RESOURCE DOCUMENT: ANNEXURE C

Developing and implementing municipal solid waste management business turnaround strategies

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Contents

1 Preface 1

2 Context 1

3 Status of solid waste management in metros 2

4 The case for change 6

5 Strategic focus areas 8

6 Managing a solid waste management business 10

6.1 Sound management as a foundation of resilience 10

6.2 Essential characteristics of soundly managed trading service businesses 10

7 Governance 12

7.1 Why sound governance is important 12

7.2 Options to improve governance 13

8 Structuring the solid waste management service as a business 15

8.1 Changing landscape of solid waste management 15

8.2 Reorganising for a business approach 15

8.3 Benefits of structuring solid waste management as a business 16

8.4 Implications of not treating solid waste as a business 17

8.5 Trading service restructuring options 18

9 Management and technical capability 20

9.1 Internal capacity building, with external support (keeping the existing delivery model intact) 20

9.2 Creating a business unit or municipal entity, supported by a management contract 20

10 Process considerations 21

10.1 Foundational conditions for successful reform 21

10.2 Political and administrative leadership of the process at municipal level 21

11 Additional resources & references 22

Annexure A: Solid Waste Management Delivery models 24

Annexure B: A governance-protected municipal company 27

Annexure C: Using a management contract to reorganize the water utility in Johannesburg 30

List of figures

Figure 1: Waste Management Hierarchy 8
Figure 2: 7-box model of successful trading service 11
Figure 3: Key waste management activities and related incentives 12
Figure 4: Direction of travel 19
Figure 5: A leadership first model 22

List of tables

Table 1: Core ingredients of sound governance and effective management 13
Table 2: Examples of Waste Management Operations and Administrative Models[25] 24

1 Preface

This resource document has been developed to support metropolitan municipalities to turnaround and improve their solid waste management businesses. It is based on similar documents developed to support institutional turnarounds and improvement in the metro water and electricity businesses. Subsequent to publication of the water and electricity documents during 2024, the Metro Trading Services Programme (MTSP) design was designed with a performance-based finance grant to incentivise the turnaround of metro trading services. The MTSP focuses on supporting turnarounds of water and sanitation, electricity and solid waste services in the eight metropolitan municipalities.

This resource document is intended to guide metros to craft their strategies towards creating a soundly managed solid waste management businesses. Writing a strategy document in itself is not sufficient to ensure change: there must be a common understanding and belief in the need for the reform for it to be successful. The resource document is structured around the argument that it is not only desirable but necessary to manage the service as a business rather than the traditional approach of treating solid waste management as a department in the city structure. The content focuses on prevailing South African governance challenges, while solutions are informed by experience in the management of trading services worldwide. Purposefully, a strategy template has not been provided as each metropolitan municipality has evolved along its own path, operates in a unique manner and at a different capacity, level of maturity and needs to develop their strategy internally for it to have the best chance of success.

The focus of this document is to provide a resource document that will guide metros to craft their agenda for creating soundly managed businesses that will be more resilient to the inevitable shocks that will arise through climate-related and other events. Soundly managed businesses plan for, and anticipate shocks, reducing their impact. These businesses have the management capability and the resources to effectively manage shocks as and when they arise.

This resource document should be read together with National Treasury's Metro Preparation For The Introduction Of Trading Services Reforms Grant: Guidance Notes 1 to 4[1] including addendums where relevant. It is worth noting that this document is not static and will be enhanced over time, based on experience and learnings from implementing the reforms.

2 Context

Many of South Africa's municipal trading service businesses are in trouble. The National Treasury is working with sector departments, municipalities and other stakeholders to address this situation . The National Treasury's Cities Support Programme (CSP) has been supporting metropolitan municipalities since 2019, on request, to turnaround their water business. Several metro municipalities have also requested support on their electricity and energy businesses, which are also facing serious challenges.

