aggregated on a regular basis to track performance throughout the year.
Water discharges – total volumes	100%	Scope of monitoring: Implats measures and monitors the total discharge volumes across all operations (100%) that discharge water. Currently, Canada and Zimplats operations have water discharges, and these discharge volumes are measured and monitored. The term "operations" applies to all Implats' mines as well as the Refinery.
		Monitoring of discharges are required to ensure that each operation's discharged water falls within the required qualitative and quantitative parameters stipulated in its water use licence.



		Volumes are monitored continuously, with surface and groundwater monitoring at each operation and annual water risk assessments conducted. Implats conducts an annual renewal of our water use licences, rehabilitation strategies and implementation plans, as well as our integrated water and waste management plans.  Method: use of meters in a monitoring network. Measurements for these water discharges are aggregated on a regular basis to track performance throughout the year.
Water discharges – volumes by destination	100%	Implats requires all of its operations (100%) that discharge water to measure and monitor the water volume discharged to each discharge destination. Currently, Canada and Zimplats operations have water discharges. Discharges are made to fresh surface water sources. The term "operations" applies to all Implats' mines as well as the Refinery. Reason: ensure that sufficient treatment of the discharged water is maintained and that volumes discharged to each source do not exceed the licensing boundaries and regulations.  Volumes are monitored continuously, with surface and groundwater monitoring at each operation and annual water risk assessments conducted. Implats conducts an annual renewal of our water use licences, rehabilitation strategies and implementation plans, as well as our integrated water and waste management plans.  Method: include the use of meters in a monitoring network. Measurements for these water discharges are aggregated on a regular basis to track performance all year.
Water discharges – volumes by treatment method	100%	Scope of monitoring: Implats requires all of its operations (100%) that discharge water to measure and monitor the water volume discharged by treatment method. Currently, Canada and Zimplats operations has water



		discharges. The term "operations" applies to all Implats' mines as well as the Refinery.  Reason for monitoring: to ensure compliance with Implats' water-use licence. As water is used in multiple processes, the quality of the water post-process differs.  Volumes are measured continuously, with surface and groundwater monitoring at each operation and annual water risk assessments conducted accordingly. Implats conducts an annual renewal of our water use licences, rehabilitation strategies and implementation plans, as well as our integrated water and waste management plans.  Method for measurement: include the use of meters in a monitoring network.  Measurements for these water discharges are aggregated on a regular basis to track performance throughout the year.
Water discharge quality  – by standard effluent parameters	100%	Implats requires all operations (100%) that discharge water to monitor the water quality – by standard effluent parameters. Currently, Canada and Zimplats have water discharges. The term "operations" applies to all Implats' mines as well as the Refinery.
		Reason: to ensure compliance with Implats' water-use licence. If water is discharged at one of Implats' closed water loop operations, the effluent parameters of the discharged water is immediately measured to ensure compliance with environmental regulations. Implats conducts an annual renewal of our water use licences. Monitoring occurs as and when required.
		Method: The water discharge quality is regulated by the Environmental Management (Effluent and solid waste disposal) regulations. Measurements for discharges are aggregated on a regular basis to track



		performance through the year. Implats' operations also make use of monitoring methods such as quality standards to monitor the effluent parameters of discharged water.
Water discharge quality  – temperature	Not relevant	Why water discharge quality- temperature is not relevant: measuring and monitoring discharge temperature is not relevant to Implats' operations as no hot water is discharged at the Zimplats and Canada sites.  Expected relevance in the future: there is no future plan to measure water discharge temperatures, unless the nature of the water discharge changes. Discharge water quality in terms of temperature will only be relevant to Implats' operations if our entire operating system changes.
Water consumption – total volume	100%	Scope of monitoring: Implats measures and monitors the volume of water consumed at all Implats' operations (100% of operations). The term "operations" applies to all Implats' mines as well as the Refinery.  Reason for monitoring: ensure that the operations meet water strategy targets and to determine our operational efficiency per unit tonne of product produced.  Frequency of monitoring: volumes are monitored continuously, with surface and groundwater monitoring at each operation and annual water risk assessments conducted accordingly. Implats conducts an annual renewal of our water use licences, rehabilitation strategies and implementation plans, as well as our integrated water and waste management plans.  Method/s for measurement includes the use of meters in a monitoring network.  Measurements for these water discharges are aggregated on a regular basis to track



		performance throughout the year.
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Water recycled/reused	100%	Scope of monitoring: Implats measures and monitors the total volume of water recycled at each of its operations (100% of operations). The term "operations" applies to all Implats' mines as well as the Refinery. Reason for monitoring: to ensure that operations meet our water strategy targets and to determine operational efficiency per unit tonne of product produced.  Frequency of monitoring: volumes are monitored continuously, with surface and groundwater monitoring at each operation and annual water risk assessments conducted accordingly. Implats conducts an annual renewal of our water use licences, rehabilitation strategies and implementation plans, as well as our integrated water and waste management plans.  Method/s for measurement: include the use of meters in a monitoring network.  Measurements for recycled/reused water are aggregated on a regular basis to track performance throughout the year.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Implats monitors the provision of fully-functioning, safely managed WASH services to all workers at each of its operations (100%). All operations have WASH services that are accessible and usable by all employees. The term "operations" applies to all Implats mines and the Refinery.  This is to ensure that employees have access to a healthy and safe water supply source for personal consumption and use, particularly during COVID-19. The licence conditions of all Implats' operations require the provision of fully-functioning, safely managed WASH services to all workers. Health and safety-based processes and policies, such as those related to WASH facilities, are monitored by



the HSE committee.
Monitoring at this level occurs on a quarterly basis. In addition, the Health and Safety Manager at each operation ensures on a continuous basis that fully functioning WASH services are provided to all workers. Methods include scheduled maintenance and inspections of WASH facilities as measurement.

# W1.2b

# (W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	24,902	About the same	Change from previous year: The total water withdrawals remained about the same, increasing by 3.6% compared to the previous reporting year. Implats defines "about the same" to be between 0 – 10%. Changes of +/-10% are considered to be higher/ lower. Changes of +/-40% are considered much higher/lower.  The increase in the volume of water withdrawn is attributed to the acquisition of Impala Canada. Furthermore, Canada's FY2020 water withdraw total was for 6 months, while for FY2021 it is a full year's volume. The change in water withdrawn from the previous reporting year is 873Ml, while Impala Canada withdrew 2 026Ml during FY2021. The difference in these values is an indication of Implats' commitment to reduce water withdrawals and increase water efficiencies and recycling initiatives.  Future volumes: The water withdrawal volumes are expected to remain about the same in the future due to expectation that the Group's production levels will increase gradually year on year but be offset by an increase in water recycling initiatives. With increasing production,



			the Group's operations will require a larger volume of water input to our processes, thus increasing the total water withdrawals. The future freshwater withdrawal volumes are, however, expected to be offset by the Group's focus on meeting its water recycling/reuse targets (44% recycle target), which is expected to be increased in the future, thus withdrawal volumes are expected to remain the same.
Total discharges	752	Much higher	Impala's Zimplats and Canada operations are the only operations that discharges water. In FY2021, the water discharged at the Zimplats' increased drastically by 84% from the previous reporting period. The reason for the higher discharge volumes in FY21 as compared to FY20 is the difference in rainfall received. Ngezi recorded a total of 329mm in FY20 (a drought year) and 1 172mm in FY21, SMC received 487mm in FY20 and 937mm FY21. The Zimplats' operation discharges water to a fresh surface water source. FY 2021 is the first time measuring a full year for Canada operation. Implats defines "about the same" to be between 0 – 10%. Changes of +/-10% are considered to be higher/ lower. Changes of +/-40% are considered much higher/lower.
Total consumption	24,150	About the same	Total water consumption increased by 1.2% year-on-year to 24 150 Ml in 2021 due to increased production and the inclusion of Impala Canada for the full production year. As in FY2020 Canada was only accounted for 6 months.  Unit consumption rate of water (water intensity) marginally improved to 2.18 kl/tonne of ore milled, from 2.20 kl/tonne in 2020 due to increased tonnes milled (inclusion of full year Canada production and increased milling at other operations) and reduced water consumption in Zimbabwe. Recycled and re-used water was 51% of total water consumed, against a Group target of 44%, supported by higher levels of water recovery at all our operations.



# W1.2d

# (W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year		Please explain
Row 1	Yes	76-99	About the same	WRI Aqueduct	Four out of five of Implats' operations are situated in water stressed areas, as determined using the WRI Aqueduct Tool. The WRI Aqueduct is a tool developed jointly by WRI members and partners bringing global data on key water-related indicators, allowing companies to understand their risks and plan water management strategies. The WRI Aqueduct Tool provides an interactive online map, with which one can identify the area of interest and select to view its baseline water stress percentage. The WRI Aqueduct Tool defines water-stressed areas as areas having a high baseline water stress of at least 40%-80%.  Implats has three operations located in South Africa, one in Zimbabwe and a recently acquired operation in Canada. By using the WRI Aqueduct Tool, Implats identified that South Africa's baseline water



stress is high (40%-80%) and the country, therefore, classifies as a water stressed area according to the tool. Consequently, the three South African operations are considered to withdraw water from water-stressed areas. Similarly, with respect to Zimbabwe, the WRI Aqueduct Tool has assisted Implats in identifying the baseline water stress as high (40%-80%) in the Zimplats region. Therefore, the Zimplats operation in Zimbabwe is considered to withdraw water from a water-stressed area. The WRI Aqueduct Tool has assisted Implats in identifying the baseline water stress at its recently acquired operation-Impala Canada. The WRI Aqueduct Tool classifies the baseline water stress as low (<10%) in the Impala Canada region. Therefore, the Impala Canada operation is not considered to withdraw water from a water-stressed area.

As identified by the WRI Aqueduct Tool, four out of five of Implats' operations (80%) withdraw water from water stressed areas, as four of Implats' operations are situated in South Africa and Zimbabwe. In FY2021, the prevailing drought conditions in Zimbabwe and higher temperatures in South Africa resulted in water losses from high evaporation, further increasing the water stress in the South African and Zimbabwean regions in which Implats' operates.



		The WRI Aqueduct Tool is
		utilised as it provides easy access to and analysis of critical
		data. Implats' use of the WRI Aqueduct Tool has assisted the
		group in foreplaning to ensure
		that water management continues to receive particular
		focus in South Africa
		(particularly at our Impala Rustenburg operations, which
		accounts for 54% of the Group's total water withdrawals). Water
		withdrawal volumes are
		consistently monitored to ensure compliance with the water-use
		licences at each of Implats'
		operations.
		The water withdrawn from water stressed areas stayed the same
		in FY2021 (FY2020: 80%) from
		the previous reporting year. This is as a result of the same four
		facilities from the previous
		reporting year are still considered to be from water-
		stressed regions. Implats defines "about the same" to be
		between 0 – 10%. Changes of
		+/-10% are considered to be higher/ lower. Changes of +/-
		40% are considered much
		higher/lower.

# W1.2h

### (W1.2h) Provide total water withdrawal data by source.

<u> </u>				
	Relevance	Volume	Comparison	Please explain
		(megaliters/year)	with	
			previous	
			reporting	
			year	



Fresh surface water,	Relevant	9,231	About the	Three out of five of Implats'
including rainwater, water from wetlands, rivers, and lakes			same	operations are highly reliant on fresh water sources.  Fresh water is relevant as it forms a material component
				of Implats' total water withdrawn. For example, in FY20 fresh water made up 53% of total water
				withdrawals for Implats, making this source particularly relevant.
				Withdrawals from fresh water increased by 9.88% from FY20 to FY21, indicating a "About the same" value as per Implats' definition. Implats defines "about the same" to be between 0 – 10%. Changes of +/-10% are considered to be higher/ lower. Changes of +/-40% are considered much
				higher/lower.  The increase can be
				attributed to the acquisition of Impala Canada. Water management continues to receive particular focus at all Implats operations.
				Withdrawal volumes from fresh surface water are expected to remain relatively the same in the next reporting year, as a result of the existing water efficiency measures across Implats' operations.
Brackish surface water/Seawater	Not relevant			This water parameter is not relevant because no brackish surface



				water/seawater volumes are withdrawn by any of Implats' operations. This trend is expected to continue in the future.
Groundwater – renewable	Relevant	2,263	About the same	Four out of five Implats' operations withdraw from renewable groundwater sources. Withdrawals from groundwater is relevant to Implats' operations as this water is used in our processes. Groundwater makes up a material component of the total water withdrawn of around 10%. This is a significant fraction and deemed relevant to Implats.  Withdrawals from groundwater decreased by 6.98% in FY21. The decrease represents a "About the same" value as per Implats' definition. Implats defines "about the same" to be between 0 – 10%. Changes of +/-10% are considered to be higher/ lower. Changes of +/-40% are considered much higher/lower.  Withdrawal volumes from groundwater are expected to remain relatively stable in the next reporting year, as drought conditions are expected to ease, which could result in the operations stabilising water withdrawal volumes respectively and relying more on municipal



				water sources.
Groundwater – non- renewable	Not relevant			This water parameter is not relevant because no non-renewable groundwater volumes are withdrawn by any of Implats' operations. This trend is expected to continue in the future.
Produced/Entrained water	Not relevant			This water parameter is not relevant because none of Implats' operations produce processed water. This trend is expected to continue in the future.
Third party sources	Relevant	13,408	About the same	Three out of five of Implats' operations are supplied with third-party water. Water withdrawals from third party sources are relevant to Implats' operations as this water is used throughout our processes. Third party water sources are relevant to the group as they made up around 54% of total water withdrawn in FY21, making third-party water sources extremely important for Implats' operations.  Withdrawals from third party sources remained about the same, increasing slightly by around 1.62% in FY21. The increase can be attributed to a increase in the use of potable water at Rustenburg and Refineries. Implats defines "about the same" to be between 0 – 10%. Changes of +/-10% are considered to be higher/ lower. Changes of +/-40% are considered much



		higher/lower.
		Withdrawal volumes from third party sources are expected to increase in the near future, as the Group production volumes are expected to gradually increase.

# W1.2i

# (W1.2i) Provide total water discharge data by destination.

		Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	elevant	752	Much higher	Facilities that discharged are Zimplats and Impala Canada. In FY21, Zimplats' water discharges are much higher increasing drastically by 84% and totalled 294 ML. The reason for the higher discharge volumes is the difference in rainfall received. Ngezi recorded a total of 329mm in FY20 and 1 172mm in FY21, SMC received 487mm in FY20 and 937mm FY21.  FY 2021 is the first time measuring a full year for Canada operation.  Implats defines "about the same" to be between 0 – 10%. Changes of +/-10% are considered to be higher/ lower. Changes of +/-40% are considered much higher/lower.  Fresh water discharge sources are relevant as 100% of discharges are to fresh water sources at Zimplats. The increase



			could be attributed to increased temperatures which resulted in an increase in withdrawals from fresh water sources.  It is anticipated that discharge levels to fresh water sources will decrease in the future, as a result of increased recycling activities and opportunities at operations.
Brackish surface water/seawater	Not relevant		None of Implats' operations discharge water to brackish surface water or seawater. Thus, brackish surface water/seawater destinations are not relevant to Implats. This trend is expected to continue in the future.
Groundwater	Not relevant		None of Implats' operations discharge water to groundwater, making groundwater discharges not relevant to the Group. This trend is expected to continue in the future.
Third-party destinations	Not relevant		None of Implats' operations discharge water to third-party destinations, making groundwater discharges not relevant to the Group. This trend is expected to continue in the future.

