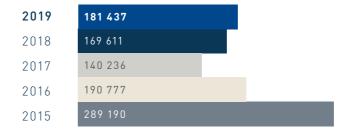


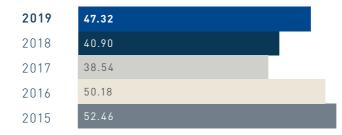




#### Total greenhouse gas emissions (tCO2e)



#### GHG emissions intensity (gCO<sub>2</sub>e per Rand revenue)



#### Total water usage (kilolitres)

2019	112 904	
2018	150 254	
2017	97 002	
2016	132 140	
2015	264 653	

#### Total solid and liquid waste generated (tonnes)

2019	7 332	
2018	9 441	
2017	12 650	
2016	7 366	
2015	3 559	



Grindrod is striving towards environmental sustainability premised on our understanding that environmental sustainability is connected to long term financial profitability and is guided by international best practice, and applicable legislation.

In 2019, Grindrod considered a number of global factors driving social and environmental change and developed key policy documents to guide it.

The Grindrod Global Change Sensitivity Model which considers a number of key global change factors that could impact Grindrod's businesses, highlighting both risks and opportunities.

**The Grindrod Coal Position Paper** which articulates Grindrod's response to the changing coal market.

The Grindrod 2025 Climate Change and Environmental Policy which provides guidance on governance, strategy and risk management considering global change factors. This document also defines new environmental targets related to emissions, energy use, water use and waste management for 2021 to 2025. These targets are being finalised this year.

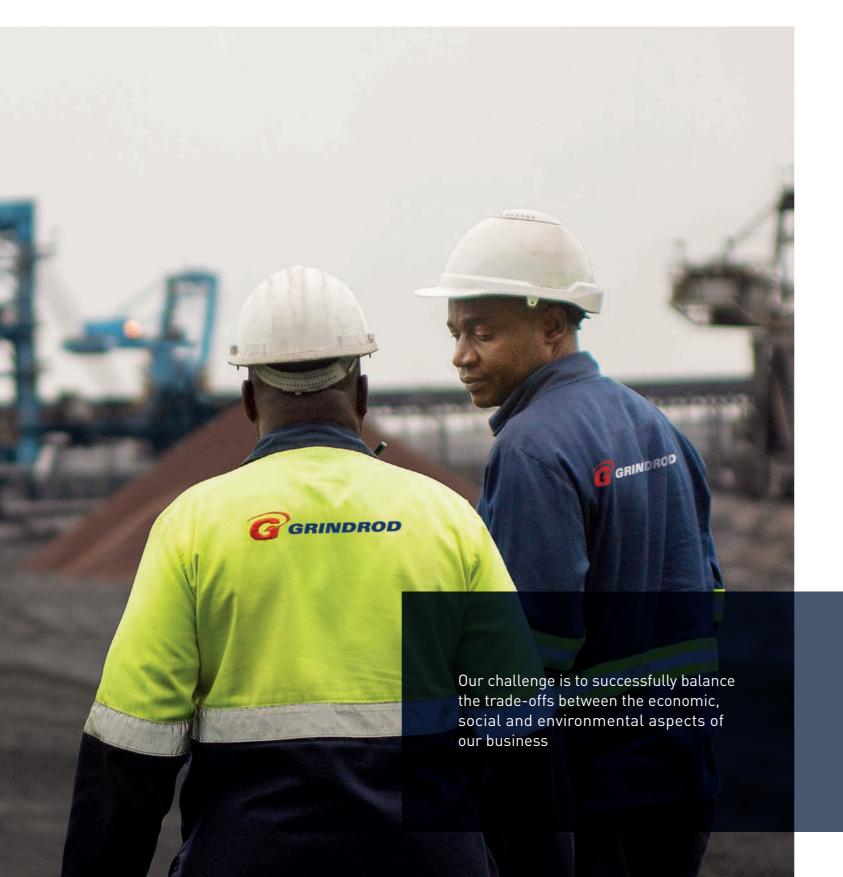


## GOVERNANCE

There are two committees that assist the board with the oversight of the company's environmental performance, being the social and ethics, and the risk committees.