[1] Accessible at https://mfma.treasury.gov.za/Guidelines/Documents/Forms/AllItems.aspx?RootFolder=%2fGuidelines%2fDocuments%2fTrading%20Services&FolderCTID=0x0120004720FD2D0551AE409361D6CB3E122A08

This, plus the overall awareness of the parlous state of all essential services in metros, resulted in the conceptualisation of the MTSP. The MTSP aims to lead the turnaround of essential services in South African metros through incentives and support, to re-establish an environment that attracts investment and provides reliable basic services to residents. Although solid waste management has a far smaller contribution to overall metro operational expenditure (± 4%), as the third municipal trading service, it is logical to include it in the reform together with water and sanitation, and electricity and energy. This is mainly because solid waste is not only a trading services but also play pivotal role in the economies of the metros and the country. Thus, solid waste management together with water, sanitation and electricity are anchor enabling infrastructure services which influence where investors locate businesses and where jobs are created.

3 Status of solid waste management in metros

- **Business scope**

The solid waste business, reduced to its core basics from a cost perspective, is a logistics business (collections and transfer) and a disposal business (management of waste disposal sites, environmental compliance). These basic operations are overlain by a complex set of incentives and processes related to waste minimisation, diversion, recycling.

Both water and sanitation and electricity are networked services, relying on physical infrastructure installations to deliver their product directly to customers along a network of fixed routes of pipes, manholes, substations and cables. In contrast, solid waste management is a logistics service that collects the product of waste from the customers and moves it to managed disposal sites. Waste logistics account for the bulk of the costs of solid waste management businesses yet efforts to improve efficiencies in metros are not in evidence[2].

Transport in metros is currently provided through various mechanisms that appear to have evolved organically: some transport is provided by the metro itself, some are outsourced via contractors (partially or completely), or provided through a PPP or service delivery agreement. Vehicles can follow any number of routes on the available road network, which could include transfer stations. Furthermore, customers can also contract directly with the private sector to collect their waste, or transport their own waste to drop-offs or landfill sites, where they may or may not be charged a gate fee to dispose. As such, solid waste does not display monopolistic characteristics as in the case of the water and electricity trading businesses of metros and features (e.g. regulation) that normally goes with such services.

Getting good data is key to both basic business processes in terms of optimisation and efficiency of collections as well as disposal. Without this, business transformation to better environmental practice and compliance with environmental regulations cannot meaningfully be achieved. Compared to the other trading services, data development is lagging in this sector.

[2] World Bank. 2023. Waste not, want not: Solid Waste Management Businesses in South Africa's Metro's – A Diagnostic

As with the other trading services, the solid waste business faces complex challenges characterized by poor financial management, lack of investment, operational inefficiencies, ageing infrastructure, vandalism, and insufficient technical (and in some cases, leadership) capacity. Different to the other services, solid waste has rarely been recognised as a service to be operated in a business-like manner[3]. Solid waste management is a primary sector that suffers from ineffective municipal financing. Averaged across the world, local governments cover about 50% of investment costs for waste systems, with the remainder mainly from national government subsidies and the private sector[4]. (Both the logistics and disposal aspects are more suited to private sector involvement than the other trading services). Improvement in municipal creditworthiness requires operating income to exceed operating expenses at which point external loan funding can be serviced. Many metropolitan municipalities in their entirety cannot attract preferential loans and service departments within these municipalities need to transform entirely to attract external finance.

Public awareness and attitudes towards waste has an impact on the entire solid waste management system. This includes household storage to separation, interest in waste reduction, recycling, demand for collection services, willingness to pay for solid waste management services, opposition to proposed locations of waste facilities, the amount of waste in the streets (littering), and ultimately the success or failure of a solid waste management system[5].

