CREATING VALUE THROUGH THE SIX CAPITALS

- R746 million invested in skills development
- R62.6 billion spent on supplier development
- R185 million invested in research and development
Value creation happens through our interactions and relationships with our stakeholders; and within the commercial and developmental contexts within which we operate, on which we depend, and which we in turn impact. We create value from tangible assets, such as our monetary assets, infrastructure, technology, property and natural resources. We also create value from our intangible assets, such as our brand reputation, our institutional knowledge, relationships, strategies and methodologies. Our operations are invariably located in and around resources shared by other stakeholders – such as land, oceans, water sources and public-use areas – and we acknowledge the need for transparency and accountability in our sharing of these common resources.

Through our integrated reporting, we aim to share how we connect to and use these tangible and intangible assets to create and preserve the value we create for Transnet and for others. A measure of the maturity of our integrated thinking – as decision-makers and employees – is our ability to define both the upsides and downsides of our choices; stated differently, the degree to which we can fully comprehend and articulate the ‘trade-offs’ in our decisions. As we accelerate into the 4th Industrial Revolution, new measures of value will emerge, which will require us to reimagine our business – and along with it, the future value-creation story we want to tell.
Financial capital

Our financial strategy is designed to create capacity over the long term and to maintain financial stability. To meet market demand, Transnet must invest for long-term growth prospects, while considering short- to medium-term volatility and uncertainty in the domestic and global markets. Credit rating downgrades for the country influence Transnet’s ability to attract investors. The decline in commodity prices has led to new lows in the demand for key commodities. These trends may severely impact our future efforts to grow volumes, placing significant pressure on our revenue growth aspirations.

Creating financial value

Transnet creates financial value from two perspectives:
• The creation of financial returns for the Company, its Shareholder and providers of capital; and
• The economic value created for its broader stakeholder base and the South African economy.

Economic tariffs are key outputs of Transnet’s business activities, while revenue from tariffs is an important capital input. Tariffs for both Pipelines and National Ports Authority are subject to economic regulation.

Pipelines holds operating licences for the petroleum and gas pipeline network as well as the associated storage facilities and applies the Nersa tariff methodology for setting tariffs in the petroleum industry.

National Ports Authority applies the guidelines set out in the Regulatory Manual for the tariff years 2017 to 2018. Freight Rail is free to set market-related tariffs without economic regulation. In determining tariffs, Transnet considers major input cost increases.

To justify tariff increases for improved service pricing, Transnet must provide services (e.g., port services), infrastructure service reliability and technical innovation. Through its operational efficiency and R&D activities, infrastructure reliability and technical expertise are enhanced, thus helping to maintain pricing levels and strengthen Transnet’s market position in the non-regulated business for its Africa Strategy.

Transnet aims to contain price increases through improved efficiency in all areas of operations. Its role is to create infrastructure capacity and to improve the reliability of existing services. Consequently, it must recover the cost of its investment while maintaining operational performance, and generate a return commensurate with the risk on investment. Failure to obtain an appropriate return on investment would impact Transnet’s financial position and ultimately its ability to access the debt capital market cost effectively.

How we structure our financial capital

Transnet accesses debt capital markets for funding. We aim to retain and constantly improve our financial strength. Given the Company’s commercial objectives, it has to remain within acceptable capital and debt structure parameters to ensure:
• Adequate reinvestment in the Company to sustain infrastructure and expand capacity;
• Optimal cost of capital, including external debt; and
• Optimal utilisation of working capital.

The Board of Directors has set specific financial metrics to enable the preceding objectives:
• Maintain a maximum capital-to-debt structure (gearing) at 50%; and
• Maintain a cash interest cover of at least 3 times.

As a State-owned Company (SOC), the financial strategy reflects the higher risk profile of the business. The capital structure parameters are included in the Shareholder’s Compact to uphold sustainability and provide assurance in respect of the long-term sustainability of the Company and to evade undue financial risks.

Key financial capital inputs at 1 April 2016

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>R13,9 billion</td>
</tr>
<tr>
<td>Share capital and reserves</td>
<td>R143,3 billion</td>
</tr>
<tr>
<td>Long- and short-term borrowings</td>
<td>R134,5 billion</td>
</tr>
</tbody>
</table>

Approaches to managing financial capital outcomes

Diversifying revenue sources to reduce risk related to commodity demand and associated volatility.

