

TRANSNET



Pipelines 2019



Highlights

- **Petroleum** volumes transported increased by **9,1%**
- **Revenue** increased by **17,2%** to **R5,3 billion**
- **EBITDA** increased by **25,2%** to **R4,0 billion**
- **Achieved** a DIFR of **0,18** against a target of 0,65

Business overview

Transnet Pipelines (Pipelines) is the largest multi-product operator in southern Africa, transporting hydrocarbons and methane-rich gas through a network of 3 800 km of petroleum and gas pipeline infrastructure. The core strategic objective of Pipelines is to ensure security of supply to the inland market. Pipelines offers fully integrated supply chain solutions from source to destination while ensuring the best safety practices, optimum service reliability and exceeding customer expectations at all times through capable human capital.

To this effect, Pipelines currently transports:

- More than 65% of all refined products to the inland market;
- More than 70% of all jet fuel required at OR Tambo International Airport;
- 100% of the crude requirements for the Natref Refinery;
- 100% of the methane-rich gas requirements to KwaZulu-Natal for Sasol Energy and its gas clients; and
- 100% of Tarlton's volumes, of which 60% is distributed cross-border.

The initiative to secure a direct import terminal in the port of Durban and a Terminal Operating Licence has become a key strategic objective for Pipelines, in alignment with the Transnet Liquid Fuels Master Plan to enable:

- New market participants entrance into the pipeline system, in line with the Liquid Fuels Charter expectations which place emphasis on the promotion of broad-based black economic empowerment and overall sector transformation; and
- The Clean Fuels II Programme as per the Department of Energy, which will necessitate increased import terminals due to changes in fuel specification in the short to medium term.

The New Multi-Product Pipeline's (NMPP) 24" trunkline is in full multi-product operation. The line transports two diesel grades (D50 and D500) and two unleaded petrol grades (93 and 95) as well as jet fuel. The inland accumulation facility which was operationalised in December 2017 further facilitates security of supply to the market.

The decommissioning of the Durban-Johannesburg Pipeline (DJP) is currently in execution and is expected to be completed in 2021. The alternative uses for this asset are currently under consideration and have been narrowed down to options for fibre and gas.

A seamless integrated rail and pipeline service offering is currently in operation to OR Tambo International Airport, and other routes are being considered and optimised in this regard.

The International Strategy driven by Transnet International Holdings (International Holdings) encompasses growing beyond borders of the country. Repositioning Pipelines and working with International Holdings to position the division to be a liquid and gas operator of choice across Africa is crucial to the strategy. Opportunities to diversify into the liquefied natural gas (LNG) market are also being pursued.

Where we operate



Figure 1: Petroleum and gas pipeline network

Regulatory environment

Pipelines operates in a regulated environment and is regulated by the National Energy Regulator of South Africa (Nersa) and governed by the Petroleum Pipelines Act, No 60 of 2003 and the Gas Act, No 48 of 2001. Almost all critical areas of the Pipeline business require regulatory sanction through the issuing of licences. The maintenance of the licensing status quo is core to Pipelines continuing as a going concern.

Compliance best practice requires that Pipelines reviews its regulatory universe annually in order to remain relevant in the changing regulatory environment.

Performance context

Strategic objective	Contribution to strategic objective
Reduce the total cost of logistics as a percentage of transportable GDP	<ul style="list-style-type: none"> • Providing competitive integrated customer end-to-end value propositions to lower the cost of doing business. • Facilitate integrated planning across rail, ports and pipelines through the Transnet Value Chain Coordinator (TVCC) that will result in volume growth and reduced supply chain costs.
Effect and accelerate modal shift by maximising the role of rail in the national transport task	<ul style="list-style-type: none"> • Seamlessly integrating rail and pipeline service offerings to customers is currently in operation to OR Tambo International Airport and other routes are anticipated to be operational in the next few years.
Leverage the private sector in the provision of both infrastructure and operations where required	<ul style="list-style-type: none"> • Fast-tracking key strategic initiatives for private sector participation, i.e. direct distribution, outlying depots and common-user berth operations
Integrate South Africa with the region and the rest of the world	<ul style="list-style-type: none"> • Repositioning Pipelines and working with International Holdings to position the division to be a liquid and gas operator of choice across Africa.
Optimise the social and economic impact of all interventions undertaken by the SOC in the achievement of these objectives	<ul style="list-style-type: none"> • Enable historically disadvantaged individuals to meaningfully participate in the petroleum and gas sector • Develop new players through enterprise development initiatives • Bolster skills in gas operations to build capacity and experience for future gas terminals

Operational performance

Core initiatives for 2019

- Minimise the impact of the 2019 petroleum determination on EBITDA and other key financial ratios.
- Achieve the volume targets for the financial year.
- Continued execution of the following major projects:
 - Construction of the Sapref replacement tanks
 - Upgrade of the fire protection system at its various sites
 - Control system development and crude deployment
- Continue implementation of the TVCC initiative to ensure volumes are maximised for Transnet.
- Develop skills to handle the new assets and new energy opportunities such as gas.