> Whilst the social and ethics committee has the main responsibility of considering climate change within Grindrod's business operations, the risk committee is the primary committee which oversees the compilation of the risk registers, and assists the board in carrying out its risk-governance responsibilities. Therefore, the two committees are essential components in the governance structure of the company, in terms of identifying and acting on risks and opportunities related to climate change.

The divisional SHERQ Committees report to the social and ethics committees of Grindrod Limited and Grindrod Bank respectively on aspects related to environmental concerns, including greenhouse gas emissions.



## STRATEGY

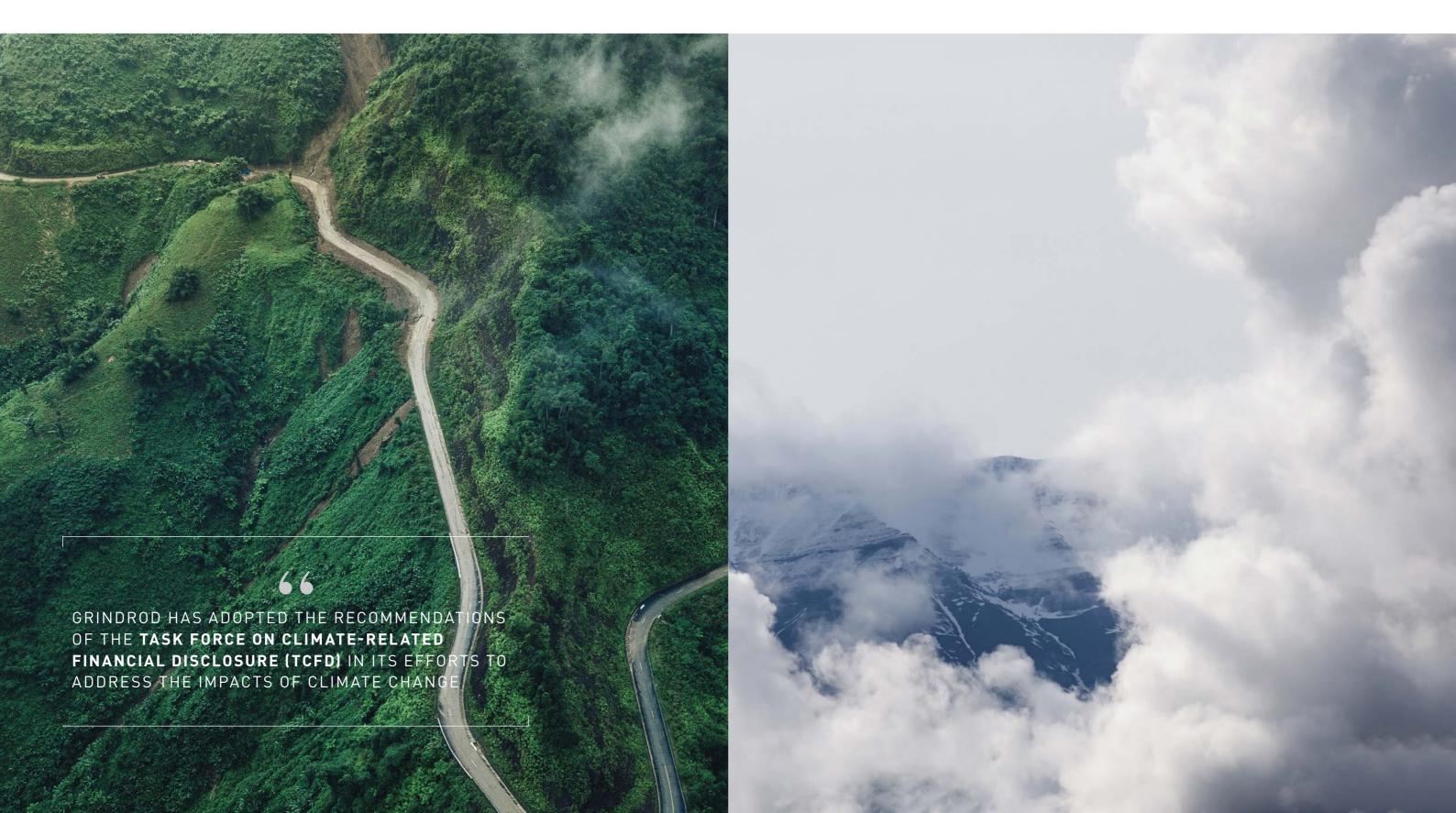
Grindrod understands that we operate in a global economic context which is influenced by several environmental and social sustainability issues, the impacts of which are highly uncertain.