Ensuring stringent cost management and optimisation as well as striking a healthy balance in capital expenditure.

Aggressive working capital management.

Generating a return on assets equal to the risk.

Maintaining cost-effective structured funding.

‘Take-or-pay’ contracts with customers.

Maintaining credit ratings and attracting funding from various sources.
Key financial capital outputs at 31 March 2017

- **EBITDA**: R27.6 billion
- **Operating profit**: R14.1 billion
- **Cash generated from operations (after working capital changes)**: R32.8 billion
- **EBITDA margin**: 42.1%
- **Gearing**: 44.4%
- **Cash interest cover**: 2.9 times
- **Cash and cash equivalents**: R6.4 billion
- **Share capital and reserves**: R143.6 billion
- **Capital investment**: R21.4 billion
- **Long- and short-term borrowings**: R124.8 billion
- **Standalone credit rating**: Baa3
  - Moody’s
  - BBB
- **Pipelines allowable revenue for 2018**: 1.43% increase in allowable revenue compared to prior tariff period
- **National Ports Authority**: granted an average tariff increase of 5.97% for 2018

Key factors impacting financial capital

**Influences**
- Changes in freight logistics market demand driven by global economic growth.
- Macroeconomic risks – currency devaluation and energy-price risk (electricity and diesel).
- Credit ratings breaching investment-grade thresholds.
- Execution of capital projects in a volatile economic climate.

**Mitigation strategies**
- De-risking capital projects – ensuring positive returns even under market pressure.
- Risk modelling and management according to the overall capital portfolio – particularly co-dependencies.
- Holistic portfolio of measures to optimise the business to buffer market stress.
- Funding diversification.
- Revenue source diversification – including driving Africa revenue.
- Sound management of working capital.

Key financial capital impacts on the other capitals

<table>
<thead>
<tr>
<th>Personnel cost</th>
<th>R20.8 billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital investment in expanding infrastructure</td>
<td>R5.2 billion</td>
</tr>
<tr>
<td>B-BBEE spend as % of total measured procurement spend</td>
<td>103.1%</td>
</tr>
<tr>
<td>Investment in property, plant and equipment</td>
<td>R311.9 billion</td>
</tr>
<tr>
<td>Committed Supplier Development (SD)</td>
<td>R62.6 billion</td>
</tr>
<tr>
<td>Investment in research and development</td>
<td>R185 million</td>
</tr>
<tr>
<td>Investment in skills development</td>
<td>R746 million</td>
</tr>
<tr>
<td>CSI spend</td>
<td>R234 million</td>
</tr>
</tbody>
</table>

Trade-offs in our use of financial capital

To meet future market demand, Transnet must invest for long-term growth prospects as per the MDS, while responding with agility to short- to medium-term volatility in markets. This approach is reflected by the reduction in our Capital Investment Plan from R277.8 billion to R229.2 billion over the next seven years in response to the lower-than-anticipated freight demand. For now, we must align our infrastructure development and manufactured capital creation more closely to validated demand. Transnet must reduce investment in infrastructure-related capital projects (or its manufactured capital) in the near term to remain financially sustainable.

There are also trade-offs in terms of Transnet’s ability to consistently meet its developmental mandate to create and sustain jobs in the domestic economy and remain financially agile in a tough global economy.

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1. On 5 April 2017, Standard & Poor’s lowered the Company’s foreign currency rating to BB+ from BBB- and the local currency to BBB- from BBB, both with a negative outlook. On 13 June 2017, Moody’s also lowered the Company’s foreign and local currency ratings to Baa3 with a negative outlook. Both these actions were due to the rating action on the Sovereign as Transnet is viewed to be closely linked to the Government. Transnet evaluated the potential impact on its financial position, liquidity and solvency and expects no significant negative effect on estimates.
Manufactured capital

We have invested R145 billion in key projects in the freight system across the rail, port and pipeline networks over the past five years. Closing the gap between the market demand for cargo transport and handling services, and the capacity to satisfy this demand is the key driver behind the large MDS capital investment programme. Investment in our manufactured assets enables us to generate long-term value for the Company, our Shareholder and the economy. The economic decline has set future growth projections for key commodity customers on a lower growth path, which requires a slower pace of capacity creation from Transnet. Additionally, keystone expansion projects need to balance economic benefits with social and environmental concerns raised by communities in and around our operations. We continue to actively engage project stakeholders to help guide the most responsible and beneficial balance of outcomes for all concerned. Transport operations (in general) have several impacts on the environment through emissions, noise pollution and ecosystems impacts. Transnet plans to bring about a lasting and substantial shift of rail-friendly cargo from road to rail, aligning directly with its strategy to grow rail volumes.