# W1.2j

# (W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Not relevant			No tertiary treatment was



					conducted at any of Implats' sites.
Secondary treatment	Relevant	752	Much higher	31-40	Only the Zimplats and Canada sites have water discharges. Zimplats have various discharge points according to the site's permits.  All water is treated (Primary and secondary) before being discharged.
Primary treatment only	Not relevant				No primary treatment was conducted at any of Implats' sites.
Discharge to the natural environment without treatment	Not relevant				No water was discharged to the natural environment without treatment.
Discharge to a third	Not relevant				No water was



party			discharged
without			to a third
treatment			party
			without
			treatment.
Other	Not		Not
	relevant		Applicable

### W1.3

#### (W1.3) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	129,575,000,000	24,902	5,203,397.31748454	In the near future Impala anticipates the same trend.

### W-MM1.3

(W-MM1.3) Do you calculate water intensity information for your metals and mining activities?

Yes

### W-MM1.3a

# (W-MM1.3a) For your top 5 products by revenue, provide the following intensity information associated with your metals and mining activities.

Product	Numerator: Water aspect	Denominator	Comparison with previous reporting year	Please explain
Platinum Group Metals	Total water consumption	Other, please specify  Tonne of ore milled	About the same	Unit consumption rate of water marginally decreased to 2.18 kl/tonne of ore milled,from 2.20 kl/tonne in 2020. This represents a 1% decrease, which is categorised as 'about the same' in accordance with Implats' definition ("about the same" to be between 0 – 10%, changes of +/-10% as "higher"/ "lower" and changes of +/-40% as "much higher/lower").  Implats uses the water intensity metric internally to understand the relationship



between how much Platinum Group
Metals operations are milling and how
much water the milling requires. Any
change in the metric gives an indication
of an increase in milling production or
decrease in water withdrawals. This
information is used to make informed
management decisions. The metric forms
part of the key sustainability indicators
reported in Implats' annual reports.
Multiple products are derived from the
ore including platinum, palladium,
rhodium and gold. Water used for
processing of ore cannot be allocated to
individual metals.

Future anticipated water intensity trends are to remain about the same as a result of water efficiency initiatives across the group.

Strategies to reduce Implats' water intensity includes increasing water efficiency operating techniques and associated technologies. This is carried out through implementing operationspecific water conservation strategy frameworks that align with Implats' strategic commitment to reduce our use of potable water and increase water recycling and reuse. This is evident through the groupwide target of 44% reduction of water consumption being bypassed at 51% in FY21. Implats makes use of water and waste management plans as a strategic tool in our water consumption reduction initiatives.

#### W1.4

#### (W1.4) Do you engage with your value chain on water-related issues?

Yes, our customers or other value chain partners



#### W1.4c

# (W1.4c) What is your organization's rationale and strategy for prioritizing engagements with customers or other partners in its value chain?

Implats engages with several partners regarding water-related matters. Partners include customers, employees, investors, local communities, relevant NGOs, regulators, statutory special interest groups and water utilities at a local level. The rationale for prioritizing Implats' partners is informed by a structured internal risk management process. The risk management process identifies the prominent business objectives and material sustainability focus areas to ensure effective strategic developments. The risk process culminates in the identification of a prioritized set of strategic risks. The risks, along with the outcomes of Implats' internal and external stakeholder engagement activities and the Group's assessment of market fundamentals, are used to identify material sustainability-related issues. This is essential to maintain and strengthen Implats' social licence to operate.

Various methods are used to engage with its partners on water-related issues. An example is the allocation of a responsible executive to each Zone 1 stakeholder in order to effectively manage the relationship. Implats categorizes customers as Zone 1 stakeholders (high priority). Zone 1 stakeholders require Implats' critical focus, high-level ongoing care and responsiveness to build on and improve relationships. The information obtained from stakeholders from these champion meetings, particularly with regards to our exposure to water risks, is then used to inform internal decision making. Internal knowledge is used to factor these issues into relevant risk assessments.

How success is measured:

An example is evident following Implats' attendance at monthly meetings with Rustenburg Municipality on water. Implats recognized the need to assist the municipality when there are water issues in the area. Implats has also embarked in negotiating with the municipality regarding a bulk water service level agreement. Implats aims to ensure all stakeholders are left satisfied with the arrangement.

# W2. Business impacts

#### W<sub>2.1</sub>

(W2.1) Has your organization experienced any detrimental water-related impacts?
Yes

#### W2.1a

(W2.1a) Describe the water-related detrimental impacts experienced by your organization, your response, and the total financial impact.



South Africa Limpopo

#### Type of impact driver & Primary impact driver

Acute physical Pollution incident

#### **Primary impact**

Increased operating costs

#### **Description of impact**

During FY2021, 3 Level 3 ("limited-impact") environmental incidents were recorded at Impala Rustenburg contributing toward a 70% reduction in 10 incidents recorded in 2020 at Rustenburg. All incidents were related to water discharge (effluent and dirty water), none of the incidents in FY21 were related to tailings release. The decrease in tailings release is an indication of Impala's commitment to improving water efficiencies across operations.

None of the reported incidents (Level 3) in FY2021 were classified as substantive (i.e., they did not result in any lasting harm to the environment), however, the incidents did increase operating costs related to rehabilitation and remediation of the incidents. Any unplanned discharges or regulatory breaches are investigated and reported as environmental incidents, while root causes are addressed promptly. Each incident was investigated, and remedial action put in place, which impacts Implats' operating costs. Additionally, where necessary, additional training was provided to operations personnel.

Environmental incidents are defined as any unplanned/unwanted event that affects the environment. The principal impact of Implats' operations relates to the pollution of soil, surface water, ground water and air quality. Implats has not recorded any Level 5 ('major') or Level 4 ('significant') environmental incidents at any of its operations since 2013.

#### **Primary response**

Improve pollution abatement and control measures

#### **Total financial impact**

#### **Description of response**

Implats strives for zero Level 3 environmental incidents across all operations. Implats responds to water-related incidents by promoting responsible water stewardship, ensuring full compliance with regulatory requirements, and minimising water use and pollution thereof.

Implats' response strategy to potential impacts is to follow its well-established risk management process. Implats identifies material environmental, social and governance focus areas through a structured risk management process, internal materiality process



and with consideration of the views and interests of stakeholders. The risk management process is based on the principles of the international risk management standard, ISO 31000. Implats' risk management process sets out to achieve an appropriate balance between minimising risks and maximising the potential reward. Both the opportunity and consequences of all uncertainties that could affect Implats' objectives are considered. Effective risk management enables management to deal with uncertainty and associated threats and opportunities.

Implats continues to drive environmental improvements through certified environmental management systems (EMS). The EMS are certified against ISO 14001:2015 at all operations (except Impala Canada) which stipulates measures to identify and manage risks. All operations have environmental authorisations with the associated environmental management plans in place.

#### Country/Area & River basin

South Africa Olifants

#### Type of impact driver & Primary impact driver

Acute physical Pollution incident

#### **Primary impact**

Increased operating costs

#### **Description of impact**

During FY2021, 4 Level 3 ("limited-impact") environmental incidents were recorded at Marula representing a 33% reduction on the 6 incidents recorded in 2020 at Marula. All 4 Level 3 incidents were water-related. They were related to water discharge (effluent and dirty water), none of the incidents in FY21 were related to tailings release. The decrease in tailings release is an indication of Impala's commitment to improving water efficiencies across operations.

None of the reported incidents (Level 3) in FY2021 were classified as substantive (i.e., they did not result in any lasting harm to the environment), however, the incidents did increase operating costs related to rehabilitation and remediation of the incidents. Any unplanned discharges or regulatory breaches are investigated and reported as environmental incidents, while root causes are addressed promptly. Each incident was investigated, and remedial action put in place, which impacts Implats' operating costs. Additionally, where necessary, additional training was provided to operations personnel.

Environmental incidents are defined as any unplanned/unwanted event that affects the environment. The principal impact of Implats' operations relates to the pollution of soil, surface water, ground water and air quality. Implats has not recorded any Level 5 ('major') or Level 4 ('significant') environmental incidents at any of its operations since



2013.

#### **Primary response**

Improve pollution abatement and control measures

#### **Total financial impact**

#### **Description of response**

Implats strives for zero Level 3 environmental incidents across all operations. This is reflected in the 56% decrease in incidents from FY2020. Implats responds to water-related incidents by promoting responsible water stewardship, ensuring full compliance with regulatory requirements, and minimising water use and pollution thereof. Implats' response strategy to potential impacts is to follow its well-established risk management process. Implats identifies material environmental, social and governance focus areas through a structured risk management process, internal materiality process and with consideration of the views and interests of stakeholders. The risk management process is based on the principles of the international risk management standard, ISO 31000. Implats' risk management process sets out to achieve an appropriate balance between minimising risks and maximising the potential reward. Both the opportunity and consequences of all uncertainties that could affect Implats' objectives are considered. Effective risk management enables management to deal with uncertainty and associated threats and opportunities.

Implats continues to drive environmental improvements through certified environmental management systems (EMS). The EMS are certified against ISO 14001:2015 at all operations (except Impala Canada) which stipulates measures to identify and manage risks. All operations have environmental authorisations with the associated environmental management plans in place.

#### W2.2

No

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

# **W3. Procedures**

#### W-MM3.2

(W-MM3.2) By river basin, what number of active and inactive tailings dams are within your control?

South Africa



#### Olifants

#### Number of tailings dams in operation

1

#### Number of inactive tailings dams

n

#### Comment

The Marula operation currently has 1 active Tailing Storage Facility (TSF). (Tailings Dam 1 - TD1)

#### Country/Area & River basin

South Africa Limpopo

#### Number of tailings dams in operation

1

#### Number of inactive tailings dams

1

#### Comment

Impala Rustenburg currently has 2 Tailings Storage Facilities. Tailings Dam 3,4 combined complex- Active. Tailings Dam 1,2 combined complex- Reprocessing .

#### Country/Area & River basin

Zimbabwe Zambezi

#### Number of tailings dams in operation

2

#### Number of inactive tailings dams

0

#### Comment

Zimplats currently has 2 active Tailings Storage Facilities - Sellous Metallurgical Complex (SMC)

#### Country/Area & River basin

Canada St. Lawrence

#### Number of tailings dams in operation



1

#### Number of inactive tailings dams

1

#### Comment

Impala Canada currently has 1 active TSFs - Impala Canada Lac des Iles and 1 decommissioned facility.

#### W-MM3.2a

(W-MM3.2a) Do you evaluate and classify the tailings dams under your control according to the consequences of their failure to human health and ecosystems?

#### Row 1

#### Evaluation of the consequences of tailings dam failure

Yes, we evaluate the consequences of tailings dam failure

#### **Evaluation/Classification guideline(s)**

South Africa (SANS) 10286

#### Tailings dams have been classified as 'hazardous' or 'highly hazardous'

Yes, tailings dams have been classified as 'hazardous' or 'highly hazardous' (or equivalent)

#### Please explain

The rationale for the selection of SANS 10286 is that it defines standards for the efficient management of tailings and associated risks. It contains fundamental objectives, principles and minimum requirements aimed at ensuring that unavoidable risks are managed. This ensures Implats' manages TSFs within their control as efficiently as possible.

Implats' Code of Practice requires a professional engineer to oversee risk monitoring and audit tailings dams annually. Activities are monitored as follows: Daily inspections by the tailings dam operator. Weekly combined inspections by the Mine and tailings dam operator. Monthly combined inspections by the Mine, consultant, tailings dam operator and private consultant. Annual aerial inspections.

A dam is classified as medium/high hazardous as per the SANS 10286 and is based on how many people and the value of the property that falls within the zone of influence of that facility. A dam is classified as medium/high hazard if it has the potential to affect 11-100 or more people and property to the value of R2m- R20m or more.

TSFs classified high/medium hazardous are subject to Zone of Influence assessments at design phase to identify the potential risks associated with the TSF. All Implats' operations submit a mine closure and decommissioning report, annual rehabilitation plans (which identify potential areas for current and future rehabilitation) and a post-mining impact assessment to the Department of Mineral Resources and Energy.



#### W-MM3.2b

# (W-MM3.2b) Provide details for all dams classified as 'hazardous' or 'highly hazardous'.

#### Tailings dam name/identifier

Tailings Dam 3 & 4 (Combined)

#### Country/Area & River basin

South Africa Limpopo

#### Latitude

-25.31906

#### Longitude

27.141653

#### **Hazard classification**

High hazard

#### Guideline(s) used

South Africa SANS 10286

#### Tailings dam's activity

Active

#### **Current tailings storage impoundment volume (Mm3)**

328

#### Planned tailings storage impoundment volume in 5 years (Mm3)

361

#### Please explain

Dam 3 and 4 refer to a combined TSF at Implats' Impala Rustenburg facility in South Africa. Tailings dam 3 and 4 (combined) are 100% owned and controlled by Impala Platinum Limited. Construction of dam 3 began in 1978, while construction of dam 4 commenced in 1981. An upstream raising method was utilised for the construction of the dam. The dam is operated as per the approved design criteria. A formal analysis of downstream impact on communities, ecosystems and critical infrastructure in the event of a catastrophic failure has been undertaken to reflect final conditions. The formal analysis employed was a Zone of Influence for worst case scenario. The Zone of Influence was assessed at design phase and reviewed during 2016. A Breach study has been incorporated in the End-of-Life study that was completed in FY2020.

Current Height 85.5 m.



#### Current Maximum design height 144.6 m.

#### Tailings dam name/identifier

Tailings Dam 1 & 2 (combined)

#### Country/Area & River basin

South Africa Limpopo

#### Latitude

-25.311232

#### Longitude

27.115673

#### **Hazard classification**

Medium hazard

#### Guideline(s) used

South Africa SANS 10286

#### Tailings dam's activity

Inactive

#### **Current tailings storage impoundment volume (Mm3)**

28.5

#### Planned tailings storage impoundment volume in 5 years (Mm3)

28.5

#### Please explain

Dam 1 and 2 refer to a combined TSF at Implats' Impala Rustenburg facility in South Africa. Tailings dam 1 and 2 (combined) are 100% owned and controlled by Impala Platinum Limited. This TSF is currently inactive but during the 2020 reporting year, Impala Rustenburg launched a project to remine tailings in its dormant facility. The dam is operated as per current reprocessing operations plan and monitoring requirements. No raising is currently occurring, but the original construction was by upstream method. A formal analysis of downstream impact on communities, ecosystems, and critical infrastructure in the event of a catastrophic failure has been undertaken to reflect final conditions. The formal analysis employed was a Zone of Influence for worst case scenario. The Zone of Influence was assessed at design phase and reviewed during 2016. A Breach study has been incorporated in the End-of-life study that was completed in FY2020.

Current Height 26m,

Current Maximum design height 26m.



#### Tailings dam name/identifier

TD 1

#### Country/Area & River basin

South Africa Olifants

#### Latitude

-24.303994

#### Longitude

30.63005

#### **Hazard classification**

High hazard

#### Guideline(s) used

South Africa SANS 10286

#### Tailings dam's activity

Active

#### Current tailings storage impoundment volume (Mm3)

13.7

#### Planned tailings storage impoundment volume in 5 years (Mm3)

14.2

#### Please explain

TD 1 is the tailings facility dam at Implats' Marula facility in South Africa. TD 1 is 73% owned and controlled by Impala Platinum Limited. The dam is operated as per the approved design criteria. An upstream raising method was utilised for the construction of the dam. A formal analysis of downstream impact on communities, ecosystems and critical infrastructure in the event of a catastrophic failure has been undertaken to reflect final conditions. The formal analysis employed was a Zone of Influence for worst case scenario. The latest update to the zone of influence assessment in accordance with SANS 10286 was undertaken in 2018 for the final height of the facility at closure. The current facility is nearing the end of life.