Being a labour intensive business, the main operational expenditure items relate to staff costs and contracted services. Capital budget allocation has historically not met the needs of metros to maintain waste collection fleet within an optimal age range, nor invest sufficiently in drop-off, transfer and landfill infrastructure. Introduction of waste minimisation and circular economy legislation such as South Africa's Extended Producer Responsibility (EPR) regulations has increased the demand for capital investment.

- **Evolution of waste management**

Modern solid waste management has evolved significantly over time, adapting to changing urbanization patterns, economic growth, and technological advancements. Since the 1970s, solid waste management practices were defined in engineering terms – technical problems with technical solutions. The concept of integrated solid waste management strives to strike a balance between three dimensions of waste management: environmental *effectiveness,* social *acceptability*, and economic *affordability*.

In low-income countries, open dumping and burning are common, but there is a growing shift toward controlled dumpsites or sanitary engineered landfills as well as some metro and government sanctioned recycling systems (e.g. MRFs and MBTs). Informal waste collection systems play a role, are being further supported through structured solutions for waste reclaimers, such as the South Africa Waste Pickers Registration System (SAWPRS). Middle-income countries primarily use landfills but are increasingly investing in sorting plants, recycling facilities, and waste-to-energy incineration due to land scarcity and the high cost of tipping fees and costs of haulage to landfills. Some

[3] A utility where a commodity is bought and sold rather than a service that is bought and sold
[4] Kaza et al., What a Waste 2.0 : A Global Snapshot of Solid Waste Management to 2050 (English). Urban Development Series, Washington, D.C. : World Bank Group.
[5] Wilson DC. Development drivers for waste management. Waste Management Research. 2007

metropolitan areas are adopting waste-to-energy incineration despite challenges such as high costs and low calorific value of co-mingled waste. High-income countries focus on sanitary landfills, incinerators, and advanced recycling techniques. Waste-derived energy is often employed with combustion, providing a net energy generation gain. Automation in waste processing, such as optical sorting and AI-driven recycling, is becoming common. Countries like Japan and Western European nations have nearly eliminated landfill use, largely through iteratively increasing their landfill tipping fees, to the point where alternative waste recycling and recovery practices led by the private sector, coupled with strict enforcement from local government, phase in scalable and commercially sustainable recycling and waste reduction practices[6].

Managing waste is a complex task that requires appropriate technical solutions informed by reliable data, sufficient organizational capacity, and co-operation between a wide range of stakeholders.[7] There is a clear difference between formal and informal areas in how solid waste is managed. Solid waste is truly at the coalface of municipal services with immediate and extensive social impact. Several cities have over time attempted to halt informal waste economies, but recently there has been movement towards further integration: recognising the value of waste-pickers in solid waste management, and integrating this despite the social complexity[8].

The interdisciplinary and multi-sectoral considerations needed for the proper management of solid waste include manufacturing, transportation, urban growth and development, land use patterns, public health, etc. and highlights ‘‘*the interaction and complexity between the physical components of the system and the conceptual components that include the social and environmental spheres. When waste is seen as part of a ... system, the relationship of waste to other parts of the system is revealed and thus the potential for greater sustainability of the operation increases*.”[9]

- **Funding**

One of the challenges to improving solid waste management is funding. Metros currently fund the service through a variety of means, usually involving some user charges/tariffs, a significant rates component, and cross-subsidisation of households to various degrees. Apportionment of equitable share to solid waste management also varies as does the level of subsidisation of households. A large portion of costs relate to general municipal cleansing services funded by rates. The challenge with this is that solid waste management is beholden to the metro when rates increases are decided and budgets are cut. The revenue shortfall can be compounded by poor billing practices and ineffective municipal debt management, resulting in significant financial leakages at corporate level which impacts the service. Trading service revenues and expenditures are not ringfenced, further exacerbating underinvestment in the logistics and maintenance of the disposal sites and the remainder of the value chain.