Creating infrastructure value

Enabling infrastructure
Transnet provides critical logistics infrastructure to meet the growth demands of the national economy. Long term, Transnet’s infrastructure development programme will reduce the overall cost of doing business in South Africa and address capacity constraints in mining and other sectors.

Freight Rail runs world-class heavy haul ore export lines and transports a range of general bulk and containerised freight commodities.

Engineering is an Original Equipment Manufacturer (OEM) for wagons and has started the journey to becoming a locomotive OEM. As the backbone of the railway industry, it provides in-service maintenance, repair, upgrade, conversion, design and manufacture of various types of wagons, coaches, locomotives, as well as equipment, machines and services.

Port Terminals operates container terminals at the ports of Durban, Ngqura, Port Elizabeth and Cape Town, as a critical facilitator of cargo trade with the rest of the world, providing cargo-handling services to a range of customers.

Pipelines is strategic in the petroleum products supply chain, ensuring that capacity anticipates demand, thus securing inland product supply.

Technology, information and communication technology (ICT)
As a transportation and logistics company, ICT is moving beyond business enablement and becoming a source of competitive advantage. The integration between modal operators’ operational systems (e.g. port and rail) enables Transnet to improve its asset utilisation and forward planning.

Innovative and disruptive technology is enabling us to create business value, such as 3D printing for rolling stock, electronic enclosures and certain mechanical sub-components. Aerial and underwater drones, as well as track-and-trace technology used to track port assets, such as tugs and dredgers, have been piloted successfully by the National Ports Authority at the Port of Durban.

Forms of waste as outputs of our operations
Transnet’s operations generate a variety of waste materials as by-products and we strive to implement the principles of waste management: avoidance, reduction, recovery, re-use, recycling and disposal, if no other use can be found. In the recovery, re-use and recycling stages, Transnet is pursuing ways to create value from waste generated.

Key manufactured capital inputs at 1 April 2016

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property, plant and equipment</td>
<td>R302.5 billion</td>
</tr>
<tr>
<td>Rail track</td>
<td>30 400 km</td>
</tr>
<tr>
<td>Petroleum and gas pipelines infrastructure</td>
<td>3 800 km</td>
</tr>
<tr>
<td>Port, rail and pipelines infrastructure</td>
<td>Infrastructure</td>
</tr>
<tr>
<td>ICT systems, digital platforms and ‘cloud services’</td>
<td>Information and communication technology</td>
</tr>
</tbody>
</table>

Approaches to managing manufactured capital outcomes

Introducing a ‘cradle-to-grave’ solutions Specialist Unit (Group Capital) to advise Transnet and clients on capacity solutions through capital planning and advisory services, capacity development, engineering and management services.

Providing an integrated view of the capital portfolio, with transparency of projects in the capital pipeline.

Allocating Transnet’s limited resources to programmes with the greatest alignment with strategic objectives.

Project optimisation through robust business case validation to test viability and ensure strategic alignment.

Implementing the Integrated Capital Projects/Programme Assurance Framework (ICPAF), which augments the assurance and control framework around capital projects, enforcing additional internal controls coverage.
Key manufactured capital impacts on the other capitals

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental incidents reported</td>
<td>13 significant incidents in 2017</td>
</tr>
<tr>
<td>Running line derailments</td>
<td>81 running line derailments</td>
</tr>
<tr>
<td>Shunting derailments</td>
<td>159</td>
</tr>
<tr>
<td>Total value of revenue generated through waste management initiatives</td>
<td>R70.9 million, most of which involved the sale of scrap metal</td>
</tr>
</tbody>
</table>

Future digital technology will require skills that are not present in the organisation today, such as digital architects, data scientists, Rapid App builders, cybersecurity architects and User Interface design experts.