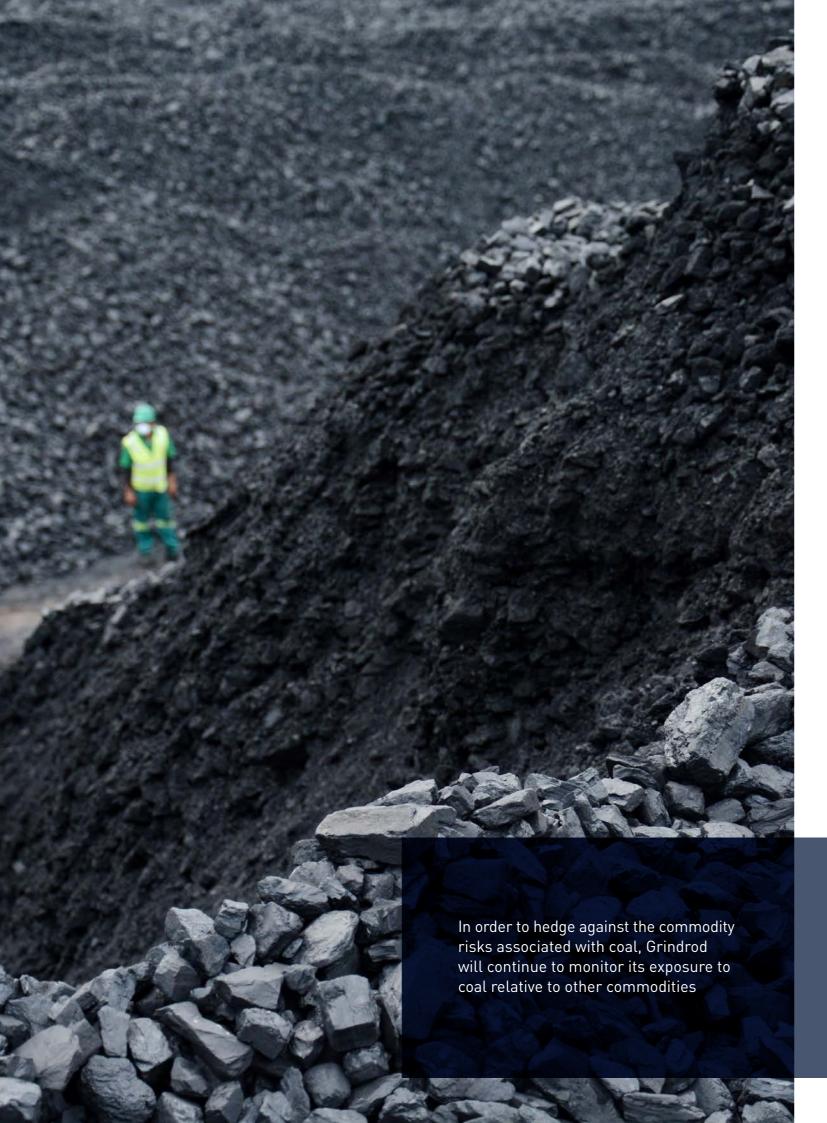
> Both the short term profitability and long term sustainability of our business are highly dependent on our ability to adapt to our operating environment on an ongoing basis and to minimise any negative impacts our operations may have on the environment. Our challenge is to successfully balance the trade-offs between the economic, social and environmental aspects of our business.