Current Height 40.1m, Current Maximum design height 42m.



#### Tailings dam name/identifier

Selous Metallurgical Complex (SMC) Tailings Storage Facility

#### Country/Area & River basin

Zimbabwe Zambezi

#### Latitude

-18.036

#### Longitude

30.434

#### **Hazard classification**

Medium hazard

#### Guideline(s) used

South Africa SANS 10286

#### Tailings dam's activity

Active

#### **Current tailings storage impoundment volume (Mm3)**

24.4

#### Planned tailings storage impoundment volume in 5 years (Mm3)

37.5

#### Please explain

SMC is the tailings facility dam at Implats' Zimplats facility in Zimbabwe. SMC is 87% owned and controlled by Impala Platinum Limited. The dam is operated as per the approved design criteria. An upstream raising method was utilised for the construction of the dam. A formal analysis of downstream impact on communities, ecosystems and critical infrastructure in the event of a catastrophic failure has been undertaken to reflect final conditions. The formal analysis employed was a Zone of Influence for worst case scenario. The Breach study inundation was scheduled for FY2020.

Current Height 35m,

Current Maximum design height 43m.

#### Tailings dam name/identifier

Impala Canada – South Tailings Management Facility (STMF)

#### Country/Area & River basin

Canada

St. Lawrence



#### Latitude

49.090768

#### Longitude

-89.390106

#### Hazard classification

High hazard

#### Guideline(s) used

Other, please specify

Technical Bulletin – Classification and Inflow Design Flood Criteria" of the Lakes and River Improvement Act (LRIA) (Ontario Ministry of Natural Resources, 2011a))

#### Tailings dam's activity

Active

#### **Current tailings storage impoundment volume (Mm3)**

13.5

#### Planned tailings storage impoundment volume in 5 years (Mm3)

19.7

#### Please explain

Impala Canada- South Tailings Management Facility (STMF) is the active TSF at Implats' Impala Canada facility in Canada. Impala Canada- STMF is 100% owned and controlled by Impala Platinum Limited. Construction of Impala Canada- STMF began in 2010. A hybrid upstream and downstream raising method was utilised for the construction of the dam. The dam is operated as per the approved design criteria. The risk rating for the STMF is "High" for incremental environmental losses. A formal analysis of downstream impact on communities, ecosystems and critical infrastructure in the event of a catastrophic failure has been undertaken to reflect final conditions.

Current Height: 22.5 m.

Current Maximum design height: 26 m.

#### Tailings dam name/identifier

Impala Canada- West Tailings Management Facility (WTMF)

#### Country/Area & River basin

Canada

St. Lawrence

#### Latitude

49.092139

#### Longitude



-89.380092

#### **Hazard classification**

Medium hazard

## Guideline(s) used

Other, please specify

(Technical Bulletin – Classification and Inflow Design Flood Criteria" of the Lakes and River Improvement Act (LRIA) (Ontario Ministry of Natural Resources, 2011a))

## Tailings dam's activity

Inactive

## Current tailings storage impoundment volume (Mm3)

20

## Planned tailings storage impoundment volume in 5 years (Mm3)

20

## Please explain

Impala Canada- West Tailings Management Facility (WTMF) is the inactive TSF at Implats' Impala Canada facility in Canada. Impala Canada- WTMF is 100% owned and controlled by Impala Platinum Limited. Construction of Impala Canada- WTMF began in 2001. A downstream raising method was utilised for the construction of the dam. The dam is operated as per the approved design criteria. The risk rating for the WTMF is "Medium" for incremental environmental losses. A formal analysis of downstream impact on communities, ecosystems and critical infrastructure in the event of a catastrophic failure has been undertaken to reflect final conditions.

Current Height 30 m.

Current Maximum design height 30 m.

## W-MM3.2c

# (W-MM3.2c) To manage the potential impacts to human health or water ecosystems associated with the tailings dams in your control, what procedures are in place for all of your dams?

Procedure	Detail of the procedure	Please explain
Operating plan	An operating plan that is aligned with your established acceptable risk levels and critical controls	Implats has taken decisive steps to review the design, management and monitoring of all our active Tailings Storage Facilities (TSFs), and to
	framework An operating plan that includes the operating constraints of the dam and its construction method	enhance our practices. Our managed TSFs are subject to the highest global safety and stewardship standards and our audit findings attest to their integrity and the high level of compliance to standard operating procedures.



An operating plan that considers the consequences of breaching the operating constraints of the dam

An operating plan that includes periodic review of the foundations and slope materials The TSF procedures apply to all Implats' operations, in South Africa, Zimbabwe and Canada. As part of its operating plan, Implats remains committed to striving for zero Level 3 incidents. The operating plan for each facility includes procedures for monitoring aquatic and terrestrial biodiversity, as well as surface and ground water sources. This includes procedures for site rehabilitation and land and waste management.

The operating plans are reviewed by the operations and updated every 3 to 5 years and as necessary when there are changes. Implats' operating procedures at the TSFs cater for regular inspections (daily, weekly and monthly) of pipelines, deposition areas and dams, as well as the recording of readings that indicate the retained water level in the dam walls.

All of Implats' dams are operated within the required safety stability factor. In addition, all TSFs are operated and monitored using standardised operating procedures. The greatest integrity risk is an abnormal accumulation of water that could cause the dam to overflow, eroding one of the walls and resulting in an uncontrolled release of the saturated tailings. To mitigate this risk, Implats' dams are designed with reinforcements to cater for excessive downpours and draining requirements. This forms part of each mine's operating plan.

This year Implats conducted a peer review process of all tailings facilities and commissioned a tailings management expert to conduct an independent assessment against the International Council on Mining and Metals (ICMM) governance framework for preventing catastrophic failure, the Minerals Residue Facility and Water Management Standard (Anglo American) and the Mine Residue Deposits Standard (Canadian Standard).

The integrity of the Group's active TSFs was confirmed via the independent assessment, which



		found that we adhered to best practice standards. Each operation has actioned respective recommendations to ensure improvements in tailings management and has tracked implementation and compliance
procedure	guidance and standards for acceptable risk levels across all life stages, including post-closure • A life of facility plan that considers post-closure land and water use	as part of its environmental management strategy.  Planning for mine closure can start before mining commences and, at Implats' operations, continues throughout the life of the mines, until
		continues throughout the life of the mines, until final closure. This approach enables better environmental outcomes aims to avoid the need for costly remedial earthworks late in the operation lifecycle.
		All Implats' mine closure plans have identified safe and sustainable locations and storage procedures related to the respective operation's tailings storage facility.
		Impala Rustenburg has an updated Water Balance for the Tailings at Closure as well as Closure Liability costing completed on an annual basis. Rehabilitation and remediation plans are included in the Closure liability reports.
		The closure liability plans are reviewed annually. Applicable financial provisions are updated accordingly.

## **W3.3**

## (W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

## W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.



## Value chain stage

Direct operations

## Coverage

Full

## Risk assessment procedure

Water risks are assessed as part of other company-wide risk assessment system

## Frequency of assessment

More than once a year

#### How far into the future are risks considered?

More than 6 years

## Type of tools and methods used

Enterprise risk management Other

#### Tools and methods used

ISO 31000 Risk Management Standard Internal company methods

#### Contextual issues considered

Water availability at a basin/catchment level

Water quality at a basin/catchment level

Stakeholder conflicts concerning water resources at a basin/catchment level

Implications of water on your key commodities/raw materials

Water regulatory frameworks

Status of ecosystems and habitats

Access to fully-functioning, safely managed WASH services for all employees

## Stakeholders considered

Customers

**Employees** 

Investors

Local communities

**NGOs** 

Regulators

Suppliers

Water utilities at a local level

Other water users at the basin/catchment level

## Comment

Implats' enterprise risk management (ERM) process is aligned with ISO 31000, the international risk management standard. Implats risk management process sets out to achieve an appropriate balance between minimising the risks associated with any business activity and maximising potential reward.



Risks are governed under the supervision of the Health, Safety and Environment committee (HSE), through an enterprise risk management process. Surface and groundwater monitoring programmes are in place. Additionally, risks are reviewed monthly by Exco and quarterly by the board, using internal company methods. Implats reviews water risk assessments annually.

Each one of Implats' operations (excluding Impala Canada) are certified against an ISO 14001:2015-aligned Environmental Management System that ensures all identified risks have the necessary control measures and mitigation strategies in place. Impala Canada has undertaken a gap analysis to determine additional requirements needed to comply with

the ISO14001:2015 standard. All operations have environmental authorisations with the associated environmental management plans in place.

## Value chain stage

Supply chain

## Coverage

**Partial** 

#### Risk assessment procedure

Water risks are assessed as part of other company-wide risk assessment system

## Frequency of assessment

More than once a year

#### How far into the future are risks considered?

More than 6 years

## Type of tools and methods used

Enterprise risk management Other

#### Tools and methods used

ISO 31000 Risk Management Standard Other, please specify Internal company methods

## Contextual issues considered

Water availability at a basin/catchment level

Water quality at a basin/catchment level

Stakeholder conflicts concerning water resources at a basin/catchment level

Implications of water on your key commodities/raw materials

Water regulatory frameworks

Status of ecosystems and habitats

Access to fully-functioning, safely managed WASH services for all employees



#### Stakeholders considered

**Employees** 

Investors

Local communities

**NGOs** 

Regulators

Suppliers

Water utilities at a local level

Other water users at the basin/catchment level

#### Comment

Implats' enterprise risk management (ERM) process is aligned with ISO 31000, the international risk management standard. Implats risk management process sets out to achieve an appropriate balance between minimising the risks associated with any business activity and maximising potential reward.

Risks are governed under the supervision of the Health, Safety and Environment committee (HSE), through an enterprise risk management process. Surface and groundwater monitoring programmes are in place. Additionally, risks are reviewed monthly by Exco and quarterly by the board, using internal company methods. Implats reviews water risk assessments annually.

Each one of Implats' operations (excluding Impala Canada) are certified against an ISO 14001:2015-aligned Environmental Management System that ensures all identified risks have the necessary control measures and mitigation strategies in place. Impala Canada has undertaken a gap analysis to determine additional requirements needed to comply with

the ISO14001:2015 standard. All operations have environmental authorisations with the associated environmental management plans in place.

## **W3.3b**

(W3.3b) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

Application of the tools:

Implats makes use of the ISO 31000 risk management standard as a tool to identify water risks at group-level, which is carried out across operations. Additionally, at operational level, the ISO 14 001 standard is used as a tool to ensure all environmental compliance (including water related risk compliance) is met. Internal company knowledge is also applied as a tool used to assess water risks across the operations. For example, internal knowledge can incorporate sustainability objectives, which forms part of key performance indicators against which management and executives are remunerated. Implats further strives to follow the International Council on Mining and Metal (ICMM) guidelines. Implats have an established incident and non-conformance procedure to manage reporting, reviewing and remediating environmental impacts from incidents that may harm the environment. They classify incidents on five levels, a



scale of Level 1 (most minor) is used to 5 (most severe) to assessing environmental incidents and their impacts.

Company knowledge is also used to incorporate the results of water monitoring programmes into Implats' annual water risk reviews. The monitored data is recorded within the water balance software at local operations. This assists the facilities to manage water supplies ensuring that water quality issues are noted and recorded in the company risk register. Inclusive stakeholder engagement underpins Implats' approach to respecting human rights and to responding to legitimate stakeholder aspirations and concerns. In 2021, security of supply of water at Implats South African and Zimbabwe operations was identified as the Group's top 13 risks. The risk response includes company knowledge, guidance and management regulations with environmental systems at the operations that are all certified against ISO 14001.

How the outcome of the risk assessment is used to inform the internal decision-making process:

Risk is governed through an enterprise risk management approach under the supervision of the health, safety and environment committee (HSE). Risks are reviewed monthly by the executive committee (Exco) and guarterly by the board, using internal company methods. Internal company knowledge is used alongside international standards, as a tool to assess waterrelated risks. This forms part of the key performance indicators against which management and executives are remunerated. Company knowledge is also used to incorporate the results of water monitoring programmes into Implats' annual water risk reviews. The monitored data is populated in water balance software at local operations. This assists the facilities to manage water supplies and anticipate future issues, ensuring that water quality issues are considered in the inputs to the company risk register. These tools have been used to assess Implats' water risks for over 10 years. They are also forward looking and consider risks between 6 to 10 years into the future. To ensure the wellbeing of their employees, potable water supply standards are closely monitored. Consequently, Implats complies to suitable potable water levels by using internal company knowledge alongside the ISO14001-aligned risk management system standard, as a risk-assessment tool at each operation. These tools are also used to ensure access to fully functioning, safely managed WASH services for all employees.

Implats embarks on quarterly stakeholder engagement meetings, where operational executives and Group champions meet relevant communities to discuss and identify material issues (including those related to water-risks). These engagements include statutory special interest groups at a local level. Furthermore, Implats categorises NGOs as Zone 3 stakeholders, in other words they have less influence and/or impact on the Group's business compared to Zone 1 or 2 stakeholders, but which have existing and mature engagement structures. Implats' engagements with NGOs typically take the form of stakeholder liaison meetings, one-on-one meetings, surveys, hotlines and publications.

Implats recognises the relevance of water-related risks on business operations and group-wide sustainability as a consequence of heavy reliance on sufficient amounts of water to ensure that operations run smoothly and efficiently. Without water, Implats operations will be severely disrupted or forced to cease completely, resulting in notable loss to their business. As a result, Implats has processes in place whereby it identifies and assesses possible water-related risks



and can respond to these risks appropriately via the Group's strategic management procedures. Furthermore, Implats identifies that water is a vital resource for their operations and communities around them. As a result, Implats implements a water stewardship practice to reduce freshwater withdrawals, enhance recycling, continuously improve efficiency of water use, prevent pollution and support their host communities.

## W4. Risks and opportunities

## W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes, both in direct operations and the rest of our value chain

## W4.1a

## (W4.1a) How does your organization define substantive financial or strategic impact on your business?

Implats defines substantive financial impacts (referred to as a material financial risk in our reporting) as a risk that poses a threat to the sustainability of Implats' operations. A substantive risk may result in any change, either within our direct operations or further along the value chain, resulting in one or more day's loss of production and associated monetary implications. These risks range from operational-related hinderances, including water stress leading to operational stoppages, to social unrest leading to strikes and other related impacts. Substantive risks include the revocation of Implats' environmental and other compliance-related licences, such as water-use licences. Without the relevant licences to operate Implats' operations will be hindered posing a substantive financial and strategic impact to the group.

Implats makes use of a risk appetite and tolerance framework to identify and manage all risks that could affect operations, which forms part of our enterprise risk management process. Implats risk management process sets out to achieve an appropriate balance between minimising the risks associated with any business activity and maximising the potential reward. Using this risk management process, Implats is able to identify the risks which may pose substantive financial impacts to the company and establishes the most appropriate response to mitigate the impacts of each identified risk. Implats identifies its strategic business objectives and material sustainability focus areas through its structured internal risk management process, and with consideration to the views and interests of its stakeholders. Implats' group-level enterprise risk management (ERM) process is aligned with ISO 31000, the international risk management standard.

The Group reviews and updates the risk profile on a quarterly basis. Annually, ten key risks are identified and ranked to ensure optimum awareness and focus on minimising these risks. 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.