Thus, it is recognised that part of turning around municipal solid waste management business will require significant investments in improved business practices and infrastructure. Capital allocation

[6] World Bank. 2021. Bridging the Gap in Solid Waste Management: Governance Requirements for Results
[7] M.A. Zarate, J. Slotnick, M. Ramos, Capacity building in rural Guatemala by implementing a solid waste management program, Waste Management, Volume 28, Issue 12, 2008
[8] World Bank. 2023. Supporting waste picker registration and integration: insights from South Africa
[9] J. K. Seadon, Sustainable waste management systems, Journal of Cleaner Production, Volume 18, Issues 16–17, 2010

for solid waste infrastructure is typically not prioritised when competing with other critical infrastructure for roads, water, electricity etc. Solid waste infrastructure is also not as visible and politically marketable as other social good types of infrastructure. Providing the space for solid waste management to plan for the long-term with reliable sources of revenue which are ringfenced to the business will result in efficiencies and service improvement even if capital expenditures do not dramatically increase in the short-term.

Furthermore, it is clear that municipalities alone will not be able to meet the investment needs to have significant impact, while failure to provide a solution to this glaring challenge impacts negatively on the economy, health and wellbeing of the cities and the country. To mitigate this imminent threat, national government needs to work with municipalities to develop a long-term sustainable solution to address underinvestment. With increasing pressure on the national fiscus, the traditional approach of providing more money, through increased transfers (e.g., grant funding with relaxed conditions) to fund the under-investment in trading services is not viable or desirable.

The current grant allocation conditions in the Division of Revenue Act (DORA) do not incentivize better outcomes. The DORA allocates resources to municipalities based on the ability to spend rather than spending that leads to improved service outcomes. In addition, spending grant funding suffers from the following inter-connected challenges:

- Municipalities lack the technical capability and capacity to spend grants effectively. This often means that allocated grants remain unspent at the end of a financial year;
- Projects are chosen for the wrong reasons, and capital allocations are not optimized;
- Procurement processes are captured for corrupt purposes, leading to inflated prices and poor project outcomes; and
- Supply chain management processes are overly onerous and privilege form (a tick box exercise) over substance (obtaining value for money).

The result is extremely poor value for money from the significant grant spend in the sector overall.

This problem cannot be solved by throwing more good money after bad and increasing grant allocations to inefficient services. It is imperative that existing grants are used more effectively and efficiently.

The MTSP aims to incentivise metro trading services to reform into sustainable businesses. This provides solid waste management with a unique opportunity to participate alongside water services and electricity in using grant funding to leverage improved performance as well as business turnaround to enable commercial funding. The grant component will be allocated to metros who meet the criteria for joining the programme (see Guidance Notes 1 and 2) and progressively improve service performance according to selected indicators over the life of the reform (see Guidance Note 4).

South Africa cannot afford sufficient grant funding to restore all three services in all eight metros. For this, more commercial funding is needed to fill the funding gap. Commercial funding is entirely feasible to support infrastructure investments in South Africa's main economic hubs, but *only where* trading services are effectively and efficiently managed.

- **Required reform**

National Treasury together with sector departments is establishing a performance-based finance incentive requiring cities to develop and implement a turnaround strategy that sets out clear goals, with time-bound targets and includes a practical pathway to develop or secure the necessary capability to implement the strategy effectively.

The metro trading services reform is based on a theory of change[10] which recognises that municipalities have the constitutional responsibility to provide basic services, and that it is ultimately a political decision on the part of municipalities as to how these services are provided. It is against this background that each municipality needs to develop a reform strategy that responds to its context.

Change is more likely to be successful if it is guided by a clear strategy that includes the following components (Refer to Section 6.2 for the 7-box model):

- A clear identification of the challenges to be addressed, together with an understanding of the underlying causes of these challenges;
- Clear prioritised goals related to key outcomes, with time-bound targets so that progress can be tracked;
- Clear identification of solutions (*how to address the challenges*) paying attention to organisational form (structure), processes, and capability (particularly managerial and technical capability);
- A process that builds a stable and strong coalition to support the changes, understanding that any significant change will inevitably meet some form of resistance; and
- Draws on relevant experience and expertise to assist the process, both from South Africa and elsewhere. South Africa's challenges are not unique and experience in the provision of well managed municipal trading services is both relevant and available to support within South Africa and beyond.