Trade-offs in our use of manufactured capital

Transnet’s operations generate a variety of waste materials as by-products. We have identified contaminated areas throughout our operations, using scientific methods and visual assessments. Management plans have been developed for the asbestos and hydrocarbon contaminated areas, and we work with relevant authorities to ensure appropriate remediation.

Our operations are industrial- and infrastructure-driven, with excellent productivity and safety as primary objectives. Accident avoidance and high productivity are tightly linked. In the short term, however, these systems may operate under tight human resource and time constraints, which may result in trade-offs between immediate productivity and safety. Transnet’s safety management strategies for critical systems involve multiple dimensions, including design philosophy, maintenance policies and operating procedures, procedures for hiring the appropriate staff, occupational training and performance evaluation.
Intellectual capital

As a logistics infrastructure enabler, Transnet has to grow, invest and modernise at unprecedented rates through innovation and technological advancements. Our investment in research and development has led to an ever-expanding range of rolling stock products. Our technology and capabilities are focused to deliver world-class products and services specifically designed for the African market. To build in-house capability – and to promote local skills and content – we balance the technical content that can be outsourced to local providers, and that which needs to be developed internally as the organisation’s intellectual capital. Inherent in our drive for innovation is the need to publish and protect Transnet’s intellectual property assets. Our Long-term Planning Framework contains several unique methodologies that originated within Transnet.

Creating intellectual value

Engineering, an internationally acclaimed original equipment manufacturer (OEM) of freight wagons, forms our research and innovation hub. Through Engineering, Transnet is expanding its offerings to narrow-gauge operators worldwide. Our investment in research and development has led to an expanding range of rolling stock products designed to suit various area-specific conditions.

Key factors impacting intellectual capital

The rapid decline in revenue from traditional markets means Engineering must invest heavily in achieving OEM status in passenger trains. Large investments remain critical in research and business intelligence development to increase revenue in niche markets. Transnet’s ability to attract sufficient funding remains key to our ability to greatly expand our horizons and contribute to the MDS.

Key intellectual capital inputs at 1 April 2016

- Research and development (Engineering)
- Standard operating procedures
- Policies, frameworks and processes
- Responsible leadership principles and practices

Key intellectual capital impacts on the other capitals

- Learning from the traction motor prototype will be used in the manufacture of the full-scale prototypes
- The Condition Monitoring System (CMS) tracks stationary and mobile assets
- Our real-time Advanced Data Analytics and Machine Learning platform facilitates predictive maintenance, which improves reliability and productivity

Key intellectual capital outputs at 31 March 2017

- Transnet’s first in-house designed traction motor
- Transnet’s first in-house designed CMS using satellite, 3G, WiFi and GPS for real-time condition monitoring of stationary and mobile assets
- Transnet’s first in-house designed Advanced Data Analytics and Machine Learning platform (IRIS)
- Transnet’s first standard gauge wagon bogie – currently undergoing manufacturing
- Transnet’s own port hauler, which is a truck-like vehicle for the ports
- Deployed an in-house developed commissioning tool for locomotives (TAL) – an application to connect to Transnet’s in-house designed control system for advanced diagnostics and monitoring

Trade-offs in our use of intellectual capital

Moving into the 4th Industrial Revolution, Transnet will increasingly operate as a multi-faceted, manufacture-driven, service-led organisation. Some of our existing technical competencies may become obsolete, while other yet unknown competencies will be required. Some existing skills may be replaced by technological innovations. Within this digital context, in which Transnet hopes to play an innovative role, we need to maintain a careful balance in our requirement for specialist technical advancements, and our mandate to create and sustain broad-based employment for the Company and the wider economy. This balance will be maintained, in part, by investing in appropriate upskilling of people and appropriate re-deployment of skills.

Approaches to managing intellectual capital outcomes

- Leading research and development into emerging digital technologies. Technology is a key enabler of innovation and transforming the organisation into a ‘digital’ Transnet.
- Attracting and retaining people with skills that enable our strategy and add value through innovation.
- Enhancing customer relationship management and business intelligence to create customer-centric business solutions.
- Partnering with academic institutions to empower growth-oriented entrepreneurs through business education, mentorship and other support.
Human capital

The competencies, motivation and ethical work practices of our employees and service providers enable us to create commercial and sustainable developmental value in the short, medium and long term. Our operating context is industrial- and infrastructure-driven, necessitating occupational training, as well as comprehensive policies and procedures to safeguard employees and the public in and around our operations. We foster safety vigilance among employees through a safety-oriented operational culture.