Through the risk management process, each identified risk, as well as its associated controls, has a clearly defined line management owner. This process ensures that all risk assessments are reviewed twice annually for relevance, and for example, to identify substantive change in the business, operations, revenue or expenditure from water risks. The review includes interrogation of both the internal and external environment for identification and ratification of risks and/ or opportunities that affect the achievement of objectives. The process to define and quantify risks within Implats is as follows: 1) Establishment of the external operating context and the views/interests of stakeholders; 2) Identification of risk sources and causes, and evaluation of all possible consequences; 3) Analysis of the risk in terms of what it means for the achievement of Impala's objectives; 4) Evaluation of the risk rating (by severity, exposure and frequency), identification of the controls (existing or new) and risk prioritisation; 5)
Consideration of all options to establish the most appropriate response for each identified risk.

Indicators used to identify substantive impacts are: 1) if the risk poses the threat of work stoppages for a day, and 2) the associated revenue lost for that period. Implats' threshold for substantive change is defined as the average financial loss of revenue or the loss of production associated with 1 day's stoppages. In FY21, the financial threshold for defining substantive loss/liability was greater than R 355.1 million, which is the average revenue lost for one day of lost production. This definition of substantive impact applies to both Implats' direct operations, as well as to the relevant partners along the supply chain.

An example of a substantive risk would be if prolonged drought causes a hindrance to Implats' water supply, particularly in South Africa. Security of water supply has been listed as one of Implats' top 10 risks in FY2020. South Africa is considered a water scarce region and since Implats' largest operations are based in South Africa, Implats is at risk of possible water supply challenges due to drought. If a drought occurs, Implats will be allowed access to a limited supply of water, such to maintain the availability of water from freshwater bodies (like rivers, lakes and dams) to local communities and the sustenance of ecosystems and habitats. With these restrictions, Implats may not be able to operate, thus forcing the operations to cease production. Depending on the duration of the drought, the operations could be ceased for days or weeks, resulting in substantive financial losses. This stoppage of operations would lead to revenue losses that are considered substantive.

## W4.1b

(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

Total number	% company-	Comment
of facilities	wide facilities	



	exposed to	this	
	water risk	represents	
Row 1	5	100	Five out of five of Implats' operations are exposed to water risks with the potential to have a substantive impact on the company. The five facilities include Impala Rustenburg, Marula, Refineries and Zimplats in Southern Africa, and Implats' Canada operation.  Four of Implats' operations are located in Southern Africa, with mining operations in both South Africa and Zimbabwe. South Africa and Zimbabwe are considered water-stressed areas according to the WRI Aqueduct Tool, Zimbabwe is also considered water-stressed due to the ongoing drought experienced in the country. Climate projections indicate that Southern African is expected to get considerably hotter and drier than global averages in this regard. Increased temperatures will have a detrimental impact on water supply in Southern African countries and further increase Implats' facilities' exposure to water risks and water stress. Climate change impacts will also affect the communities around Implats' operations on account of the low economic development level of the region. On the other hand, Impala Canada is exposed to flooding events that can result in a substantive financial or strategic impact on operations.

## W4.1c

(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive financial or strategic impact on your business, and what is the potential business impact associated with those facilities?

## Country/Area & River basin

South Africa Limpopo

Number of facilities exposed to water risk

1

% company-wide facilities this represents



51,400,000,000

## % company's total global revenue that could be affected

31-40

#### Comment

Four of Implats' operations are located in Southern Africa, with mining operations in both South Africa and Zimbabwe. South Africa is considered a water-stressed area according to the WRI Aqueduct Tool. The severity of the risk in the Limpopo River basin is high with the potential to have a significant impact on Implats as a group, since Impala Rustenburg is one of Implats' biggest water consuming operations. Impala Rustenburg's revenue in FY2021 accumulated to R51.4 billion, the second biggest revenue per operation in FY2021.

Implats' response to risk is to follow its well-established and structured internal risk management process. This process enables the Group's operations to identify and respond quickly and effectively to potential risks/incidents. The Implats risk management process is aligned with ISO 31000, the international risk management standard. Implats' risk management process sets out to achieve an appropriate balance between minimising the risks associated with any business activity and maximising the potential reward. In this context, both the upside (opportunity) and downside (consequences) of all uncertainties that could affect one or more of our objectives at different levels can be considered. Effective risk management enables management to deal with uncertainty and associated threats and opportunities, enhancing the enterprise capacity to build value. The risk management process comprises the following steps: 1) Identification of operational objectives, 2) Establishing the context, 3) Identify the risk, 4) Analysing and evaluating the risk, 5) Treating the risk, 6) Monitoring and reviewing the risk, 7) Reporting the risk.

All identified risks are captured into the Group risk repository system that informs Implats' risk profile. This process results in the identification of a prioritised list of Group strategic risks. The profile is presented monthly to Exco and quarterly to the board risk committee.

## Country/Area & River basin

South Africa Olifants

Number of facilities exposed to water risk

1

% company-wide facilities this represents



9,300,000,000

## % company's total global revenue that could be affected

1-10

#### Comment

Four of Implats' operations are located in Southern Africa, with mining operations in both South Africa and Zimbabwe. South Africa is considered a water-stressed area according to the WRI Aqueduct Tool. The severity of the risk in the Olifants river basin is high with the potential to have a significant impact on Implats as a group. Marula's revenue in FY2021 accumulated to R9.3 billion.

Implats' response to risk is to follow its well-established and structured internal risk management process. This process enables the Group's operations to identify and respond quickly and effectively to potential risks/ incidents. The Implats risk management process is aligned with ISO 31000, the international risk management standard. Implats' risk management process sets out to achieve an appropriate balance between minimising the risks associated with any business activity and maximising the potential reward. In this context, both the upside (opportunity) and downside (consequences) of all uncertainties that could affect one or more of our objectives at different levels can be considered. Effective risk management enables management to deal with uncertainty and associated threats and opportunities, enhancing the enterprise capacity to build value. The risk management process comprises the following steps: 1) Identification of operational objectives, 2) Establishing the context, 3) Identify the risk, 4) Analysing and evaluating the risk, 5) Treating the risk, 6) Monitoring and reviewing the risk, 7) Reporting the risk.

All identified risks are captured into the Group risk repository system that informs Implats' risk profile. This process results in the identification of a prioritised list of Group strategic risks. The profile is presented monthly to Exco and quarterly to the board risk committee.

## Country/Area & River basin

South Africa Vaal

Number of facilities exposed to water risk

1

% company-wide facilities this represents



68,895,000,000

## % company's total global revenue that could be affected

51-60

#### Comment

Four of Implats' operations are located in Southern Africa, with mining operations in both South Africa and Zimbabwe. South Africa is considered a water-stressed area according to the WRI Aqueduct Tool. The severity of the risk in the Vaal river basin is high with the potential to have a significant impact on Implats as a group. Furthermore, Rand Water is the Refineries single source of water supply. Impala Refineries' revenue in FY2021 accumulated to R68.9 billion, the highest revenue per operation in FY2021.

Implats' response to risk is to follow its well-established and structured internal risk management process. This process enables the Group's operations to identify and respond quickly and effectively to potential risks/ incidents. The Implats risk management process is aligned with ISO 31000, the international risk management standard. Implats' risk management process sets out to achieve an appropriate balance between minimising the risks associated with any business activity and maximising the potential reward. In this context, both the upside (opportunity) and downside (consequences) of all uncertainties that could affect one or more of our objectives at different levels can be considered. Effective risk management enables management to deal with uncertainty and associated threats and opportunities, enhancing the enterprise capacity to build value. The risk management process comprises the following steps: 1) Identification of operational objectives, 2) Establishing the context, 3) Identify the risk, 4) Analysing and evaluating the risk, 5) Treating the risk, 6) Monitoring and reviewing the risk, 7) Reporting the risk.

All identified risks are captured into the Group risk repository system that informs Implats' risk profile. This process results in the identification of a prioritised list of Group strategic risks. The profile is presented monthly to Exco and quarterly to the board risk committee.

#### Country/Area & River basin

Zimbabwe Zambezi

## Number of facilities exposed to water risk

1

## % company-wide facilities this represents



20,054,000,000

## % company's total global revenue that could be affected

11-20

#### Comment

Four of Implats' operations are located in Southern Africa, with mining operations in both South Africa and Zimbabwe. Zimbabwe is considered a water-stressed area according to the WRI Aqueduct Tool, as well as water-stressed due to the ongoing drought experienced in the country. The severity of the risk in the Zambezi river basin is high with the potential to have a significant impact on Implats as a group. Zimplats' revenue in FY2021 accumulated to R20.1 billion.

Implats' response to risk is to follow its well-established and structured internal risk management process. This process enables the Group's operations to identify and respond quickly and effectively to potential risks/ incidents. Implats' risk management process sets out to achieve an appropriate balance between minimising the risks associated with any business activity and maximising the potential reward. In this context, both the upside (opportunity) and downside (consequences) of all uncertainties that could affect one or more of our objectives at different levels can be considered. Effective risk management enables management to deal with uncertainty and associated threats and opportunities, enhancing the enterprise capacity to build value. The risk management process comprises the following steps: 1) Identification of operational objectives, 2) Establishing the context, 3) Identify the risk, 4) Analysing and evaluating the risk, 5) Treating the risk, 6) Monitoring and reviewing the risk, 7) Reporting the risk.

All identified risks are captured into the Group risk repository system that informs Implats' risk profile. This process results in the identification of a prioritised list of Group strategic risks. The profile is presented monthly to Exco and quarterly to the board risk committee.

#### Country/Area & River basin

Canada

St. Lawrence

## Number of facilities exposed to water risk

1

## % company-wide facilities this represents



3,254,000,000

## % company's total global revenue that could be affected

1-10

#### Comment

One of Implats' operations is located in Canada. Canada is considered to have a high flood risk. The severity of flooding in the St Lawrence River basin is high with the potential to have a significant impact on Implats as a group. Impala Canada's revenue in FY2021 accumulated to R9.0 billion.

Implats' response to risk is to follow its well-established and structured internal risk management process. This process enables the Group's operations to identify and respond quickly and effectively to potential risks/incidents. Implats' risk management process sets out to achieve an appropriate balance between minimising the risks associated with any business activity and maximising the potential reward. In this context, both the upside (opportunity) and downside (consequences) of all uncertainties that could affect one or more of our objectives at different levels can be considered. Effective risk management enables management to deal with uncertainty and associated threats and opportunities, enhancing the enterprise capacity to build value. The risk management process comprises the following steps: 1) Identification of operational objectives, 2) Establishing the context, 3) Identify the risk, 4) Analysing and evaluating the risk, 5) Treating the risk, 6) Monitoring and reviewing the risk, 7) Reporting the risk.

All identified risks are captured into the Group risk repository system that informs Implats' risk profile. This process results in the identification of a prioritised list of Group strategic risks. The profile is presented monthly to Exco and quarterly to the board risk committee.

## W4.2

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Country/Area & River basin

South Africa Limpopo

Type of risk & Primary risk driver



Acute physical Drought

## **Primary potential impact**

Reduction or disruption in production capacity

## Company-specific description

Failure to establish water security, avoid contamination and manage water costs is a top 13 business risk for Implats in FY2021. Adverse weather changes/events and a rise in the demand for water from other users has reduced the availability and supply of water for Implats' operations and negatively impacted the availability of this scarce resource in the Limpopo River basin area. Increased water stress refers to the ability, or lack thereof, to meet both human and ecological demand for water. According to the WRI Aqueduct Tool, Impala Rustenburg is located in a region that is considered to be exposed to high-levels (40-80%) of water stress. The risk of water supply security is owed to the increasing pressure on local water resources in the area from the growth in neighbouring communities, together with seasonal supply variability caused by low rainfall and a lack of new water capacity in the north-west region.

How the impact identified will affect Implats' direct operations:

Water is a critical input for mining, processing and refining operations. Implats is reliant on water to ensure uninterrupted production, thus, a lack of water caused by increased water stress would negatively impact production capacity at our mining operations, causing either a reduction or disruption to capacity. Water supply security also poses a risk to the communities in which Implats' operates, a lack of water could increase the vulnerability of communities. Decreased production capacity or disruptions to production at Implats' Rustenburg operation could impact on revenue associated with this facility. Since Impala Rustenburg contributes the second highest revenue to the group, a decrease in production at this operation will have a substantive financial impact on the Group as a whole.

#### **Timeframe**

1-3 years

#### Magnitude of potential impact

High

## Likelihood

Likely

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

Yes, a single figure estimate

#### Potential financial impact figure (currency)

140,800,000

## Potential financial impact figure - minimum (currency)



## Potential financial impact figure - maximum (currency)

## **Explanation of financial impact**

Explanation of approach used to calculate the figure:

If Implats' water supply was limited due to water stress in the region, Implats could be at risk of losing at least a day's worth of revenue due to production stoppages (considering that Implats is highly dependent on water for our operations). The estimated financial impact was calculated according to the average revenue losses that Implats would incur if they lost a day's worth of production. Implats could be at risk of losing an estimated R140.8 million per day, assuming production runs year round (365 days). This figure is the equivalent of an average day's lost revenue in FY2021 for the South African Impala Rustenburg operation.

## Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

## **Description of response**

Water is a critical input for our mining operations. For Implats, water shortage is a principal risk as our southern Africa sites are in water scarce areas. In response to water supply risks, our operations implement initiatives to ensure effective monitoring of use, conservation, and optimal use of this scarce resource.

Impala Rustenburg currently uses only 42% of its potable water allocation. In mitigating security supply risks caused by increased water stress, ongoing controls include using specialised software to forecast water supply and demand dynamics given operational requirements and local weather patterns, daily dashboard reporting of water usage, robust water recovery processes at our three onsite water works and use of tailings return water and grey water from external sources. In addition, Implats has also responded to water supply security risks through the implementation of a water conservation and demand management programme which enables operational demand simulation and the ongoing implementation of water recycling and detailed monitoring of use.

Impala Rustenburg operation also has scavenging boreholes around its active tailings dam that collectively supply an average of 1.15Ml/day of water. Impala Rustenburg continues to research alternative water sources for usage and storage capacity with the potential to minimise production losses during water interruptions and drought periods.

Implats' strategy focuses on water consumption and quality management and proposes a framework for operation-specific water conservation strategies, in line with our strategic commitment to reduce levels of potable water usage and to increase recycled water usage. Progress in implementing our strategy is driven through the water management programme which includes a focus on driving operational excellence and



engaging and partnering with relevant stakeholders.

Implats places a particular focus on managing water at Impala Rustenburg, which accounts for 47.8% of the Group's total water consumption. Implats have continued the phased development and implementation of operation-specific water conservation and water demand management plans at Impala Rustenburg operations, in line with continued efforts to increase the percentage of water recycled and reduce the volume of water withdrawn. Implats prioritises using grey water for our operations. Our recycled water includes tailings return water and internal purified sewage effluent.

## Cost of response

81,000,000

## **Explanation of cost of response**

Explanation of cost of response Explanation of approach used to calculate the figure: Implats invested about R81 million into infrastructure development projects in South Africa in FY2021 in response to this risk. Infrastructure development projects included the construction of boreholes and water supply infrastructure on site to mitigate the risks associated with water supply security in the Limpopo River basin region. Boreholes and water supply infrastructure assisted Implats in our water efficiency, water reuse, recycling and conservation practices at Impala Rustenburg. Also included in the investment is the Magalies Water pipeline

#### Country/Area & River basin

South Africa Limpopo

#### Type of risk & Primary risk driver

Acute physical Drought

#### **Primary potential impact**

Constraint to growth

## Company-specific description

Southern Africa is already experiencing increased conditions of dryness. The regions in which Implats operate in are projected to become generally drier under enhanced anthropogenic forcing, with an associated increase in dry spells and droughts. During the period 2035-2064, a high likelihood of increased conditions of drought are projected to occur within the presence of a drastic increase in maximum temperature and very hot days. These conditions will exacerbate water scarcity in the Limpopo River basin region. Impala Rustenburg is in an area where there are rapidly growing demands for water to support agricultural, mining, industrial and domestic consumption to support on-going economic development and growth. A lack of water will hinder our ability to grow our



operations further.