Overview of key performance indicators

Key performance area and indicator	Unit of measure	2017 Actual	2018 Actual	2019 Target	2019 Actual	2020 Target
Financial sustainability						
Revenue	R million	4 355	4 488	6 293	5 262	6 725
EBITDA	R million	3 377	3 192	4 925	3 996	5 430
Return on invested capital	%	n/a	n/a	n/a	n/a	n/a
EBITDA margin	%	77,5	71,1	78,3	75,9	80,7
Operating profit margin	%	57,3	48,3	57,7	51,6	62,3
Gearing	%	41,0	38,3	32,3	31,1	23,4
Net debt to EBITDA	times	3,8	3,9	2,2	2,4	1,4
Return on average total assets	%	10,7	7,0	8,8	7,0	10,8
Asset turnover - excluding CWIP	times	0,2	0,1	0,15	0,1	0,2
Cash interest cover	times	2,6	2,7	4,0	3,3	5,8
Capacity creation and maintenance						
Capital investment	R million	1 706	1 544	1 338	326	1 407
Actual vs planned maintenance	%	95	n/a	n/a	n/a	n/a
Production interruptions	hours	249	371	438	332	438
Operational performance						
Volume and revenue growth						
Total petroleum	Mℓ	16 978	16 345	17 516	17 825	17 204
Refined	Mℓ	10 563	10 678	11 476	11 186	11 556
Crude	Mℓ	5 254	4 534	4 970	5 462	4 510
Avtur	Mℓ	1 161	1 133	1 130	1 177	1 138
Gas	million m ³	595	489	506	509	509
Storage	Mℓ	415	315	338	553	553
Capacity utilisation (actual usage: capacity)						
DJP and NMPP	Mℓ/week	116:152	115:148	128:148	110:148	124:148
Crude	Mℓ/week	98:134	87:134	94:134	105:134	87:134
Avtur	Mℓ/week	22:24	20:24	20:24	23:24	20:24
	Mℓ.km/MWh (year-on-year percentage improvement)	(0,4)	n/a	n/a	n/a	n/a
Electricity efficiency	R/Mℓ.km	119	135	168	139	167
Gas (actual usage: capacity)	million m ³ /month	50:57	40:57	42:57	43:57	42:57
Service delivery						
'Off spec' volumes	litres per billion delivered	253 022	162 519	228 271	2 043 187	216 952
Number 'off spec' delivery events per thousand dockets	number	0,3	0,4	0,3	0,3	0,3
Ordered vs delivered volume	%	96	93	95	97	95
Planned vs actual delivery time	%	86	86	88	91	90
Sustainable developmental outcomes						
Employment (human capital)						
Training spend	% of personnel cost	3,3	3,0	n/a	n/a	n/a
Employee turnover	%	4,8	n/a	n/a	n/a	n/a
Employment equity	% of black employees	88	n/a	n/a	n/a	n/a
Employee headcount	number	642	639	684	672	709
Female employees	% of headcount	33	n/a	n/a	n/a	n/a
People with disabilities	% of headcount	3,0	n/a	n/a	n/a	n/a
Risk, safety and health						
DIFR	rate	0,37	0,09	0,65	0,18	0,60

Financial performance review

Salient features		Year ended 31 March 2019 R million	Year ended 31 March 2018 R million	% change
Revenue	R million	5 262	4 488	17,2
- Refined	R million	2 941	2 502	17,5
- Aviation fuel	R million	62	66	(6,1)
- Crude	R million	2 056	1 445	42,3
- Gas	R million	107	96	11,5
- Handling	R million	37	19	94,7
- Other	R million	6	(31)	119,4
- Clawback and levy	R million	53	391	(86,4)
Operating expenses	R million	(1 266)	1 296	(2,3)
- Energy costs	R million	(298)	(264)	12,9
- Maintenance	R million	(112)	(98)	14,3
- Materials	R million	(9)	(305)	(97)
- Personnel costs	R million	(438)	(427)	2,6
- Other	R million	(409)	(202)	102,5
Profit from operations before depreciation, derecognition, amortisation and items listed below (EBITDA)		3 996	3 192	25,2
Depreciation, derecognition and amortisation	R million	(1 283)	(1 026)	25,0
Profit from operations before items listed below	R million	2 713	2 166	25,3
Impairments and fair value adjustments	R million	24	(20)	220
Net finance costs	R million	(1 125)	(233)	382,8
Profit before taxation	R million	1 612	1 913	(15,7)
Total assets (excluding CWIP)	R million	39 004	38 000	2,6
Profitability measures				
EBITDA margin ¹	%	75,9	71,1	4,8
Operating margin ²	%	51,6	48,3	3,3
Return on average total assets (excluding CWIP) ³	%	7,0	7,0	0
Asset turnover (excluding CWIP) ⁴	times	0,1	0,1	0
Capital investments ⁵	R million	326	1 544	(78,9)
Employees				
Number of employees (permanent)	number	672	639	5,2
Revenue per employee	R million	7,83	7,02	11,5

¹ EBITDA expressed as a percentage of revenue.