Creating human capital value

Transnet acknowledges its ethical and strategic roles as both direct employer and national facilitator of indirect and induced employment opportunities.

Transnet’s Human Capital Strategy approaches job creation with strategic planning to recruit and retain top-quality employees. Our talent management and development programme is designed to ensure succession plans for critical positions. Leadership programmes target all management levels, while coaching and mentoring programmes are also provided.

We promote outcomes-oriented skills development and human resourcing. Over the past two years, Transnet has ‘re-shaped the core’ of its operations to support our long-term strategic objectives.

We continue to improve operational efficiencies and a safe working environment by implementing Lean Six Sigma principles, safety and environmental initiatives, and by promoting a culture of ‘safety in all we do’.

Key human capital inputs at 1 April 2016

- Skilled and motivated employees as at 1 April 2016 year-end: 66,467
- Responsible leadership structure (Governance and Ethics)

Key human capital outputs at 31 March 2017

- Total headcount: 58,828
- Permanent employees: 53,661
- Fixed-term employees: 5,167
- Labour cost on skills development: R746 million

Key human capital impacts on the other capitals

- Improved productivity and innovation
- Performance-driven culture and optimised costs

Key factors impacting human capital

Transnet has two recognised trade unions: the United National Transport Union (UNTU) and the South African Transport and Allied Workers Union (Satawu). Collectively they represented 79.2% of bargaining unit employees as at the end of November 2016.

Due to recent high retirement rates, Transnet has improved its race and gender profile to better reflect the National Economically Active Population (NEAP) benchmarks as provided by Statistics South Africa. Black, coloured and Indian employees represent 85.0% of the Transnet workforce as compared to the NEAP average of 87.7%.

Transnet has a disproportionately high representation of male employees (72.5%) relative to female co-workers (27.5%). Over the last 10 years the female employee base has more than doubled.

Our remuneration philosophy and framework form an integrated part of the key deliverables of the human resources strategy.

Approaches to managing human capital outcomes

Managing talent within Transnet and rewarding excellent performance.

Encouraging employees to adhere to our desired organisational culture and safety behaviours.

Developing critical skills and succession planning to achieve long-term strategic objectives.

Approaches to managing human capital outcomes

Improving capability and capacity through training and development.

Improving HR service delivery through appropriate policies and procedures, and establishing solid labour relationships.
Creating social and relationship capital value

South Africa’s freight logistics system requires investment beyond levels already committed to by Transnet. The DPE has mandated that Private Sector Participation (PSP) be included in the broader delivery of the MDS to support the country’s socio-economic imperatives.

As procurement practices have matured in Transnet, our focus on integrated Supply Chain Management (iSCM) has increased with our influence extending to much-needed national Enterprise Development (ED).

Our commitment to developing mutually beneficial relationships with communities in and around our operations is expressed through the Transnet Foundation’s socio-economic programmes, which empower South Africa’s rural communities. Our Operating Divisions respond proactively to the needs of vulnerable communities surrounding our operations.

Approaches to managing social and relationship capital outcomes

Transnet builds reputational value and market visibility to attract vital competencies at all levels of the organisation.

Transnet’s CSI programmes focus on health, socio-economic infrastructure and education in rural communities situated along the rail network and projects with a strong community impact near ports and pipelines.

Transnet’s supply chain has an extensive reach into the manufacturing and services sectors of South Africa and draws upon international sources where required. Our service to customers is linked to the quality of these supplier relationships.

The Board of Directors holds overall responsibility for decentralised stakeholder engagement, delegating authority to the Group Chief Executive, who reports to them on material stakeholder issues and takes responsibility for incorporating these into strategy and risk management.

Our Enterprise and Supplier Development increasingly supports small, medium and micro-enterprises through nurturing industrialisation and entrepreneurship.

Maintaining consistent and transparent engagements with investors helps to align our collective understanding of value creation and future expectations around long-term targets.

Continuing to forge and strengthen partnerships with OEMs to enhance skills and create new market opportunities.