Implats' Rustenburg operation is already located in a water-stressed area, with climate change predictions indicating that water scarcity is likely to worsen in this region in the near future. Water availability to the Rustenburg region has been a concern for several years because of low rainfall and a continued increase in the demand for potable water in the area by other users such as local communities. In 2021, levels of rainfall were higher than in recent years in the southern African region where Rustenburg operate, alleviating critical shortages. The bulk water infrastructure is also inadequate to meet all the water user's needs. Drought conditions across southern Africa has further exacerbated this risk. Implats' operations are highly reliant on sufficient amounts of water for continued production. Without the necessary water supply, Implats' operations could experience a reduction or disruption in production capacity, which may constrain operational growth in the future. Increased water scarcity will also have an impact on the communities surrounding Implats' Rustenburg operation. Implats has an obligation to the surrounding communities in terms of shared resources, particularly in vulnerable communities that are affected by inadequate service provision and the risks associated with water security supply in water-stressed areas. Since Impala Rustenburg is a large user of water amongst the surrounding communities, increased water scarcity may require Implats to reduce our daily water consumption allowance, which will impact production capacity and hinder our ability to grow. Reduction or disruption to operations will have an impact on Implats' revenue.

#### **Timeframe**

More than 6 years

## Magnitude of potential impact

High

#### Likelihood

About as likely as not

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

Yes, a single figure estimate

## Potential financial impact figure (currency)

140,800,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

## **Explanation of financial impact**



Explanation of approach used to calculate the figure:

If Implats' water supply was limited as a consequence of water scarcity in the region, Implats could be at risk of losing at least a day's worth of revenue due to production stoppages (considering that Implats is highly dependent on water for our operations). The estimated financial impact was calculated according to the average revenue losses that Implats would incur if they lost a day's worth of production. Implats could be at risk of losing an estimated R140.8 million per day, assuming production runs year round (365 days). This figure is the equivalent of an average day's lost revenue in FY2021 for the South African Impala Rustenburg operation.

## Primary response to risk

Secure alternative water supply

## **Description of response**

Implats' primary response to water scarcity risks is securing alternative water supplies at our Rustenburg operation. Impala Rustenburg secures alternative water supplies through the development and implementation of boreholes, robust water recovery processes at our three onsite water works , the use of tailings return water and the use of grey water from external sources. In addition, through the use of Implats' water management and water monitoring systems, Implats establishes site-specific water efficiency targets, such to ensure that our operations are minimally impacted by increased water scarcity. Implats has also responded to water scarcity through the implementation of water conservation and demand management programmes which enables operational demand simulation and the ongoing implementation of water recycling and detailed monitoring of use.

An example of Implats' response to water scarcity in the region includes Impala Rustenburg's use of scavenging boreholes that collectively supply an average of 1.15MI/day to operations. Thereby, securing an alternative water supply on site. In addition, Implats reached and exceeded its Group-wide water recycling target of 51% in FY2021, another example of Implats' response to water scarcity risks. Impala Rustenburg also continues to research alternative water sources for usage and alternative water storage capacity with the potential to minimise associated losses.

Implats' strategy focuses on water consumption and quality management and proposes a framework for operation-specific water conservation strategies, in line with our strategic commitment to reduce levels of potable water usage and to increase use of alternative water supplies. Progress in implementing our strategy is driven through the water management programme which includes a focus on driving operational excellence and engaging and partnering with relevant stakeholders.

Implats places a particular focus on managing water at Impala Rustenburg, which accounts for 47.8% of the Group's total water consumption. Implats have continued the phased development and implementation of operation-specific water conservation and water demand management plans at Impala Rustenburg operations, in line with



continued efforts to increase the percentage of water recycled and reduce the volume of water withdrawn. Implats prioritises using grey water for our operations. Our recycled water includes tailings return water and internal purified sewage effluent.

## Cost of response

81,000,000

## **Explanation of cost of response**

Explanation of approach used to calculate the figure:

Impala Rustenburg invested an amount of about R81 million into infrastructure development projects in South Africa in FY2021 in response to increased water scarcity risks. Infrastructure development projects included storm water and portable water infrastructure projects. Such projects were implemented to mitigate the risks associated with water scarcity in areas considered water stressed. Also included in the investment is the Magalies Water pipeline

## Country/Area & River basin

South Africa Olifants

## Type of risk & Primary risk driver

Acute physical Pollution incident

## **Primary potential impact**

Closure of operations

#### Company-specific description

Water is Implats' most significant environmental concern. The principal risks we face are increased water stress leading to potential operational disruptions, uncontrolled dirty water discharges into the environment and increasing costs associated with water supply and management. Implats strives for zero level 4 or 5 environmental and water-related incidents and has not recorded such incident at any of their operations since 2013. The principal potential impacts of our activities on communities relate to the pollution of soil, surface water, ground water and air quality. Consequently, Implats seeks to minimise the adverse effects of our mining activities on surrounding surface and groundwater.

How the impact identified will affect Implats' direct operations:

Poor-quality water can be harmful to the environment and human health, can affect mining and processing equipment, and presents closure liabilities. Uncontrolled release of process water from surface dams into nearby streams can result in a delay or



disruption in production capacity or, depending on severity, cause operational closure while the pollution incident is addressed. The volume and quality of water allowed to be discharged by our operations is regulated. Any unplanned discharges or regulatory breaches are investigated immediately and reported as environmental incidents, while root causes are addressed promptly. When a pollution incident does occur, each incident is investigated, and remedial action is put in place. Where necessary, additional training is provided to operations personnel.

#### **Timeframe**

1-3 years

## Magnitude of potential impact

Medium

#### Likelihood

Likely

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

Yes, a single figure estimate

## Potential financial impact figure (currency)

25,500,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

## **Explanation of financial impact**

Explanation of approach used to calculate the figure:

If Implats' operations were closed for a day due to water supply constraints or compliance issues caused by the water-related pollution incident, Implats could be at risk of losing at least a day's worth of revenue due to production stoppages (considering that Implats is highly dependent on water for our operations). The estimated financial impact was calculated according to the average revenue losses that Implats would incur if losing a day's worth of production at Implats' Marula operation in South Africa. Implats could be at risk of losing an estimated R25.5 million per day.

#### Primary response to risk

Improve pollution abatement and control measures

## **Description of response**

In response to risks associated with uncontrolled dirty water discharges into the environment, Implats has and will continue to improve pollution abatement and control measures across operations. At executive management level, the Group Executive:



Safety, Health and Environment is responsible for Implats' water strategy and water management initiatives. At board level, the Health, Safety and Environment board subcommittee is responsible for monitoring our water strategy and risk. Implats' environmental mitigation activities focus on promoting responsible water stewardship by minimising water use and water pollution. Furthermore, Implats operating procedures at the TSFs require regular inspections (daily, weekly and monthly) of pipelines, deposition areas and dams, as well as the recording of readings that indicate the retained water level in the dam walls. Each operation has been mandated to appoint an Engineer of Record.

The South African operations maintain a focus on improving levels of compliance to water use licences (WULs) in terms of the National Water Act with an emphasis on the separation of clean and dirty water systems. In improving compliance with WULs, Impala Rustenburg and Marula operations continue to focus on storm water management and clean and dirty water separation systems. Marula is also seeking to optimise its metering system in order to improve the accuracy of its water balance. In South Africa, we review and submit our integrated water and waste management plans, and our rehabilitation strategy and implementation plan to the Department of Water and Sanitation annually. This ensures that we continue to uphold WUL requirements and improve on pollution abatement and control measures. In response to this risk, Marula plans to amend the WUL to include additional surface storage dams. In addition, the response includes the development and implementation of water-related infrastructure that will assist in pollution abatement and existing control measures. Infrastructure includes tailings storage facility plume treatment. This will reduce closure liability, and potential legal liability. Marula also plans to line the surface water dams to ensure compliance with Marula's WUL. Additional surface dams and pumping is also planned to increase recycled water capacity and decrease water costs. It is important to note that in response to this risk, there was a 56% reduction in level 3 incidents in comparison to FY2020.

#### Cost of response

12,500,000

#### **Explanation of cost of response**

Explanation of approach used to calculate the figure:

In response to uncontrolled dirty water discharges and other water-related risks, Marula has invested in several water-related infrastructure projects. From FY20 the following initiatives in Marula to assist with pollution abatement and control measures:

- 1) Tailings storage facility contamination plume treatment: R7 million
- 2) Lining and formalising surface dams: R3 million
- 3) Water recycling improvement infrastructure: R2.5 million



South Africa Limpopo

## Type of risk & Primary risk driver

Regulatory

Increased difficulty in obtaining withdrawals/operations permit

## **Primary potential impact**

Reduction or disruption in production capacity

## Company-specific description

Implats' Rustenburg operation is located in South Africa, a country considered a water-stressed area according to the WRI Aqueduct Tool. Climate change predictions indicate South Africa is expected to experience increased water stress in the future. As water stress increases in South Africa, the South African Department of Water Affairs may place stricter requirements on mining operations to reduce the amount of water they are allowed to withdraw, particularly as mining operations are often the largest consumers of water in the communities within which they operate. Furthermore, the South African Department of Water Affairs may encourage tighter control mechanisms and expect increased water efficiencies within mining operations. These measures may impact Implats' ability to comply with water use licences (WUL) in terms of the National Water Act and increase Implats' difficulty in obtaining water withdrawals permits.

How the impact identified will affect Implats' direct operations:

Impala Rustenburg's WUL received in 2019 did not incorporate certain requested amendments and in FY2020, Rustenburg had to undertake a further amendment application to safeguard its compliance status. Each South African operations is required to conduct an annual or bi-annual external audits against their water use licences (WULs), environmental management programme reports (EMPR) and waste licences. This process may cause certain delays to operations. Impala Rustenburg may be required to halt certain aspects of operations while awaiting the approved of their WUL, this could lead to a reduction or disruption in production capacity. Decreased production could negatively impact Impala Rustenburg's revenues

#### **Timeframe**

Current up to one year

## Magnitude of potential impact

Medium

#### Likelihood

About as likely as not

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

Yes, a single figure estimate

## Potential financial impact figure (currency)



140,800,000

## Potential financial impact figure - minimum (currency)

## Potential financial impact figure - maximum (currency)

## **Explanation of financial impact**

Explanation of approach used to calculate the figure:

If Implats' water supply or water withdrawal capacity was limited due to failure to address certain requested water use licence amendments, Implats could be at risk of losing revenue due to production stoppages (considering that Implats is highly dependent on water for our operations). The estimated financial impact was calculated according to the average revenue losses that Implats would incur if they lost a day's worth of production. Implats could be at risk of losing an estimated R140.8 million per day, assuming production runs year round (365 days). This figure is the equivalent of an average day's lost revenue in FY2021 for the South African Impala Rustenburg operation.

## Primary response to risk

Engage with regulators/policymakers

#### **Description of response**

In response to this risk, Impala Rustenburg continues to engage with authorities to secure further amendments to its amended WUL application. Furthermore, Impala Rustenburg regularly engages with authorities in order to meet the necessary regulatory requirements. Our South African operations maintain a focus on improving levels of compliance to WULs in terms of the National Water Act with an emphasis on the separation of clean and dirty water systems. In improving compliance with WULs, Impala Rustenburg operations continue to focus on storm water management and clean and dirty water separation systems.

To ensure regulatory and legal compliance, Implats make use of the IsoMetrix software. The software is used at the South African operations to track legal compliance with licence conditions and monitor remedial action progress can be used to ensure that the targets fall within the boundaries of health and safety requirements, as well as ensuring optimal operational capabilities. In South Africa, we review and submit our integrated water and waste management plans, and our rehabilitation strategy and implementation plan to the Department of Water and Sanitation annually.

## Cost of response

250,000



## **Explanation of cost of response**

Explanation of approach used to calculate the figure:

The cost of engaging with regulators and policy makers amounts to R250 000 per annum. This cost involves managing the WUL renewal process through engagements with regulators in this regard. In addition to this cost, are the costs related to the amendment process, time spent on engagement with regulators, travelling costs involved with engagement and consultants' costs.

## Country/Area & River basin

South Africa Limpopo

## Type of risk & Primary risk driver

Acute physical Pollution incident

## **Primary potential impact**

Closure of operations

## Company-specific description

Water is Implats' most significant environmental concern. The principal risks we face are increased water stress leading to potential operational disruptions, uncontrolled dirty water discharges into the environment and increasing costs associated with water supply and management. Implats strives for zero level 4 or 5 environmental and water-related incidents and has not recorded such incident at any of their operations since 2013. The principal potential impacts of our activities on communities relate to the pollution of soil, surface water, ground water and air quality. Consequently, Implats seeks to minimise the adverse effects of our mining activities on surrounding surface and groundwater.

How the impact identified will affect Implats' direct operations:

Poor-quality water can be harmful to the environment and human health, can affect mining and processing equipment, and presents closure liabilities. Uncontrolled release of process water from surface dams into nearby streams can result in a delay or disruption in production capacity or, depending on severity, cause operational closure while the pollution incident is addressed. The volume and quality of water allowed to be discharged by our operations is regulated. Any unplanned discharges or regulatory breaches are investigated immediately and reported as environmental incidents, while root causes are addressed promptly. When a pollution incident does occur, each incident is investigated, and remedial action is put in place. Where necessary, additional



training is provided to operations personnel.

#### **Timeframe**

1-3 years

## Magnitude of potential impact

Medium

#### Likelihood

Likely

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

Yes, a single figure estimate

## Potential financial impact figure (currency)

140,800,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

#### **Explanation of financial impact**

Explanation of approach used to calculate the figure:

If Implats' operations were closed for a day due to water supply constraints or compliance issues caused by the water-related pollution incident, Implats could be at risk of losing at least a day's worth of revenue due to production stoppages (considering that Implats is highly dependent on water for our operations). The estimated financial impact was calculated according to the average revenue losses that Implats would incur if losing a day's worth of production at Implats' Rustenburg operation in South Africa. Implats could be at risk of losing an estimated R140.8 million per day.

#### Primary response to risk

Improve pollution abatement and control measures

#### **Description of response**

In response to risks associated with uncontrolled dirty water discharges into the environment, Implats has and will continue to improve pollution abatement and control measures across operations. At executive management level, the Group Executive: Safety, Health and Environment is responsible for Implats' water strategy and water management initiatives. At board level, the Health, Safety and Environment board subcommittee is responsible for monitoring our water strategy and risk. Implats' environmental mitigation activities focus on promoting responsible water stewardship by minimising water use and water pollution. Furthermore, in terms of the tailing facility management, Implats operating procedures at the TSFs require regular inspections (daily, weekly and monthly) of pipelines, deposition areas and dams, as well as the



recording of readings that indicate the retained water level in the dam walls. Each operation has been mandated to appoint an Engineer of Record. Drones are used at most of the facilities for surveillance and mapping stability movement.

The South African operations maintain a focus on improving levels of compliance to water use licences (WULs) in terms of the National Water Act with an emphasis on the separation of clean and dirty water systems. In improving compliance with WULs, Impala Rustenburg operations continue to focus on storm water management and clean and dirty water separation systems. In South Africa, we review and submit our integrated water and waste management plans, and our rehabilitation strategy and implementation plan to the Department of Water and Sanitation annually. This ensures that we continue to uphold WUL requirements and improve on pollution abatement and control measures. In response to this risk, Marula plans to amend the WUL to include additional surface storage dams. In addition, the response includes the development and implementation of water-related infrastructure that will assist in pollution abatement and existing control measures. Infrastructure includes tailings storage facility plume treatment. This will reduce closure liability, and potential legal liability. Additional surface dams and pumping is also planned to increase recycled water capacity and decrease water costs. It is important to note that in response to this risk, there was a 56% reduction in level 3 incidents in comparison to FY2020, with only 3 incidents at Rustenburg.