The development of the Grindrod Global Change Sensitivity Model aligns to Grindrod's strategy and business direction. During 2019 Grindrod undertook a strategic review process and refined its growth strategy.

The review of the Port, Terminals and Logistics divisions identified unlocking southern African trade corridors as a key strategic growth point. Environmental compliance and climate change will be aspects to consider in order to effectively navigate this growth path. Environmental changes affect markets, including commodity prices, demand and supply, reflective of volatile flows of commodities and operations through increasing resource scarcity. It is important to understand these changes as we deliver on our strategy.

In measuring its environmental performance progress, Grindrod will set its targets guided by its Global Change Sensitivity models and its 2025 Climate Change and Environmental Policy. These targets are being refined and will be articulated in due course.





## CLIMATE SCENARIO ANALYSIS

Grindrod conducted a climate change risk and vulnerability scenario analysis based on its current and potential future business to assist with the identification and management of climate-related risks and opportunities.

> The analysis followed the approach of the Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) of June 2017 and considered Grindrod's supply chain, core operations and the market in which the company operates. This has helped Grindrod to understand its potential risks and opportunities in the coal, vehicle and agricultural sectors.

> The findings of the scenario analysis highlighted Grindrod's exposure to commodities as a key risk as Grindrod is exposed to the risk of commodity demand and prices, which result in volatility of earnings and asset utilisation. This is especially so in the coal market as civil society, investors and regulators are becoming increasingly vocal with regard to climate change and environmental issues. The continuation of the current coal business model will come under increased social and regulatory pressure which, depending on the levels of usage of coal, could impact the licence to operate of companies and well as their economic sustainability. However, this position is countered by the South African economy's dependence on coal-based energy. In order to hedge against the commodity risks associated with coal, Grindrod will continue to monitor its exposure to coal relative to other commodities with the diversification of commodities playing a key part in its strategy to identify new opportunities and apply risk mitigation measures. Grindrod realises that, due to the potentially disruptive nature of changes in the coal market, there may be a need to act fast if certain changes do occur. As such, Grindrod will update its position on coal on a quarterly basis through its risk management process in order to adapt to the reigning coal market conditions.

> The scenario analysis also indicated that major changes in the automotive industry is possible in the coming decade. Such changes may impact on Grindrod's business, and we will keep watch of selected indicators to act as early warning signals of changes in the market.