Partnering with private-sector logistics partners to create solutions for our clients.

Streamlining and effective contract management activities across the Company that ensure compliance with legal and contractual terms, while maximising value.

Key social and relationship capital inputs at 1 April 2016

Transaction relationships with customers and suppliers

Constructive and equitable engagements with Government and regulators

A positive relationship with employees and organised labour

Proactive interaction with communities, citizens, institutions, media and pensioners

Collaborative relationships with the Shareholder and funders

Transaction relationships

Engagements

Employee relationships

Corporate citizenship

Collaboration
Key social and relationship capital outputs at 31 March 2017

- **Total CSI spend**: R234 million
- **Committed Supplier Development (SD)**: R62.6 billion
- **Enterprise Development (ED) spend**: R38.6 million
- **Entrepreneurial support**: showcased 20 entrepreneurs from the Transnet Design, Research and Innovation Centre, who invented ‘life changing ideas’ that would address challenges in SA

**Patients treated at the health, dental, eye, psychology and pharmacy clinics**: 173,016

- **Individuals who benefited from community outreach services**: 438,807
- **Health and hygiene workshops implemented**: nine provinces
- **Transnet employees volunteering for community services during the year**: 3,216
- **Ongoing academic support was provided for orphaned youth**: 52 youth enrolled in our programmes
- **Donations**: R250,000 paid to Batswana High School as part of the R750,000 donation towards building classrooms

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Key factors impacting social and relationship capital

**Ethical stakeholder relationships**

Our large infrastructure development projects pose a risk in terms of ethical and transparent procurement practices and ‘rent-seeking’ behaviour. Transnet’s ambitious MDS relies heavily on foreign investment, and perceptions of anti-competitive behaviour and corruption negatively impact international foreign direct investment. Sound and ethical corporate governance can attract local and foreign investment and deter unethical business practices that blight the image of SOCs. We undertake to intensify our commitment to the following principles:

- **Equitable treatment of all stakeholders**: We continue to work towards transparency regarding business issues of material interest to stakeholders, enhancing our reporting on stakeholder relationships, and refining our Code of Ethics to ensure the protection of stakeholder rights.

- **Ethical relationships with all stakeholders**: Refining our corporate governance framework towards a methodology that accurately tracks corporate governance transgressions.

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Key social and relationship capital impacts on the other capitals

**Partnering with private sector logistics partners creates end-to-end infrastructure logistics solutions for customers, including technology solutions and specialised services.**

**Transnet pursues new revenue streams through private-sector collaboration and complementary investment by private companies. This further accelerates Transnet’s commercial impact on economic growth and job creation in South Africa and the region.**

**Transnet’s Procurement strategy is integral to the growth of a ‘green economy’ whereby efficient and resilient technologies, along with increasing use of rail for freight transport, lower business costs and stimulate economic activity in environmentally responsible ways.**

**Trade-offs in our use of social and relationship capital**

Our keystone expansion projects - such as our large-scale port infrastructure improvement project at the Port of Durban - need to balance the economic benefits of the country with the social and environmental concerns raised by surrounding communities. The investment aims to sustain the current container capacity at South Africa’s premier multi-cargo port. However, adverse impacts on local communities include the possibility of social and small business displacement, extensive waste generation during the construction phase and pressure on shared resources, such as water and electricity.

Our developmental spend, both from ED and CSI perspectives, must always be balanced against our financial sustainability.
Natural capital

Our business is conducted across diverse ecosystems, where we build and maintain infrastructure, operate equipment and handle large volumes of cargo. Our employees, contractors, suppliers and customers have an impact on the natural environment and depend on it for their livelihoods. The ‘natural capitals’ in the context of our commercial activities include air, water, land, minerals and forests, as well as biodiversity and ecosystems’ health. Our operations generate waste, including greenhouse gases, which in turn contribute to global warming. Transnet embraces its responsibility to institute activities that enhance the natural environment’s capacity to meet the resource needs of future generations.

Protecting natural capital value

The Company generates waste, including greenhouse gases, which in turn contribute to global warming. As one of South Africa’s largest industrial consumers of national electricity, energy and carbon management is Transnet’s primary focus in its environmental stewardship. The Company has realised significant gains in energy efficiency and reduced carbon emissions in recent years.