#### Cost of response

1,300,000

## **Explanation of cost of response**

In response to uncontrolled dirty water discharges and other water-related risks, Impala Rustenburg has invested R1,3 million for Storm Water Separation project and the Concentrator Processing Pollution Control System Phase 1.

## W4.2a

(W4.2a) Provide details of risks identified within your value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

#### Country/Area & River basin

Zimbabwe Zambezi

#### Stage of value chain

Supply chain

Type of risk & Primary risk driver



Acute physical Drought

## **Primary potential impact**

Reduction or disruption in production capacity

## Company-specific description

The region is projected to become generally drier under enhanced anthropogenic forcing, with an associated increase in droughts. During the period 2035-2064, a high likelihood of increased droughts is projected to occur. Increasing water scarcity because of rising demand, deterioration of bulk infrastructure and intermittent drought, will continue to pose a challenge to our operations and production capacity. A consulting firm was engaged to conduct a comprehensive water study for Zimplats in FY 2021. The objective was to identify key water supply risks and propose measures to assure medium to long term water supply for the mining operations and domestic use. The study report has played a key role in the development and refining of the Zimplats water strategy which is reviewed and improved on a continual basis. Zimplats obtains many of its water-reliant raw materials/consumables from Zimbabwe, thus, drought in Zimbabwe is a risk to Implats' supply chain. The drought led to lower dam levels and increased competition from other users for the limited water resources.

Electricity is a critical input for Implats' operations, without which the mines cannot operate. During FY21, Rising cost and unreliable supply of electricity resulting in business interruption was listed as one of Implats top risks. At Zimplats, they have an agreement to receive 100% of our electricity from a hydro-electric scheme (electricity is approximately 69% of total energy consumed at the operation). However due to capacity and technical challenges, currently on average 50% of the electricity consumed is generated from hydro-electric power. Zimplats also continues to utilise renewable energy (50%) from hydro-electricity sources obtained from Kariba dam. However, the prolonged drought, places increased pressure on hydro-electricity sources in the country, increasing the risks associated with reliable and secure energy supplies for our operations. To mitigate this risk, the Zimplats' operation needs to consider new or alternative energy supplies to maintain stable production levels at the operation. Reduced production levels at the Zimplats' operation could negatively impact revenue. As water scarcity increases in Zimbabwe, there may not be enough water capacity in the area to supply large water consumers such as mines. In periods of drought, suppliers will most likely prioritise water supply to residential areas over industry.

## **Timeframe**

1-3 years

## Magnitude of potential impact

High

## Likelihood

Likely



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

Yes, a single figure estimate

## Potential financial impact figure (currency)

54,900,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

## **Explanation of financial impact**

Explanation of the approached used to calculate this figure:

Should commodities such as electricity not be available for use by Zimplats' operations, the Group faces the possibility of production losses associated with the cease of production. The financial impact figure was, therefore, calculated by quantifying one day's lost revenue at the Zimplats' operation. The potential financial impact is estimated to be R54.9 million/day. This figure is the equivalent of an average day's lost revenue in FY2021 for the Zimbabwean operation

## Primary response to risk

Direct operations
Increase investment in new technology

## **Description of response**

To mitigate water-related disruptions caused to the value chain, Implats continues to increase investment in new technologies. New technologies aim to reduce the risks related to the exposure of Zimbabwe's hydroelectric utilities, as well as the waterdependent value chain, to associated water scarcity. Implats has invested in targeted fuel cell development in collaboration with government and academic institutions to help promote local technology development and develop local skills and fuel cell manufacturing. Zimplats has investigated numerous water-related adaptation projects. For instance, the project to harness treated Mupani village sewage effluent for use in gardens was undertaken during the year, bankable feasibility studies to reduce Chitsuwa dam water transmission losses through pipeline extension and the harnessing of water from nearby flooded old chrome mines shafts were conducted during the year. The bankable feasibility study to recycle Turf sewage effluent was conducted in FY2021. The project is envisaged to recycle more than 2 000ML of sewage effluent per year which significantly reducing abstraction volumes of freshwater resources. Increased investments in new technology includes investigating alternative energy supply for our Zimplats' operations. During FY21, Zimplats is finalising a feasibility study to evaluate the construction of a large-scale (>100MW) solar PV plant and has applied for a generation licence from authorities. The project will reduce the demand on the national power grid and could potentially channel excess power generated to



surrounding communities. Zimplats complies with new regulations requiring solar water heating systems to be incorporated in all new premises designs and extensions or alterations or retrofitting to existing premises. Zimplats continues to increase its uptake of solar lighting and heating. The previous year, the operation installed solar powered boreholes and storage tanks at local schools and streetlights in villages.

In addition, Implats' has looked into alternate plans such as increased supplier engagement. Implats is a member of the Energy Intensive Users Group, and this helps Implats identify efficiency methods that are appropriate for such sectors. Implats has implemented an SAP Ariba system that will assist in screening suppliers on various legal compliance criteria, including health, safety and labour practices. Implats also conducts ad hoc supplier audits against its standards.

## **Cost of response**

125,000,000

## **Explanation of cost of response**

Explanation of approach used to calculate response:

From FY2020, Energy conservation and energy efficiency initiatives implemented in Implats for costed the company over R125 million. This comprises an investment of R100m spent on energy conservation initiatives over the last four years (once-off cost); an investment of R25 million in targeted fuel cell development (once-off cost) and the annual fee of R165 000 for membership to the Energy Intensive Users Group (reoccurring cost).

## W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized

## W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

## Type of opportunity

Efficiency

## Primary water-related opportunity

Improved water efficiency in operations



## Company-specific description & strategy to realize opportunity

Implats' southern Africa operations are located in water stressed areas, which results in high water costs. Implats is cognisant of the impact our water usage has on the communities with which we share natural resources. Particularly, as these communities are in water stressed areas and are mostly considered as vulnerable communities. As such, water efficiency initiatives can not only pose a financial benefit through potential water cost savings, but also aid Implats in reducing our water footprint to ensure water supply security for neighbouring communities. By increasing water use efficiency in our operations, Implats could access two main opportunities: 1) reduced operational expenditures related to water (cost savings), and 2) an opportunity to provide water to local communities who struggle with water supply security.

Implats has a group-wide strategy in place to realize this opportunity. The strategy to achieve water efficiencies and costs savings at all Implats' operations includes initiatives which assist in 1) reducing Implats' potable water consumption; 2) the optimisation of industrial water-use; and 3) increasing water recycling. The action to realize the opportunity of cost savings includes Implats' water recycling strategy and its associated targets.

The water recycling target is a group-wide opportunity that covers the South African, Zimbabwean and Canadian operations. The strategy in action aims for Implats to achieve a target of 44% recycled water used across all operations. For example, in FY2021 51% of water consumed at operations was recycled water against a target of 44%. All operations have exceeded the group target to date. Surface and groundwater monitoring programmes support the recycling/reuse initiatives at Implats. Another example of the strategy in action is Implats investigations into improving water efficiency at the group's tailings storage facilities. Impala Canada invested \$50 million in water management systems over the last five years. As a result, more than 80% of the water we use at our LDI Mine, mill, tailings pond and camp is recycled. Simultaneously, we conduct tests almost daily on our monitoring wells and treated water discharge site, as well as on the surrounding lakes. We also monitor "reference lakes"— bodies of water located up to 30 kilometres away — to ensure that our recycled water meets legislated standards, and is benefiting the surrounding environment.

#### Estimated timeframe for realization

1 to 3 years

#### Magnitude of potential financial impact

Medium

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

Yes, a single figure estimate

## Potential financial impact figure (currency)

116,800,000

## Potential financial impact figure - minimum (currency)



## Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact**

The financial impact figure was calculated by quantifying the cost savings achieved through Implats' recycling target at the Impala Rustenburg operation. The financial benefit of the opportunity represents the amount of money saved by recycling water instead of purchasing water from the local municipality. The calculated cost of municipal water is R10 660 per megalitre (MI), while the volume of water recycled at Impala Rustenburg in FY2021 was 10 953MI. Thus, the financial benefit of the opportunity would be the volume of water recycled multiplied by the cost of municipal water. The benefit of recycling water at Impala Rustenburg in FY2021 amounted to R116.8million. This quantifies the cost savings achieved through water recycling initiatives, as the R116.8 million no longer needed to be spent on purchasing municipal water for use at the Rustenburg operation.

## Type of opportunity

Resilience

## **Primary water-related opportunity**

Increased supply chain resilience

#### Company-specific description & strategy to realize opportunity

Implats has the opportunity to increase supply chain resilience by continuing to implement measures that assist the operations to reach or exceed the group water recycling target of 44%. By decreasing their reliance on upstream water supplies by making use of water efficient practices and focusing on water conservation methods, Implats will both save money from their operations and benefit from upstream/downstream users' satisfaction due to increased water availability. Upstream and downstream water users may benefit from increased water supplies due to Implats' conservation efforts. The respective operations will benefit as increased water efficiency and conservation practices will serve as buffers in times of water stress or scarcity, and which may result in work stoppages or reduced productivity. Implats' strategy to realise this opportunity is based on the continued implementation of projects to reduce potable water consumption through the optimisation of industrial water-use and water recycling. An example of how this strategy is being implemented is the group's recycled water target of 44%. In FY2021, all operations exceeded the group target of 44%. Recycling/reuse is supported through surface and groundwater monitoring programmes. An example is Implats' investment in the development of a water balance simulation model to plan for wet and dry seasons. The investigations include options for sourcing and storage of potable water as well as storing of grey water.

#### Estimated timeframe for realization

1 to 3 years



## Magnitude of potential financial impact

High

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

Yes, a single figure estimate

## Potential financial impact figure (currency)

116,758,980

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

## **Explanation of financial impact**

The financial impact figure was calculated by quantifying the cost savings achieved through Implats' recycling target at the Impala Rustenburg operation. The financial benefit of the opportunity represents the amount of money saved by recycling water instead of purchasing water from the local municipality. The calculated cost of municipal water is R10 660 per megalitre (MI), while the volume of water recycled at Impala Rustenburg in FY2021 was 10 953MI. Thus, the financial benefit of the opportunity would be the volume of water recycled multiplied by the cost of municipal water. The benefit of recycling water at Impala Rustenburg in FY2021 amounted to R116.8million. This quantifies the cost savings achieved through water recycling initiatives, as the R116.8 million no longer needed to be spent on purchasing municipal water for use at the Rustenburg operation.

#### Type of opportunity

Markets

#### Primary water-related opportunity

Improved community relations

## Company-specific description & strategy to realize opportunity

Implats has a responsibility to the communities within which it operates, particularly in vulnerable communities exposed to several resource-related risks. Being a large user of water in water-stressed areas means that Implats must actively participate in aiding communities in mitigating water supply risks and upholding water stewardship practices. Engaging and supporting local communities is crucial for improving community relations, and securing the Group's social licence to operate. One strategy to realize the opportunity is through our water-related community projects. Access to clean water and sanitation are necessities. Accessing adequate water supply is a challenge in many of the communities around our southern African operations. By enhancing community access to safe water, Implats improve community relations in these areas. Implats' operations have addressed supply constraints in vulnerable host communities through major infrastructure projects and continue to focus on alleviating water



shortages. Implats assists with strategic regional planning, local service provision, and work with local stakeholders to address immediate needs. We participate in water boards in the areas where we operate, and we assist with ensuring that bulk infrastructure is maintained, and long-term planning is in place. At a direct local level, we are working with stakeholders, specifically municipalities, school principals and governing bodies on water conservation. Implats' community development projects are largely focused on municipal infrastructure development. During FY2021, water infrastructure was installed and repaired to ensure a constant flow of fresh water into reservoirs. The quality of the school learning environment in several communities and rural schools near Zimplats' operations is significantly compromised by a lack of access to potable water. 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. With most surface water points dry due to the drought; the borehole sites also serve as watering points for livestock. Furthermore, since 2008 Implats has drilled more than 60 boreholes to improve the community access to potable water. As for Marula, Pilot study on TSF contamination plume to improve water security in community areas has been implemented.

#### Estimated timeframe for realization

Current - up to 1 year

#### Magnitude of potential financial impact

Low-medium

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

Yes, a single figure estimate

#### Potential financial impact figure (currency)

12,600,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact**

Explanation of financial impact Approach used to calculate the figure:

The financial impact figure was the amount spent by Implats on community development projects in FY2021 at Impala South African operations. Although this is regarded as a financial expense for Implats, the benefit of these projects is expected to be realized in the next financial period and the years to follow. The water supply infrastructure installed at Rustenburg and Zimplats benefits the community members in the surrounding areas. These projects assist Implats in improving community relations, which ultimately secures our social licence to operate in the surrounding communities



## W5. Facility-level water accounting

## W5.1

(W5.1) For each facility referenced in W4.1c, provide coordinates, water accounting data, and a comparison with the previous reporting year.

## Facility reference number

Facility 1

## Facility name (optional)

Impala Rustenburg

## Country/Area & River basin

South Africa Limpopo

## Latitude

-25.657804

#### Longitude

27.226435

#### Located in area with water stress

Yes

## Total water withdrawals at this facility (megaliters/year)

13.331

## Comparison of total withdrawals with previous reporting year

About the same

## Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

1,846

## Withdrawals from brackish surface water/seawater

0

## Withdrawals from groundwater - renewable

345

## Withdrawals from groundwater - non-renewable

0

## Withdrawals from produced/entrained water

0



## Withdrawals from third party sources

11.140

Total water discharges at this facility (megaliters/year)

0

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

13.331

Comparison of total consumption with previous reporting year

About the same

## Please explain

Water withdrawals increased by 1.56% from the previous year. There is no water discharge at Rustenburg. The Rustenburg operation has scavenging boreholes that collectively supply an average of 1.15Ml/day, although water withdrawals from groundwater decreased by 30% from the previous reporting year.

The levels of water recycling vary across seasons and operations plan to set quarterly targets accordingly. Impala Rustenburg also continues to research alternative water sources for usage and alternative storage capacity with the potential to minimise water losses in the future. Unit consumption rate of water (water intensity) marginally improved to 2.18 kl/tonne of ore milled, from 2.20 kl/tonne in 2020 at Implat's operations.

The total water consumption was calculated by subtracting the metered water discharged volumes from the metered withdrawal volumes. Total water consumption was slightly higher with a increase of around 2% from the previous reporting period.

Implats defines "about the same" to be between 0 - 10%. Changes of +/-10% are considered to be higher/ lower. Changes of +/-40% are considered much higher/lower.



## Facility reference number

Facility 2

# Facility name (optional)

Marula

# Country/Area & River basin

South Africa Olifants

#### Latitude

-24.503009

## Longitude

30.082798

#### Located in area with water stress

Yes

# Total water withdrawals at this facility (megaliters/year)

1.967

# Comparison of total withdrawals with previous reporting year

About the same

# Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

## Withdrawals from brackish surface water/seawater

0

# Withdrawals from groundwater - renewable

561

# Withdrawals from groundwater - non-renewable

0

# Withdrawals from produced/entrained water

0

# Withdrawals from third party sources

1,406

# Total water discharges at this facility (megaliters/year)

0

# Comparison of total discharges with previous reporting year

About the same

## Discharges to fresh surface water



0

## Discharges to brackish surface water/seawater

0

## Discharges to groundwater

0

# Discharges to third party destinations

0

# Total water consumption at this facility (megaliters/year)

1,967

## Comparison of total consumption with previous reporting year

About the same

## Please explain

Water withdrawals at Marula remained about the same, increasing by a marginal 10% compared to the previous reporting year, a 10% increase is defined as about the same by Implats. There is no water discharge at the Marula operation. The slight increase in the water withdrawn at Marula is attributed to a marginal increase in third party sources at the Marula operation, FY2021: 1406 MI vs FY2020: 1328 MI. The operation is constructing a best-practice tailings facility that is expected to enable a significant increase in water recycled in the future.