² Profit from operations before impairment of assets, fair value adjustments, net finance costs and taxation expressed as a percentage of revenue.

³ Profit from operations before impairment of assets, fair value adjustments, net finance costs and taxation expressed as a percentage of average total assets, excluding CWIP.

⁴ Revenue divided by average total assets, excluding CWIP.

⁵ Actual capital expenditure (replacement plus expansion), excluding borrowing costs and including capitalised finance leases.

Performance commentary

Financial sustainability

- Revenue increased by 17,2% to R5,3 billion (2018: R4,5 billion). This is mainly attributable to the 25,96% increase in petroleum allowable revenue granted by NERSA for the financial year.
- Net operating expenses decreased by 2,3% to R1,27 billion (2018: R1,3 billion). The decrease is due to the inclusion of an inventory write-off of R292 million in the 2018 financial year.
- EBITDA, of R4,0 billion is 25,2% higher than the prior year (2018: R3,2 billion).
- Revenue per employee increased by 11,5% to R7,8 million (2018: R7,0 million).

Looking ahead

- Pipelines intends to minimise the impact of the 2020 petroleum tariff determination on EBITDA and other key financial ratios.
- Pipelines plans to engage with Nersa on the NMPP prudency review.
- The division will continue with the Total and Sasol litigation resolution.
- Pipelines' will review tariffs at Kroonstad and Tarlton to ensure cost effectiveness.

Capacity creation and maintenance

- The division's spend on capital for the year was R326 million compared to a target of R1,3 billion. This is mainly due to revision of project schedules and delays in certain projects.
- The decommissioning of the southern section of the Durban to Johannesburg Pipeline has commenced.
- The prefeasibility exercise for the PL5 (Sasolburg to Kroonstad pipeline) and PL6 (Jameson Park to OR Tambo International Airport pipeline) continued in the 2019 financial year and is planned to be finalised in the 2019/20 financial year.

Looking ahead

- Transnet Pipelines will execute the following major projects in the next financial year:
 - Construction of the Sapref replacement tanks;
 - Upgrade of the fire protection system at its various sites; and
 - Control system development and crude deployment.
- Pipelines will finalise the business case for the Coastal Terminal (TM1) accumulator tanks.

Operational performance

Volumes

- The petroleum volumes transported for the period increased by 9,1% to 17,825 billion litres (2018: 16,345 billion litres). This increase is predominantly due to higher crude volumes transported as there was no Natref shutdown in the current year.
- Tarlton storage and handling volumes increased by 72,5% to 596,531 million litres (2018: 345,745 million litres). This is attributable mainly to new clients, certain fuel majors recommencing use of the Tarlton facility and increased volumes from certain customers.
- Gas volumes compared to the preceding year showed a slight increase of 4,4% to 511 million cubic metres (2018: 489 million cubic metres).

Capacity utilisation

Combined capacity utilisation for the NMPP 24" and DJP (actual usage: capacity) of 110:148 Mℓ per week (2018: 115:148 Mℓ per week) is lower than the target of 128:148 Mℓ as a result of commercial agreements that the customers entered into with the inland refineries.

Service delivery

- Pipelines' customer satisfaction declined to 65,7% from 75% in 2018. This was mainly due to customer concerns regarding the conveyance agreement.
- Service delivery measures relating to ordered versus delivered volumes and planned versus actual delivery times were 97% and 90% respectively compared to 93% and 86% in the prior year. The results were attributed to full operation of the terminal at Jameson Park giving flexibility while reducing delays.
- Pipelines' operational cost per megalitre kilometre (Mℓ.km) of R139 per Mℓ.km is lower than the target of R168 per Mℓ.km due to cost-saving initiatives being implemented.

Looking ahead

- The division aims to achieve petroleum volume of 17,204 billion litres, which is lower than 2019 due to a planned Natref shutdown.
- Pipelines will continue to improve Tarlton volumes and efficiencies by focusing on process automation, rail and road turnaround times.
- With the availability and optimisation of TM2 (Jameson Park), Pipelines will continue to improve the availability of product at the main areas of supply.