2019 Integrated Annual Report - Environmental Supplement

## RISK MANAGEMENT

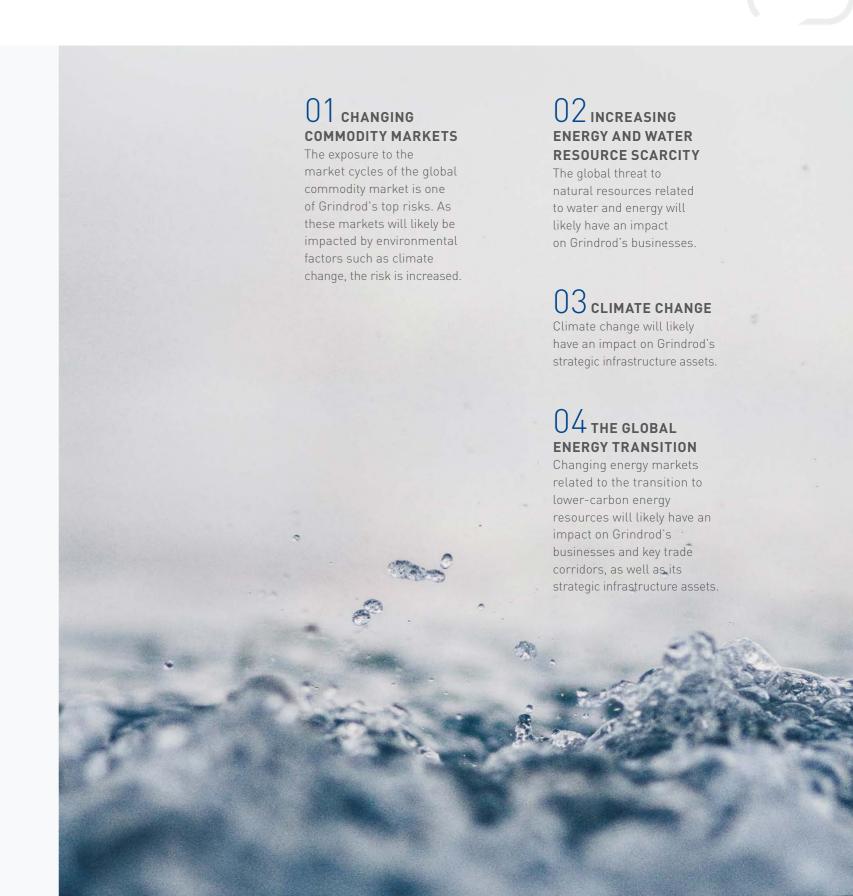
Risk management, as a sub-set of governance, allows Grindrod to identify potential risks and alternatives in achieving its vision as well as positioning the company for growth.

Investors and other stakeholders need to understand how an organisation's global change risks are identified, assessed, and managed and whether those processes are integrated into existing risk management processes. Such information supports users of financial disclosures in evaluating the organisation's overall risk profile and risk management activities.

#### KEY ASPECTS IN THIS REGARD INCLUDE

- Risk management must support strategy formulation and implementation through risk-informed decision-making.
- Risk management is a tool to stress-test strategies and policies to ensure robustness in the face of global change.

Grindrod's Global Change Sensitivity Model identified certain risks that would need to be managed in order to adapt to global trends which includes global influences, market changes, social challenges and increasing resource scarcity. The most concerning environmental and climate change related risks that will have an impact on Grindrod's business operations include the following:



## METRICS AND TARGETS

Grindrod's environmental performance in 2019 is outlined below.

### Greenhouse gas emissions

Grindrod's total emissions for 2019 increased by 7.0% from 169 611 tonnes of carbon dioxide equivalent ( $CO_2e$ ) in 2018 to 181 437 tonnes  $CO_2e$  in 2019. During 2019 the greenhouse gas emission baseline was restated for Shipping spin-off in 2018 and other restructures.