4 The case for change

Implementing significant change in an organisation is both difficult and risky. There needs to be a **compelling case for change**, although this is not the only criterion for initiating successful change. Key stakeholders need to understand the need for change. It is particularly important that political and administrative leadership within a municipality understands the need for change and provides the leadership required to implement a Council-approved strategy that effectively addresses the challenges. Following the development of strategies for both water and electricity trading services, metro Councils will be familiar with the reform when the solid waste management strategy lands.

National Treasury acknowledges that a compelling case has been made to implement trading services reforms in municipalities. In summary:

- **Financial performance is very poor**, and many cities are not able to collect the cash necessary to manage the business effectively. A turnaround in the financial performance of trading services is critical to improve services.

[10] "Building water resilience in South Africa's cities" (National Treasury, 2022)

- **Cities have been under-investing in the maintenance and rehabilitation of infrastructure over many years,** including waste transport vehicles and the non-maintenance, repair or installation of basic quality assurance and monitoring assets such as weighbridges, resulting in a compromised service with an ongoing decline in service outcomes.
- **Tariff structures, setting and approval** are problematic resulting in tariffs that are not cost-reflective with negative impacts on revenue. In some metros, collection tariffs compete with the private sector in securing commercial waste customers.
- **Cities' trading services are not run as businesses**. This has a direct impact on all aspects of the performance of the service. There is no single point of accountability for performance. Corporate finance blames the technical department for poor performance. The technical department blames the corporate and finance functions (IT, fleet, metering, billing, debt management, procurement, HR and customer services) for poor performance. The reasons why trading services should be run as a business are set out elsewhere in the document.
- **Most cities do not have the necessary technical or general management capability to manage and run an effective trading services business**. Some municipalities do not have any appropriately registered professionals in the employ of the service function at a senior level. For solid waste management, not only are professional engineers, technologists and scientists required, but also logistics specialists.
- **Data and information on solid waste management particularly are insufficient and unreliable**[11] to inform improved efficiencies, services and legislative compliance. This results in a massive wastage of scarce resources and inability to plan and resource waste minimisation or EPR based initiatives.
- **Procurement of essential support services is compromised**. Cities appear unable to procure the services of competent service providers in a timely way to support the performance of its functions. The compliance focus of centralised procurement processes often results in disabling interpretation of applicable legislation and regulations, leading to unacceptable delays and questionable value for money.
- **Cities suffer a lack of legitimacy and credibility** and are unable to win the trust of customers.
- **Additionally, evolving legislation**[9] **to improve environmental sustainability impacts on existing business models and is likely to increase the investment requirement**. Environmental sustainability and the circular economy is now a central concept pivoting from long term planning based on landfill as a primary destination for waste. Energy recovery from waste as well as scalable recycling and recovery initiatives hold considerable potential, but will still require a large public subsidy share, beyond the inherent commodity value of what is being recycled or recovered. Such public, private financed models are well documented in South Africa and include large waste MRF and MBT facilities at Kraaifontein and Coastal Park.