Sustainable developmental outcomes

Human capital (employment and transformation)

- Pipelines achieved a permanent employee headcount of 672 (target: 684). The filling of vacancies was curtailed during the year due to the current moratorium on filling vacancies.
- Black employees represented 89,58% of the total employee base against a target of 89,0%.
- Female employees represented 34% of the total employee base against a target of 34,08%.
- People with disabilities represented 1,98% of the total employee base against a target of 3,2%.
- The employee turnover rate is 5,17% compared to a target of 5,0%.
- The Absenteeism Index of 1,78% is lower than the target of 2,5%.

Skills development

- Pipelines achieved a training spend of 1,1% compared to a target of 3,5%.
- The division will focus on:
 - People Living with Disability Learnership programme;
 - People in Pipeline training programme;
 - Lean 6 Sigma White Belt training for all employees;
 - Supervisory Development Training for all supervisors; and
 - Building a Gas Skills Competency Framework in preparation for the new business initiatives.

Health and safety

- A DIFR of 0,18 (2018: 0,09) was achieved for the year compared to a threshold of 0,65.
- Pipelines continues to implement the Transnet Integrated Management Approach and is aiming for certification on the safety system in the next financial year.

Quality assurance

- Pipelines achieved the ISO 9001:2015 certification.

Environmental stewardship

- Pipelines continued to implement a comprehensive Environmental Management System based on the ISO 14001 standard. We managed to maintain certification in line with the ISO14001:2015 standard.
- As part of sustainable initiatives Pipelines conducted a very successful coastal clean-up in partnership with National Ports Authority in September 2018, in commemoration of the International Coastal Clean-up Day.

Social accountability

- Enterprise Development (ED) initiatives amounted to R10,2 million for the year, including the following highlights:
 - Pipelines entered into partnerships with third-party/conduit ED companies to implement enterprise and supplier development (ESD) initiatives for the purpose of developing and sustaining small, medium and micro enterprises (SMMEs) that have the potential to become suppliers.
 - ESD resources continued to focus on the needs of SMMEs within Transnet's supply chain and provided them with support and early payment terms.

Key risks and mitigating activities

The following table details Pipelines' top five risks and the key mitigations activities.

Key risks	Mitigating activities
Material pay-out in terms of Natref neutrality principle	<ul style="list-style-type: none"> • Termination of the letter agreement • Commercial case management process is currently in progress
Delay in the completion of the Sapref R-tanks as part of the NMPP	<ul style="list-style-type: none"> • Proactive management and monitoring of key milestone dates and activities as per the execution schedule
Negative financial impact of Nersa NMPP Prudency Review	<ul style="list-style-type: none"> • Compilation of position papers and sourcing of supporting documentation to mitigate prudency risks on TM1, TM2 and Engineering Procurement and Construction Management (EPCM) costs • Prudency assurance team in place • Engagement with Nersa on the Nersa NMPP Prudency Review
Non-completion of the TM1 accumulator tanks in time to meet demand	<ul style="list-style-type: none"> • Timeous approval of business case • Appointment of EPCM to complete FEL 3 validation and assist with the business case
Loss of revenue due to the high cost of doing business with Pipelines	<ul style="list-style-type: none"> • Capital optimisation programme • Various initiatives to increase volumes • Review of tariffs at Kroonstad and Tarlton
DJP Pipeline Integrity (SBG – KRO and ALR – APT)	<ul style="list-style-type: none"> • Replacement of DJP sections with PL5 and PL6
Increase in safety, health and environmental incidents	<ul style="list-style-type: none"> • Behaviour-based safety programme • Internal and external assurance testing • Planned job observations • Implement and monitor corrective action from previous incidents



Opportunities

Gas

- Exploring opportunities to diversify into the LNG market

Terminal

- Creating import capability for new users at Island View, Durban
- Terminal operations at Island View and Ambrose Park, Durban

Pipelines

- Feasibility study - new jet pipeline from Chevref or from Port to Cape Town International Airport
- Feasibility study - new pipeline from South Africa to Botswana
- Investigating alternative uses of the DJP after its decommissioning from petroleum product use

Africa

- Via Transnet International Holdings, Pipelines will focus on the success of the Africa strategy. The division intends to grow the non-regulated business by sharing skills, knowledge, pipeline training, and operational services with other African pipeline companies in the Southern Africa Development Community (SADC), including Kenya
- Focus on efficient supply chain to Botswana

Integration of Transnet business units

- Intermodal integration of Freight Rail and Pipelines service offering for liquid fuel.

Abbreviations and acronyms

CWIP	Capital work in progress
DIFR	Disabling injury frequency rate
DJP	Durban-Johannesburg Pipeline
EBITDA	Earnings before interest, taxation, depreciation and amortisation
LNG	Liquefied natural gas
NMPP	New Multi-Product Pipeline
Nersa	National Energy Regulator of South Africa
SOC	State-owned company
TVCC	Transnet Value Chain Coordinator