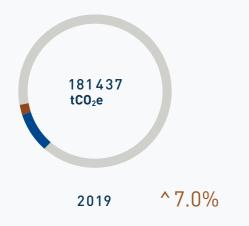




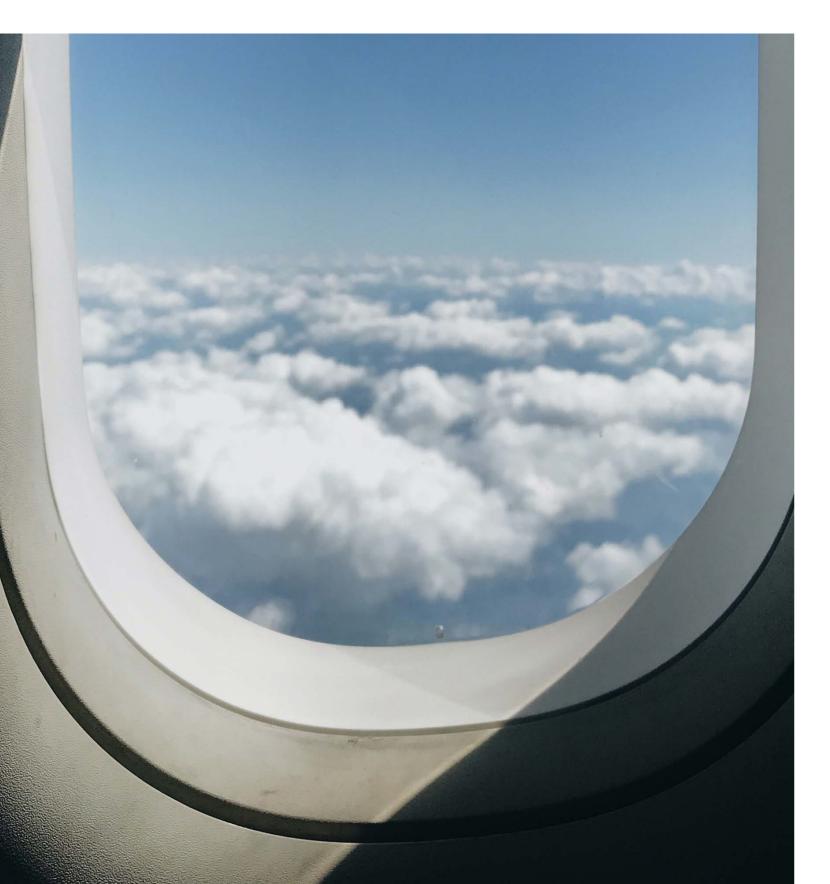
TABLE 1
GRINDROD GROUP EMISSION BREAKDOWN OVER A FIVE-YEAR PERIOD 1

		Grindrod	Group Global 1	Total Greenhou	ıse Gas Emissi	ons (tCO₂e)
		2019	2018*	2017*	2016*	2015*
	Combustion of fuel in ships where company has operational control	52 688	49 908	49 737	102 598	162 806
	Company owned and / or operated vehicles, mobile equipment, locomotives	50 260	52 818	51 654	51 723	66 347
Scope 1	Combustion in stationary fuel-burning equipment (generators and boilers)	8 376	6 173	6 574	6 701	7 866
	HFC refrigerant gasses	14 480	10 115	8 834	8 206	16 020
	CO <sub>2</sub>	23	2	-	-	-
<u></u>	Acetylene	5	1	1	1	57
Scope 1 subtotal		125 833	119 017	116 800	169 229	253 096
Scope 2 total	Purchased electricity	17 066	15 410	15 554	14 132	18 265
Scope 3 & other	Purchased goods and services	180	229	_	_	_
	Fuel and energy related activities	27 195	25 630	-	_	-
	Waste generated in operations	1 366	784	4 646	2 012	4 847
	Business travel	1 335	1 392	3 236	5 404	12 982
	Employee commuting	8 462	7 148	-	-	_
Scope 3 & other subtotal		38 537	35 184	7 882	7 416	17 829
Scope 3 & other subtotal TOTAL	Metric tonnes of CO <sub>2</sub> e	38 537 181 437	35 184 169 611	7 882 140 236	7 416 190 777	17 829 289 190

15

<sup>\*</sup> Value restated for Shipping spin-off in 2018 and other restructures

<sup>&</sup>lt;sup>1</sup> Group totals may differ from the sum of the values due to the inclusion of several scope 3 categories under the group value where no divisional split was available



The following table provides a breakdown of greenhouse gas emissions per division for the 2019 financial year.