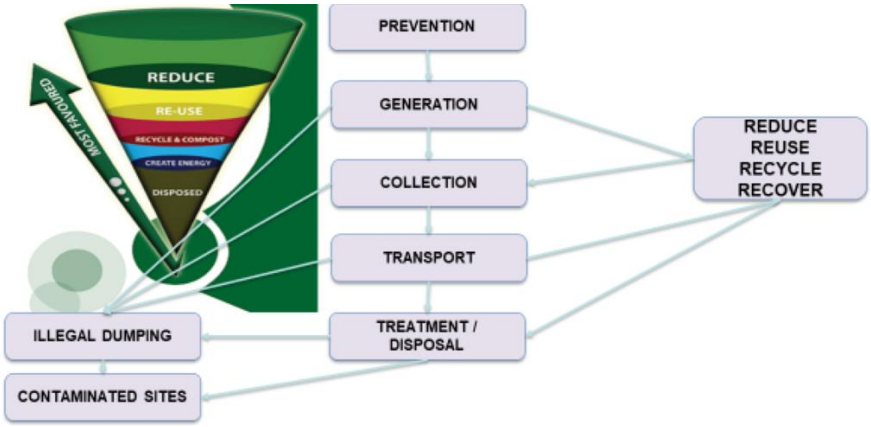
Service delivery performance is negatively impacted by a combination of the above inter-related factors, where long-term underinvestment leads to:

- declining services which result in declining cash revenues;
- inefficient and under-resourced municipal service providers resulting; and
- less funding to maintain and invest in infrastructure.

[11] World Bank. 2023. Waste not, want not: Solid Waste Management Businesses in South Africa's Metro's – A Diagnostic

Without attending to the overall management and governance of the solid waste management hierarchy (Figure 1), improvements in any of the above factors are likely to be only temporary.

Figure 1: Waste Management Hierarchy[12]



5 Strategic focus areas

Based on National Treasury's engagement over several years with municipal trading service challenges, an effective and responsive turnaround/improvement strategy for cities should address the following key areas: (*with associated goals, indicative and illustrative*)

- **Organisational structure**

The organizational structure within which the service is delivered should be designed to **effectively manage the core functions of the business**—such as customer services, finances, human resources, procurement, asset management, and operations. This management structure must have a degree of autonomy, with clear accountability for performance, while operating within a framework of robust governance practices.

- **Management and technical capability**

To ensure the effective management and operation of the service, it is essential to secure the following capabilities:

- Management Capability: Recruit or contract skilled professionals with the requisite management expertise to oversee and guide the service's operations effectively. This includes individuals with **strong leadership skills, strategic planning abilities, and experience in managing core business functions**; and
- Professional Engineering and Technical Capability: Engage or contract **qualified engineering and technical experts who possess the specialized knowledge and skills necessary for the technical and logistical aspects** of the service.

[12] DFFE. 2020. National Waste Management Strategy 2020 (NWMS), https://www.dffe.gov.za/sites/default/files/docs/nationalwaste_management_strategy.pdf. The NWMS is a legislative requirement of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008).

Human resources talent management must identify and develop a pipeline of competent employees in these critical skills areas.

- **Financial viability and performance**

Solid waste services typically have a **tariff component** where customers pay for collection services, as well as a **rates component** to cover the cost of public cleansing services which comprises a substantial proportion of the service and volume of generated waste. The proportion of rates revenue specifically collected for public solid waste services needs to be transparent and reliable if the service is to be able to properly plan. Tariffs need to cover the cost of individual customer collection, providing the opportunity for customers to choose how much of the service they need (i.e. number of wheelie bins collected), as well as for example gate fees at landfill sites.

Revenues and expenditures need to be properly categorised and reported to improve efficiencies. While financial statements are currently not provided by the service in most metros[13], separate statements per trading service will inform costs and facilitate ringfencing. The largest up-front capital waste management expenditures usually relate to construction of disposal infrastructure, collection vehicles and disposal equipment and bins. As services evolve and waste volumes grow, these need to be rehauled or augmented, and offset against higher maintenance costs for older vehicles. Aspects such as increases in fuel price and maintenance, road condition and regional development also influences the requirements for waste transfer stations.