The total water consumption was calculated by subtracting the metered water discharged volumes from the metered withdrawal volumes. Total water consumption was slightly higher with an increase of around 10% from the previous reporting period. This is attributed to the increase of municipal water provided.

Implats defines "about the same" to be between 0-10%. Changes of +/-10% are considered to be higher/lower. Changes of +/-40% are considered much higher/lower.

## **Facility reference number**

Facility 3

# Facility name (optional)

Refineries

## Country/Area & River basin

South Africa

#### Latitude

Vaal

-26.224931



# Longitude

28.439836

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

862

Comparison of total withdrawals with previous reporting year

Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

862

Total water discharges at this facility (megaliters/year)

0

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

n

Total water consumption at this facility (megaliters/year)

862



# Comparison of total consumption with previous reporting year

Higher

## Please explain

Total water withdrawn increased by a marginal 19.33% compared to the previous reporting period, this is due to a increase in the amount of municipal water bought. There is no water discharged at the Refineries operation. There was more production as compared to the previous year. 6E receipts in matte and concentrate from mine-to-market operations increased by 14% to 1.38 million ounces (FY2020: 1.21 million ounces) reflecting a recovery from a series of operational constraints in the prior year. 6E receipts from third-party customers increased by 9% to 358 000 ounces (FY2020: 327 000 ounces).

The total water consumption was calculated by subtracting the metered water discharged volumes from the metered withdrawal volumes. Total water consumption was higher with an increase of around 19.33% from the previous reporting period. This is attributed to the increase of municipal water provided.

Implats defines "about the same" to be between 0 - 10%. Changes of +/-10% are considered to be higher/ lower. Changes of +/-40% are considered much higher/lower.

## **Facility reference number**

Facility 4

## Facility name (optional)

Zimplats

## Country/Area & River basin

Zimbabwe Zambezi

#### Latitude

-18.664262

## Longitude

30.352324

### Located in area with water stress

Yes

## Total water withdrawals at this facility (megaliters/year)

6,717

# Comparison of total withdrawals with previous reporting year

Lower



# Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

6.093

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

624

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

294

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

294

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

6,423

Comparison of total consumption with previous reporting year

Lower

## Please explain

Water withdrawals at the Zimplats' operation remained about the same, with a slight decrease of 10%. Water discharged at Zimplats increase much higher, increasing by 84% compared to the previous reporting period.

The reason for the higher discharge volumes in FY21 as compared to FY20 is the difference in rainfall received. Ngezi recorded a total of 329mm in FY20 (a drought year) and 1 172mm in FY21, SMC received 487mm in FY20 and 937mm FY21.



The total water consumption was calculated by subtracting the metered water discharged volumes from the metered withdrawal volumes. Total water consumption was much lower with a decrease of around 12% from the previous reporting period. This is attributed to the increase of water discharge at Zimplats.

Implats defines "about the same" to be between 0-10%. Changes of +/-10% are considered to be higher/ lower. Changes of +/-40% are considered much higher/lower.

# Facility reference number

Facility 5

## Facility name (optional)

Impala Canada

# Country/Area & River basin

Canada

St. Lawrence

#### Latitude

49.090768

## Longitude

-89.390105

## Located in area with water stress

No

# Total water withdrawals at this facility (megaliters/year)

2,026

## Comparison of total withdrawals with previous reporting year

Much higher

# Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

1,293

# Withdrawals from brackish surface water/seawater

0

## Withdrawals from groundwater - renewable

733

## Withdrawals from groundwater - non-renewable

0

## Withdrawals from produced/entrained water



0

## Withdrawals from third party sources

O

# Total water discharges at this facility (megaliters/year)

458

# Comparison of total discharges with previous reporting year

Much higher

## Discharges to fresh surface water

458

## Discharges to brackish surface water/seawater

0

## Discharges to groundwater

0

## Discharges to third party destinations

0

# Total water consumption at this facility (megaliters/year)

1,568

#### Comparison of total consumption with previous reporting year

Much higher

## Please explain

Implats acquired Impala Canada during the 2020 reporting year. Impala Canada had been measuring water volumes previous to this reporting year; however, this did not form part of Implats' water monitoring process until second half of FY2020. As a result, FY2021 will be the first year in which a full year measurements were taken compared to only 6 months of FY2020. As a result, FY20201 was relatively higher to FY2020 measurements. Impala Canada withdraws water from both freshwater and renewable groundwater sources, and it has increased by 120% in comparison to FY2020 withdrawals.

The total water consumption was calculated by subtracting the metered water discharged volumes from the metered withdrawal volumes. Total water consumption was much higher with a increase of around 120% from the previous reporting period. This is attributed to the water measurements being a full year, while FY2020 water measurements were only accounted for 6 months.

Implats defines "about the same" to be between 0 - 10%. Changes of +/-10% are considered to be higher/lower. Changes of +/-40% are considered much higher/lower.



# W5.1a

# (W5.1a) For the facilities referenced in W5.1, what proportion of water accounting data has been third party verified?

#### Water withdrawals - total volumes

#### % verified

76-100

### Verification standard used

Standards used: Implats conducted assurance engagement in accordance with the International Standard on Assurance Engagements 3000 (Revised) and Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000 (Revised)) issued by the International Auditing and Assurance Standards Board.

Methodology: Nexia SAB&T's assurance methodology is undertaken in accordance with ISAE 3000 (Revised) and involves planning and performing engagement to obtain the appropriate level of assurance about whether the selected sustainability information is free from material misstatement. The methodology involves assessing the suitability of the Company's use of its reporting criteria as the basis of preparation for the selected sustainability performance information.

The scope of the methodology: involves performing procedures to obtain evidence about the measurement of the selected sustainability information and related disclosures in the report, the scope included inquiries, observation of processes followed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies and agreeing or reconciling with underlying records.

# Water withdrawals - volume by source

### % verified

76-100

## Verification standard used

Standards used: Implats conducted assurance engagement in accordance with the International Standard on Assurance Engagements 3000 (Revised) and Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000 (Revised)) issued by the International Auditing and Assurance Standards Board.

Methodology: Nexia SAB&T's assurance methodology is undertaken in accordance with ISAE 3000 (Revised), and involves planning and performing engagement to obtain



the appropriate level of assurance about whether the selected sustainability information is free from material misstatement. The methodology involves assessing the suitability of the Company's use of its reporting criteria as the basis of preparation for the selected sustainability performance information.

The scope of the methodology: involves performing procedures to obtain evidence about the measurement of the selected sustainability information and related disclosures in the report, the scope included inquiries, observation of processes followed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies and agreeing or reconciling with underlying records.

## Water withdrawals - quality by standard water quality parameters

### % verified

Not verified

## Please explain

Water withdrawals by quality is not a commonly requested indicator, apart from the CDP Water disclosure programme.

As this is not a common externally verified parameter, Implats does not make use of an external verification body to verify its water withdrawals quality.

## Water discharges - total volumes

### % verified

Not verified

### Please explain

This parameter is not externally verified as, in the cases where discharges occur, they are monitored in accordance with licence conditions agreed with the local environmental and water regulator (quality and volume). Each discharge destination is monitored and measured by Impala Platinum to ensure compliance with regulations at all operations.

# Water discharges - volume by destination

### % verified

Not verified

## Please explain

This parameter is not externally verified, as in the cases where discharges occur, they are monitored in accordance with licence conditions agreed with the local environmental and water regulator (quality and volume). Each discharge destination is monitored and measured by Impala Platinum to ensure compliance with regulations at all operations.

## Water discharges - volume by final treatment level



#### % verified

Not verified

## Please explain

This parameter is not externally verified, as in the cases where discharges occur, they are monitored in accordance with licence conditions agreed with the local environmental and water regulator (quality and volume). Each discharge destination is monitored and measured by Impala Platinum to ensure compliance with regulations at all operations.

## Water discharges – quality by standard water quality parameters

## % verified

Not verified

## Please explain

This parameter is not externally verified, as in the cases where discharges occur, they are monitored in accordance with licence conditions agreed with the local environmental and water regulator (quality and volume). Each discharge destination is monitored and measured by Impala Platinum to ensure compliance with regulations at all operations.

## Water consumption - total volume

#### % verified

76-100

#### Verification standard used

Standards used: Implats conducted assurance engagement in accordance with the International Standard on Assurance Engagements 3000 (Revised) and Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000 (Revised)) issued by the International Auditing and Assurance Standards Board.

Methodology: Nexia SAB&T's assurance methodology is undertaken in accordance with ISAE 3000 (Revised), and involves planning and performing engagement to obtain the appropriate level of assurance about whether the selected sustainability information is free from material misstatement. The methodology involves assessing the suitability of the Company's use of its reporting criteria as the basis of preparation for the selected sustainability performance information.

The scope of the methodology: involves performing procedures to obtain evidence about the measurement of the selected sustainability information and related disclosures in the report, the scope included inquiries, observation of processes followed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies and agreeing or reconciling with underlying records.



# **W6.** Governance

# W6.1

# (W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

# W6.1a

# (W6.1a) Select the options that best describe the scope and content of your water policy.

	Scope	Content	Please explain
Row 1	Companywide	Description of business dependency on water Description of business impact on water Company water targets and goals Commitment to stakeholder awareness and education Commitment to water stewardship and/or collective action Acknowledgement of the human right to water and sanitation	Rationale for the scope selected: Implats' commitment to responsible water stewardship is reflected by the integration of water-related issues into our company-wide Water Policy. Implats' Water Policy is company-wide in scope and includes all managed and joint venture operations, employees and contractors working at our operations. Incorporating water-related responsibilities and commitments in the Water Policy communicates our commitment to 'maximise the positive impacts PGMs have on the environment and minimise or eliminate any negative impacts'. Implats' Water Policy assists the Group in managing risks and opportunities associated with water and related environmental issues. Implats is aware that equitable and secure access to water is a significant environmental and socio-economic concern.  Overview of policy content: Water is Implats most significant environmental concern, consequently Implats' policy commits to water stewardship across operations. The Water Policy provides direction for company-wide water targets and goals to uphold our commitment to water stewardship. In addition, Implats commits to promoting stakeholder awareness and water-related education, such as encouraging participation in water management programmes and related awareness initiatives.  Furthermore, Implats' strives to integrate water concerns into everyday practices across operations. Implats complies with all applicable water-related regulations and executes strategic and operational decisions informed by water constraints and targets. As a big water user,



# W6.2

(W6.2) Is there board level oversight of water-related issues within your organization?  $_{\mbox{\scriptsize Yes}}$ 

# W6.2a

(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual	Please explain
Board-level committee	Implats identifies their material environmental, social and governance (ESG) focus areas through structured risk management process and materiality process, with consideration to the views and interests of their stakeholders. Implats addresses sustainability (including water) issues quarterly at board-level through two subcommittees: the social, transformation and remuneration (STR) committee and the health, safety, and environment (HSE) committee. The HSE is responsible for monitoring water strategy and risk, and the governance and monitoring of the environment. The HSE oversees strategy implementation, assesses the adequacy and appropriateness of HSE policies, standards and procedures and reviews Groupwide performance and risk management practices. The HSE investigates and reviews all major incidents, including water-related incidents.  Example: the decision to progress Implats' water conservation strategies, in line with the Group's commitment to reduce levels of potable water and increase operational reliance on recycled water, as well as approving Group-wide water recycling targets. Furthermore, a decision was made to include water security as a top 13 group risk in FY2021.

# W6.2b

(W6.2b) Provide further details on the board's oversight of water-related issues.

Frequency that	Governance	Please explain
water-related	mechanisms into	



	issues are a	which water-related	
	scheduled	issues are	
	agenda item	integrated	
Row 1	Scheduled - all meetings	Monitoring implementation and performance Overseeing major capital expenditures Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Setting performance objectives	Implats addresses sustainability issues (including water-related issues) at board level, through the health, safety, and environmental (HSE) committee. The HSE committee is responsible for the group's health and safety concerns, as well as environmental issues. At Board level, the committee monitors the implementation of the Group's strategy as it relates to employees' health, safety and protection of the environment.  The HSE committee is responsible for overseeing the Group's approach and performance in managing mine closure, rehabilitation, and biodiversity impacts. At Board-level, the HSE committee consists of independent non-executive directors, supporting a strong risk governance framework. The HSE committee monitors and reviews the Group's risk profile and effectiveness of all risk management activities and ensure health and safety policies and procedures are implemented. The HSE committee also monitors the Group's adherence to agreed risk limit. The HSE ensures that the board, as a collective, works towards managing the foreseen risks (including the risks associated with water) effectively and maintains responsibility for the risks assigned to the committee.  Group-wide performance monitoring and reporting of identified risks and risk mitigation action plans are derived quarterly. Board-level committee meetings are held quarterly to ensure that all proposed strategies are adequately reviewed, approved, and continually monitored and reported on.  The HSE committee is responsible for the review of Group-wide performance and risk management practices on a quarterly basis. These governance mechanisms contribute to the board's oversight of Implats' socio-economic, environmental, health and safety programs, including water responsibilities.



	Through the monitoring of implementation and
	capital expenditure regarding water risks, Implats'
	board remains consistently aware of pending water-
	related issues. This is similarly maintained through
	reviewing and guiding strategies; major plans of
	actions; risk management policies; water policies;
	· · · · · · · · · · · · · · · · · · ·
	annual budgets and business plans.
	Assisted by the HSE, the Board is able to monitor
	the implementation and performance of objectives;
	goals and targets for addressing water-related
	issues. Implats' performance is monitored through
	key performance indicators. This ensures that any
	material changes to Implats' risk profiles are
	evaluated in the context of risk appetite and risk
	tolerance limits; and those necessary actions are
	taken in a timely manner. In South Africa the
	directors of a company may be held directly and
	legally responsible for water related impacts.
	Therefore, Implats' Board of Directors hold the
	highest level of direct responsibility for water within
	the company.

# W6.2d

# (W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues
Row	Yes	Competence is measured by the qualification an individual
1		holds. The competent board member has a BSc
		Environmental studies qualification.

# W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)

Other C-Suite Officer, please specify

The Exco made up of Chief Executives



# Responsibility

# Frequency of reporting to the board on water-related issues

Quarterly

## Please explain

Sustainability falls under the responsibility of the executive committee (Exco). The Exco consists of the chief executives of Implats, forming a part of the top level of the corporate structure. The Group has appointed a Group Executive: Sustainability who is responsible for developing the environmental strategy and reviewing performance in terms of the Group's non-financial indicators, such as water. The Exco lends support to the board's HSE committee. The HSE is responsible for oversight of the Environmental, Social and Governance (ESG) Report. The ESG Report provides Implats' stakeholders – including employees, local communities, non-governmental organizations, investors and customers – with a transparent account of how Implats addressed material sustainability issues faced during 2021. Water-related responsibilities of the Exco include assessing and managing water-related risks and opportunities and water management and infrastructure budget decisions.