Accelerating the modal shift from road to rail is included in the SSI. Government’s National Climate Change Response White Paper (2011) identifies such a modal shift as a flagship carbon mitigation programme for South Africa. As owner and operator of the country’s rail freight network, Transnet commits to increasing rail market share to 35% by 2019, and to demonstrate the carbon emissions savings achieved annually through its growing market share.

Transnet recognises the potential impacts of its operations on the biodiversity of areas where it operates. Accordingly, we seek to mitigate impacts arising from our operations and, where possible, restore the environment and natural habitats.

Structured water stewardship initiatives form part of the value we create to safeguard the natural environment’s capacity to meet the resource needs of future generations.

Key natural capital outputs at 31 March 2017

- ISO 14001: Environmental Management System certification process: 95% of business operations now certified
- Electricity consumption: Decreased by 1.7% from 2016
- Energy efficiency: Increased by 1.2% from 2016
- Freight rail traction (contributes >70% of total Company power consumption): Electrical traction energy efficiency decreased by 4.3%. Diesel traction achieved 7.9% energy-efficiency gain from 2016
- Energy generated by new locomotives: 242,788 MWh
- Waste management: 16 sites sampled and assessed for historical contamination
- Freight Rail Hydrocarbon Elimination Programme 2: 35 tons of asbestos removed
- Asbestos Remediation and Rehabilitation: 1,200 litres used oil sold
- Used Oil Reclamation (Inyanda Precinct): 118.7 tons waste recycled
- Waste Recycling: 2.3 tons of asbestos removed
- Galley Waste Management (Port of Durban): 149 tons galley waste removed
- National Ports Authority Asbestos Remediation and Rehabilitation: 1,647.4 tons industrial waste generated
- Ports Terminals: 17,293.5 tons waste generated and 662,766.6 tons waste recycled
- Environmental legal compliance: Recorded 13 significant incidents - a 13% improvement from 2016

Key factors impacting our natural capital

Biodiversity

We mitigate, as far as possible, the adverse impacts of our operations on surrounding biodiversity. Where viable, we seek to restore the environment and natural habitats.

Air

Extreme weather conditions such as flash floods lead to washaways and mudslides on major routes, which can increase the severity of rail safety-related incidents, resulting in derailments, asset losses and even employee fatalities.

Key natural capital inputs at 1 April 2016

Air, water, land, minerals and forests, as well as biodiversity and ecosystems health.

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1 The Port of Cape Town lost its certification, two of Freight Rail’s business units are awaiting re-certification, while the Port of Mossel Bay is not certified.
2 Already being tracked under the bilateral agreement. These incidents include spills from our pipeline and incidents occurring due to derailments.
Trade-offs in our use of natural capital

Trade-offs relating to natural capital relate mainly to those areas where our operations compete for shared natural resources in common-use areas and, by extension, the impacts on the communities who share those resources with our operations, placing pressures on the critical biodiversity and environmental services which underpin and support South Africa’s social and economic development.

Our development and economic activities are essential for economic growth. However, under ‘Business as Usual’ practices, this can result in the loss of biodiversity, such as wetlands; displacement of communities and businesses on land where we expand infrastructure; and competition for natural resources such as water and clean air.

We acknowledge the trade-offs in transporting large quantities of commodity volumes for customers and, by extension, the impacts of our customers’ operations on natural capital in producing those commodities on which we depend for our business. This includes the conversion of natural vegetation for land use (e.g. cultivation, mining and urban expansion).

By reducing energy costs through more efficient energy consumption, we positively impact financial sustainability.

Approaches to managing natural capital outcomes

Transnet established a bilateral relationship with the Department of Environmental Affairs to facilitate environmental authorisations and closure of significant environmental incidents.

We are considering mechanisms to further ‘mainstream’ biodiversity management into the business through policies, processes and procedures in our long-term planning.

Key natural capital impacts on the other capitals

- Erratic weather patterns due to climate change, such as coastal storm surges and rising sea levels, could affect port infrastructure while inland floods could impact rail infrastructure.
- Severe drought adversely affects bulk export commodities, such as grain, which negatively impacted volume performance and associated revenue.
- We transport mineral commodities for key customers, thereby growing revenue.

Infrastructure impacts

Volume and revenue impacts

Revenue growth