Financial viability encompasses key functions such billing performance, cash collection, credit control, budgeting, budget execution, and tariff management. Specific performance targets may include improved cash collection rate and publishing annual financial statements for the business unit. Effective management and sustainable revenue from solid waste services require enabling systems that are both technologically advanced and integrated with tariff mechanisms. This allows for efficient operation, better performance tracking, and dynamic tariff adjustments, enabling utilities to meet performance targets and manage the solid waste business more effectively. Ring fencing of solid waste accounts is a step towards cost-reflective tariffs and identifying the level of subsidisation of either the waste service or the rates account.

- **Customer service, responsiveness, and communications**

A key principle is recognizing that the service exists to meet customer needs. This can be demonstrated through a fully operational customer call centre, ensuring for example that 80% of calls are answered within 60 seconds (to be progressively improved), and setting clear standards for resolving different types of customer queries. These actions promote responsiveness, efficiency, and accountability in service delivery. Depending on location, the number of calls logged for solid waste complaints are likely to be in the region of 20% or less compared to either electricity or water services. However, with customer services playing such a critical part of management of the utility, it requires special focus even if a separate call centre cannot be justified.

- **Technical performance metrics**

[13] Currently only Pikitup, an entity of the City of Johannesburg, is able to provide information in detail.

For this service, the customer experience and environmental impact of the service carry equal weight in defining success. Service coverage and reliability impacts on customer satisfaction, requiring functional logistics infrastructure and telematics such as fleet tracking for route optimisation, and weighbridges at landfills, drop-offs, transfer stations, and MRFs. A comprehensive, long-term strategy for a circular waste economy is essential to shaping business priorities while ensuring compliance with environmental licenses, reducing greenhouse gas emissions, harnessing potential revenue streams such as energy generation and minimizing waste. A key component of this strategy is Extended Producer Responsibility (EPR), which mandates that industries finance waste management systems, including higher tipping fees. This funding mechanism creates an enabling environment where recycling solutions—otherwise economically uncompetitive with landfill tipping fees—can be implemented at lower costs, ultimately supporting more sustainable infrastructure and operational efficiency.

- **Strategies to mitigate increased costs due to legacy practices, illegal dumping and infrastructure vandalism**

Addressing the issue of increased costs, poor service perception and increased environmental impact is crucial for maintaining the financial sustainability of municipal services. The cost of any additional services such as rehabilitation of closed un-lined landfill sites, clearing of illegal dumping and prevention, security at municipal waste sites and repair of infrastructure damaged through vandalism must be accounted for. Additional services such as treating leachate and capturing gas, more frequent litter picking in informal settlements, additional security to safeguard perimeters of vast landfill sites and increasing availability of drop-offs need to be contrasted to the value they render. For example, in the absence of regular improved services, what would the cost be of removing illegal dumping, of addressing increased anti-social behaviour, of reduced tourism, of negative impact on health and safety especially of vulnerable communities, all of which hamper economic growth?