## Name of the position(s) and/or committee(s)

Facilities manager

## Responsibility

## Frequency of reporting to the board on water-related issues

More frequently than quarterly

#### Please explain

The UTS Engineer and Manager deal with all the potable water contracts as well as effluent (at Rustenburg Water and Sewage Treatment plant) from town and the internal sewerage treatment plants. They also manage all flow meters and monitoring of water quality.

# W6.4

# (W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	



# W6.4a

# (W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive	Performance indicator	Please explain
Monetary reward	Other C-suite Officer Group Executive: Safety, Health and Environmental Other, please specify Group Head: Environmental	Reduction of water withdrawals Reduction in consumption volumes Increased access to workplace WASH Implementation of water-related community project Other, please specify Promoting environmental stewardship	Implats' CEO is responsible for signing off the Group strategy, with operations executive responsible for developing and implementing management plans such as efficiency projects and other activities related to achieving the water recycling target of 44% in direct operations. The chosen indicator is, thus, achieving the water recycling target of 44%.  The rationale for selecting this indicator is due to recycling water allowing Implats' operations to withdraw less water, which results in more efficient water usage. As water is a shared resource, Implats' reduced freshwater demands will increase water security for host communities and will meet the social licence to operate. Reduced withdrawal demands from third party sources will also improve the operational costs associated with water withdrawn.  The threshold of success for this indicator is the 44% water recycling target. The timescale in which this indicator must be met is annually. For example, in FY21, 51% of total water consumed was recycled. Total remuneration is determined by the key performance indicators agreed between the Social Transformation and Remuneration (STR) committee and the employee. The CEO and the corporate executive team obtain incentives of 2.5% and 1.35% respectively of key performance indicators weighted towards safety, health, environment and community as part of the company's short-term incentives.



Non-	Corporate	Other, please	Performance indicator chosen: the executive
Non-monetary reward	Corporate executive team	Other, please specify Reduction in environmental incidences	Performance indicator chosen: the executive committee is responsible for the formulation and implementation of water management plans. This includes plans to implement water efficiency projects and other activities related to achieving the group's reduction in water-related environmental incidences.  The rationale for selecting this indicator is because reduced water-related incidences improves Implats' social licence to operate within the respected communities. Such indicator is another indicator that the executive committee receives recognition for. Since water is a shared resource, by reducing Implats' water-related environmental incidences, it is possible to increase the security of water supplies for host communities and local environments that are both upstream and downstream of Implats' operations.  The threshold of success for these indicators varies. Thresholds include improved relationships with communities and other stakeholders (both upstream and downstream of Implats' operations). Improved stakeholder relationships can improve Implats' reputation and social licence to operate. 1.35% of the senior executives' key performance indicators
			are weighted towards safety, health, environment and community.

# W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, direct engagement with policy makers

# W6.5a

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?



Implats' environmental policy outlines the Group's commitment to effective management of resources, reduced impact on the environment and host communities, and legislative compliance. The policy stipulates the methods with which Implats' practices stewardship towards natural resources and aims to mitigate the unavoidable environmental impacts of mining activities, including impacts on water resources. It also commits to training and educating their employees in environmental responsibilities. It is used as a basis for stakeholder engagements that influence policy. It commits Implats' operations to running processes in an environmentally responsible manner, safeguarding the well-being of all.Waterrelated areas within the policy include promoting water stewardship by minimizing water use and pollution. The process to ensure consistency with the policy is entrenched in Implats' stakeholder engagement procedures. This allow Implats to manage multiple water-related engagement activities across different business divisions, ensuring a common approach that is consistent with the group's strategy on water security, stewardship and management.Responsibilities for engagements with stakeholders are sub-delegated to specialist personnel and operational executives, depending on the nature of the issue. If any inconsistencies arise in terms of alignment with Implats' water strategies, these are dealt with on a case-by-case basis, by making constant reference to the environmental policy

# **W6.6**

# (W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

Yes (you may attach the report - this is optional)

Implats Annual Integrated Report\_2021.pdf

# W7. Business strategy

# W7.1

# (W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water- related issues integrated?	Long- term time horizon (years)	Please explain
Long-term business objectives	Yes, water- related issues are integrated	21-30	Implats integrates water issues that evaluate long-term water usage, discharge and efficiency, as well as relevant water-related issues experienced post-mine life into the Group's mine closure and rehabilitation plans. The Group integrates mine-closure planning into life-of-mine planning with a focus on rehabilitating land in parallel with mining activities, while ensuring the protection of water. Implats'



			closure plans are reviewed annually. Closure liabilities are updated as necessary. Plans for post-mine operations have budget allocations.  Examples of how water-issues are integrated -Water efficiencies are being addressed through Implats' group-wide recycling target and commitment to reduce levels of potable water usage; -Monitoring of quantity/quality of water discharges to minimize environmental impacts by using technology, eg) long-term water balances, to evaluate use and minimize environmental impacts; -Prioritising the use of grey water at all operations; -Flood planning, all tailings storage facilities have concurrent rehabilitation plans that include revegetation, dust management and water management - Water management provisions for post-closure. The long-term time horizon of 21-30 years is aligned with Implats' internal planning horizons which consider the life of mines as well as the post mine life periods (which are typically over 20 years). Implats' board is responsible for overseeing corporate strategy and major plans of action, including water-related issues.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	21-30	Water issues integrated into Implats' strategy for achieving water objectives include the assessment of long-term water use profiles; water management provisions for post-mine closure; monitoring of quantity and quality of water discharges to minimize environmental impacts and flood planning. For example, regarding the latter, Implats' tailings storage facilities have concurrent rehabilitation plans that include revegetation, dust management and water management.  Examples: - Improving levels of statutory compliance with amended water-use licences; - Implementing a framework for operation-specific water conservation strategies; - Effective water management strategies including water consumption and quality management; - Promoting responsible water stewardship by minimizing water use and pollution; - Responding to climate change risks/opportunities; - Managing waste streams and promoting responsible land management/biodiversity practices.



			Responsible stewardship of natural resources, mitigating environmental impacts of our activities and going beyond compliance of regulatory standards are key Group policies. Measures that support the achievement of Implats' strategic water objectives include ISO 14001 certification for environmental management systems. The long-term time horizon of 21-30 years is aligned with Impala Platinum's internal planning horizons which consider the life of mines as well as the post mine life periods (which are typically over 20 years).
Financial planning	Yes, water-related issues are integrated	21-30	The following water-related issues are incorporated into Implats' long-term financial planning (varying per operation): long-term water use profiles and tariffs; water management provisions for post-mine closure; monitoring of quantity and quality of water discharges to minimize environmental impacts and flood planning. Responsible stewardship of natural resources, mitigating environmental impacts of our activities and going beyond compliance of regulatory standards are key Group policies incorporated into long-term financial planning.  For example, all Impala Platinum's tailings storage facilities have concurrent rehabilitation plans that include revegetation, dust management and water management. These water-related issues are integrated into financial plans through the development of site-specific operational plans and post-mine closure plans. Approved operational and post-mine closure plans have dedicated budget allocations.  The long-term time horizon of 21-30 years is aligned with Impala Platinum's internal planning horizons which consider the life of mines as well as the post mine life periods (which are typically over 10 years). The rationale for addressing water issues in long-term financial planning is that it assists the operations in identifying financial requirements related to water management. This assists Impala Platinum to allocate appropriate resources and helps to mitigate or avoid risks of non-compliance with regulations and best practice standards.



# W7.2

(W7.2) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

#### Row 1

Water-related CAPEX (+/- % change)

937

Anticipated forward trend for CAPEX (+/- % change)

900

Water-related OPEX (+/- % change)

2.4

Anticipated forward trend for OPEX (+/- % change)

3

## Please explain

Why CAPEX has increased: During FY21, Implats invested in capex for Ngezi water treatment plant and SMC North Portal replacement of water pipeline at the Zimplats operation. For the Impala Rustenburg the capex investment was for portable water reservoir, alternative water source, storm water separation and MagaliesWater pipeline connection.

CAPEX is anticipated to increase in the next financial year due to the development and implementation of stormwater management systems (over 5 year period) for the separation of clean and dirty water, as well as for the building of another potable water reservoirs at Impala Rustenburg. Why OPEX has increased: Operational expenditure has increased slightly in FY21 due to an increase in output and an increase in municipal water prices. OPEX is anticipated to increase with 3.0% in line with the Consumer Price Index (CPI).

# W7.3

## (W7.3) Does your organization use scenario analysis to inform its business strategy?

	Use of scenario	Comment		
	analysis			
Row	No, but we	Implats does not currently use climate-related scenario analysis to inform its		
1	anticipate doing	business strategy, however, Implats anticipates to start doing so within the		
	so within the next	next two years. In FY20, Implats' HSER Committee made the decision to		
	two years	increase actions towards alignment with the international best practice		
		proposed by the Task Force on Climate-related Financial Disclosure		
		(TCFD) recommendations. The Group publicly decleared its support for		



TCFD and its recommendations. In FY2020, Implats appointed a
consultant to assist in identifying our TCFD gaps and a strategy for
increased TCFD alignment of our company reporting. It is anticipated that
TCFD scenario analyses and increased financial disclosures will be
included in Implats' reporting within the next two years.

# W7.4

# (W7.4) Does your company use an internal price on water?

#### Row 1

# Does your company use an internal price on water?

No, but we are currently exploring water valuation practices

# Please explain

Impala Platinum does not currently use an internal price on water aside from consideration of the water tariffs used in financial planning, however, Implats has begun exploring potential water valuation practices and plans to make use of the internal price on water in future financial periods.

# W7.5

# (W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1	No, but we plan to address this within the next two years	Important but not an immediate business priority	Implats is committed to water and environmental stewardship. Accordingly, the group has implemented and plans to implement a wide range of low water impact measures across its operations. Implats will look into developing the necessary criteria and thresholds which would be used to classify its products as low water impact.



# **W8. Targets**

# **W8.1**

# (W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Business level specific targets and/or goals Site/facility specific targets and/or goals	monitored at the corporate level	Implats' operations require large quantities of water, but operations are predominantly based in water stressed regions of Southern Africa. This causes limitations to Implats' tailings dams and general water supplies and motivates for the setting of targets and goals. Implats recognises the need for responsible water stewardship.  To set water-related targets/goals, Implats firstly identifies strategic business objectives and material sustainability focus areas through our structured internal risk management process, internal materiality process and with consideration of the views and interests of our stakeholders. The Implats' enterprise risk management is aligned with ISO 31000. The risk management process sets out to achieve a suitable balance between minimising the risk associated with any business activity and maximising the potential rewards. The risk management process is used to identify targets and goals related to water risks, impacts and opportunities. Furthermore, Zimplats regularly participates in the Zimbabwe National Water Authority catchment and sub-catchment council meetings which provides a platform to work with stakeholders in stewarding water as a shared resource. Implats' participation in catchment councils informs our water-risk reviews and water use target setting. The Board is responsible for overseeing the Group's risk management and internal control systems, which management is governed through an enterprise risk management approach under supervision of the health, safety and environment committee (HSE). The HSE consists of independent non-executive directors, supporting a strong risk governance framework. The committee monitors the implementation of the Group's strategy as it relates to employees' health, safety and protection of the environment. Risks are reviewed monthly by Exco and quarterly by the



#### board.

High-level meetings facilitate a consolidated approach to the prioritisation of water risks at group and operational level. Once identified through the assessment process at Exco level, Implats' water risk targets and goals are developed to ensure that they reflect geographic, regulatory and other contextual factors. Individual operations have formal motivations that drive target and goal setting, for example, the requirements to abide by the respective licencing and water-use conditions in accordance with Implats' annual Climate Change Risk Assessment. The progress of monitored targets and goals is stipulated in performance assessments and monetary rewards of top Executives. Implats recognises water as a shared resource. Decreasing Implats' freshwater withdrawals, allows host communities and local environments both upstream and downstream of Implats' operations access to greater volumes of water. Implats aims to reduce withdrawal volumes by setting water targets and goals to deliver meaningful outcomes for both the group and for other water users.

# W8.1a

(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

# Target reference number

Target 1

## **Category of target**

Water recycling/reuse

#### Level

Company-wide

## **Primary motivation**

Water stewardship

## **Description of target**

Implats operations located within Zimbabwe and South Africa are in scarce areas. Water is a critical input for mining operations. Therefore, Implats identifies that water shortage is a principal risk in its operations. Adding to the water-stress in these regions is Implats' water intensive activities. To uphold and strengthen the Group's water stewardship commitment, Implats' has set a company-wide, year-on-year rolling target of 44% water consumed to be recycled water.



In FY21, the group achieved a water consumption recycling/reuse rate of 51%, which exceeds the 44% target. Recycled water includes tailings return water and internal purified sewage effluent. Recycling water reduces Implats' water withdrawal quantities and total water consumption. Implats continuously aims to reduce freshwater demands. This will increase water security in host communities and local environments where Implats operates.

#### Quantitative metric

% increase in water use met through recycling/reuse

## Baseline year

2001

## Start year

2001

## **Target year**

2021

# % of target achieved

100

## Please explain

In the FY2021 reporting period, the group achieved a water recycling/reuse rate of 51%, meaning that we have met and exceeded the water recycling/reuse target of 44% in the reporting year.

# W8.1b

(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.

### Goal

Other, please specify
Strive for no Level 4 or 5 incidents

#### Level

Company-wide

### **Motivation**

Other, please specify

Maintain Licenses to Operate

## **Description of goal**

Responsible corporate stewardship is one of the key strategic pillars of Implats, and as such we are committed to develop, protect and strengthen our licence to operate through industry-leading Environmental, Social and Governance performance. Implats aims for a no "major" (Level 5) or "significant (Level 4) environmental incidents. A zero-



harm environment safeguards Implats' human capital, enables us to achieve target KPIs, strengthens social licence to operate within communities and contributes to the attainment of identified United Nations Sustainable Development Goals. Implats commits to improve environmental performance, in accordance with their Environmental Policy, through monitoring, assessing, preventing and controlling possible environmental risks. Water is vital to Implats' direct operations without which Implats' production would be severely disrupted. Implats has adopted this company-wide goal because operations that do not strive for zero Level 4 or 5 incidents are at risk of losing regulatory and social licences to operate. These licences are critical for Implats' long-term sustainability and profitability. This goal is being implemented across the Group by investing in measures that improve water management, including pollution prevention and conservation practices. The implementation of measures to achieve this goal are enhanced by Implats' commitment to maintaining ISO 14001 certification for all environmental management systems across the company.

# Baseline year

2013

Start year

2013

#### **End year**

2032

## **Progress**

The indicator used to assess progress of this goal is the number of Level 4 or 5 environmental incidents per year. The threshold for success is met if no Level 4 or 5 environmental incidents occur in a particular reporting year. Thus, the goal is considered successful if Implats is responsible for zero Level 4 or 5 environmental incidents. During the 2021 reporting period, no "major" (Level 5) or "significant" (Level 4) environmental incidents were reported at any of Implats' operations. Implats succeeded in meeting this goal during FY20201. Additionally, Implats has not recorded a 'major' (Level 5) or 'significant' (Level 4) environmental incident at any of its operations since 2013. Although 7 "limited impact" (Level 3) environmental incidents were recorded in FY21, this represents a 44% reduction from the 16 environmental incidents recorded in FY2020. Furthermore, no non-compliance notices, fines or penalties were issued to any of Implats' operations during the 2021 reporting period.

# W9. Verification

# W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

No, we do not currently verify any other water information reported in our CDP disclosure



# W10. Sign off

# W-FI

(W-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 hence the volumes are much higher than reported FY2020.

# W10.1

# (W10.1) Provide details for the person that has signed off (approved) your CDP water response.

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

# W10.2

(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

Yes

# 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