TABLE 2
GRINDROD DIVISIONAL 2019 EMISSION BREAKDOWN

		Grindrod Group		Divisional Analysis	
		total FY2019	Port and Terminals	Logistics	Bank
:	Diesel combustion	58 026	4 102	53 923	_
	Petrol combustion	599	33	566	_
	LPG combustion	12	12	-	-
	R134a	12 850	_	12 850	_
Scope 1	R404a	1 630	-	1 630	-
:	Acetylene	5 120	1	4	_
	CO <sub>2</sub>	23	-	23	-
	IFO	48 461	_	48 461	_
	MDO	4 227	_	4 227	_
Scope 1 subtotal		125 833	4 149	121 684	-
Scope 2 total	Purchased electricity	17 066	7 131	7 547	2 388
Scope 3 & other	Purchased goods and services	180	68	100	12
	Fuel and energy related activities	27 195	1 765	25 173	257
	Waste generated in operations	1 366	68	1 298	_
	Business travel	1 335	104	1 045	186
	Employee commuting	8 462	1 716	6 338	408
Scope 3 & other subtotal		38 537	3 720	33 954	863
TOTAL		181 437	15 000	163 186	3 251

#### Grindrod Greenhouse Gas Divisional Analysis



Grindrod's Port and Terminals and Logistics divisions account for approximately 98% of the Group's emissions. During the 2019 financial year this amounted to a total of 178 185 tonnes  $\rm CO_2e$ . This is a 6.87% increase from 2018.

This increase can be attributed mainly to the deployment of the larger vessel on Grindrod's mainstream service in our seafreight business, OACL. The vessel Horizon has a consumption of 28,5MT HFO daily (17183 MT DWT) as compared to the vessel Boundary which consumes 24,0 MT HFO daily (14 630 MT DWT). The vessel Horizon does far more steaming between Namibia, South Africa and Mozambique than the vessel Boundary, which is only being deployed between East London and Port Elizabeth.

#### Water

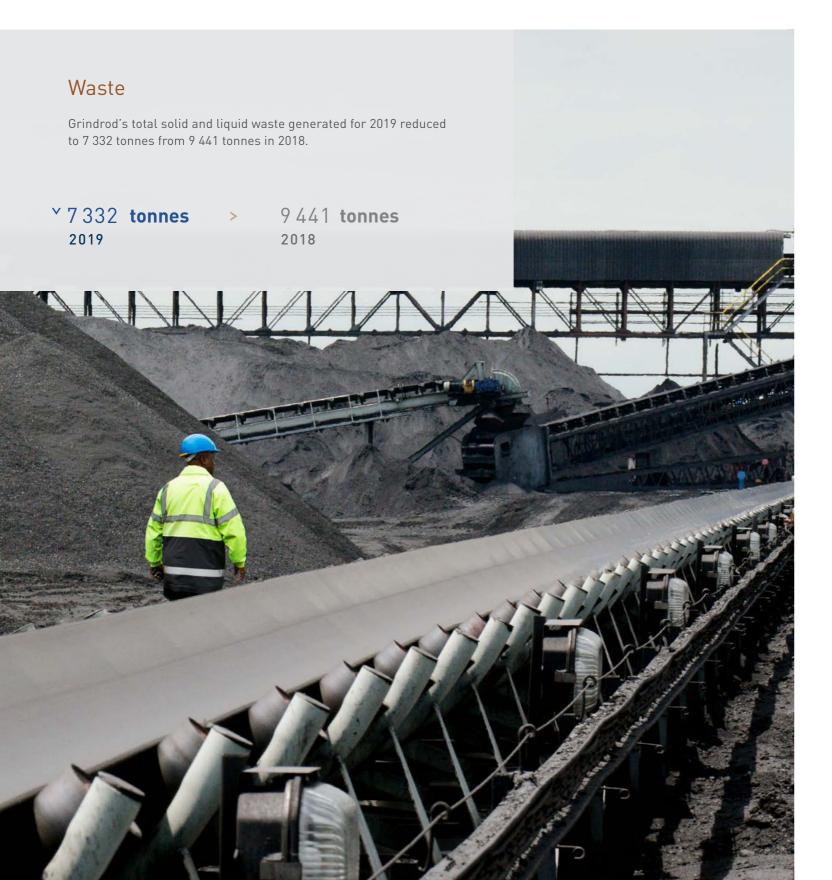
Grindrod's total water usage has decreased from 150 254 kilolitres in 2018 to 112 904 kilolitres.

Grindrod's total water usage has decreased from 150 254 kilolitres in 2018 to 112 904 kilolitres. During 2019 Grindrod's use of water for the washing of vehicles and equipment decreased, which is testament to Grindrod's continued efforts to reduce water use. Similarly, the use of water for dust suppression also decreased.

## TABLE 3 GRINDROD WATER KEY PERFORMANCE INDICATORS 2019

Key Performance Indicators		
Water and wastewater (kilolitres)	2019	2018
Total water usage (land-based and ships)	112 904	150 254
Harvested rainwater usage	2 367	3 156
Land-based water utilisation (kilolitres)		
Domestic office use discharged to municipal sewer	36 856	45 692
Domestic / office use – not to municipal sewer (e.g. soak away)	5 209	6 946
Washing vehicles and equipment discharged to municipal sewer	28 128	37 506
Washing vehicles and equipment – discharged to ground / storm-water	16 668	22 226
Dust suppression – to atmosphere or storm-water system	22 919	30 561

18



## TABLE 4 GRINDROD WASTE KEY PERFORMANCE INDICATORS 2019

Key Performance Indicators	2019	2010
Solid and liquid waste (tonnes)	2017	2016
Total solid and liquid waste generated (tonnes)	7 332	9 441
Solid and liquid waste – to landfill (tonnes)	1 094	730
Total land-based non-hazardous solid waste recycled (tonnes)	55 of 745	192 of 454

### Tracking progress against Grindrod's 2020 Environmental Targets

Grindrod has set a Vision 2020 target in 2010. This target aimed to ensure that we continue to build on our 100-plus years of good corporate citizenship by reducing environmental risks in our sphere of business. The target aimed to reduce the greenhouse gas emissions of the business by 10% over the decade up to 2020. The baseline for the measurement of the reduction was the 2010 greenhouse gas intensity of 9.8 tonnes  $CO_2e$  per R million revenue.

The five years between 2010 and 2015 saw significant restructuring of the Grindrod business to a level where the greenhouse gas intensity increased to 17.2 tonnes  $\mathrm{CO}_2\mathrm{e}$  per R million revenue.

The greenhouse gas emission baseline was restated to a new baseline in 2015 in order to ensure a meaningful comparison and tracking. The restatement took cognisance of the new structure of the business related to both turnover and emission profiles. The restated 2015 baseline is 52.46 tonnes  $CO_2e$  per R million revenue. The 2019 emission intensity of the business is 47.32 tonnes  $CO_2e$  per R million revenue, which equates to a reduction of 10% over the five-year period.

2019 emission intensity

**×**10%

over the five year period



# Focus areas and target setting for 2021 to 2025

Grindrod has identified four key areas of focus which are summarised below. The targets in each of these focus areas will be set out in due course.

O1 water is a critical resource, specifically in water-scarce countries in which Grindrod operates. In this regard, Grindrod acknowledges its impact in terms of its water usage in its operations and continues to drive conservation.

# 02 GREENHOUSE GAS EMISSIONS

Grindrod monitors its Scope 1 and Scope 2 emissions in an effort to minimise its greenhouse gas emissions.

### $03_{\text{WASTE}}$

Grindrod recognises the role of sustainable waste management in contributing towards a circular economy.

### 04 ENERGY AND FUEL

Grindrod recognises the role that fossil fuels and the combustion of these fuels in transport and electricity generation play in terms of climate change. As such, Grindrod will set specific targets to participate in the just transition to a low-carbon economy.

# 05 RENEWABLE ENERGY

Grindrod recognises the opportunities for business efficiency in renewable energy. In this regard, Grindrod will investigate the feasibility of appropriate renewable energy options for its business and develop a timeframe for renewable energy roll-out within the company.