6 Managing a solid waste management business

6.1 Sound management as a foundation of resilience

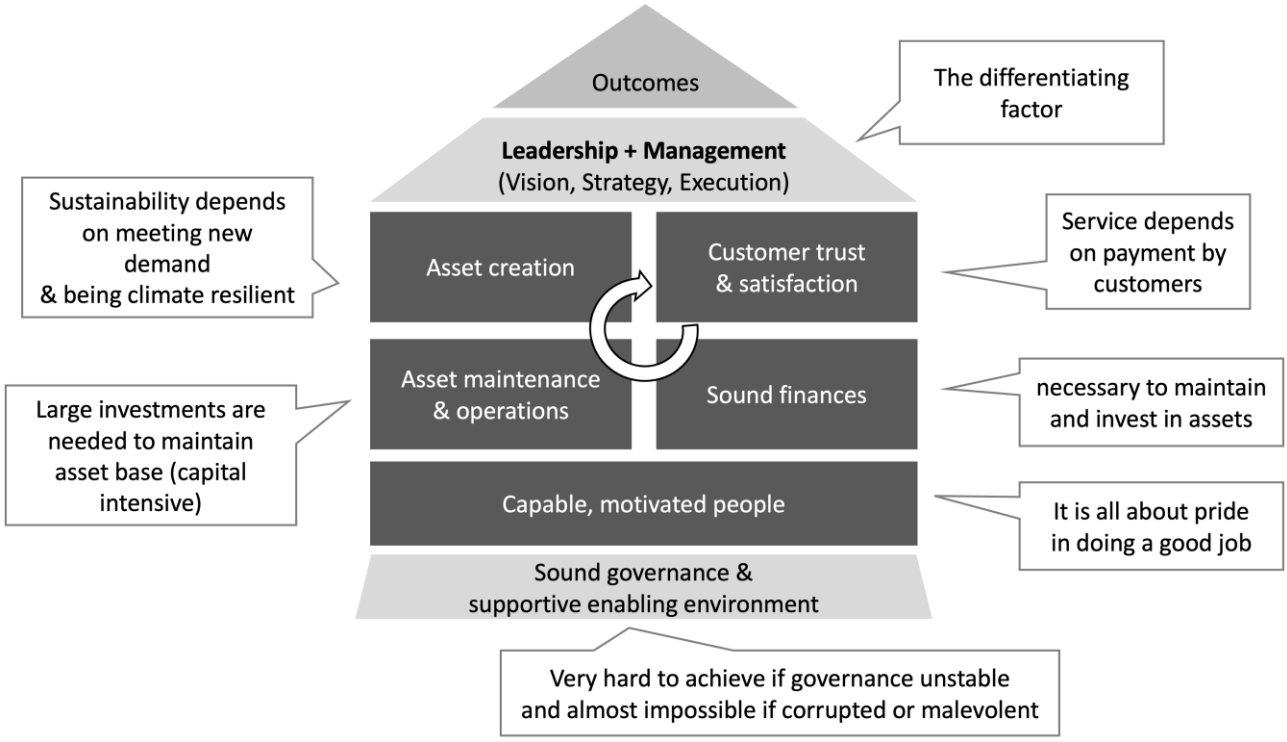
To provide reliable and safe solid waste management, solid waste services and associated infrastructure needs to be resilient to shocks, including climate-related shocks and anticipated changes arising from climate change and adaptation. Systems that are poorly managed and financially weak are inherently fragile, and the impacts of shocks on these systems are much more severe.

6.2 Essential characteristics of soundly managed trading service businesses

Providing effective trading services is not just a technical function but requires a “whole of business” approach. It is useful to consider this approach when crafting a strategy to give effect to sustainable service delivery built on business principles. All of the functions necessary to manage an effective trading service must be addressed (see figure 2); this includes customer services (communications, awareness and education etc.), financial performance (including billing, financial modelling, budgeting etc), human resources (ensuring fit-for-purpose organisational structure, staff capability and performance), support services (procurement, contract management, IT, fleet management, legal,

environmental etc.) as well as the more 'technical' aspects of the business (planning, logistics, asset creation, asset management, operations and maintenance etc.).

Figure 2: 7-box model of successful trading service



International experience shows that soundly-managed trading service businesses share the following five common characteristics:[14]

- **Customer-oriented and customer-responsive**, recognising that the purpose of the business is to serve customers, that customers experience and perceptions matter, and that happy customers are paying customers;
- **Sound finances**, as a result of effective **financial management,** accompanied by financial **transparency** and **appropriate tariffs (and rates)** with good revenue management (**billing** and **cash collection, debt management**), low levels of inefficiency and good controls on expenditure, with cost-effective and efficient procurement;
- **Care of asset maintenance, operations and asset creation** to maintain the asset base, meet new demand, respond to a changing business landscape and be climate resilient;
- **Professionalised-management** with a suitable degree of managerial autonomy, incentivised to perform and with accountability for performance; and
- **Sound governance**, with a clear distinction and separation of oversight and management/operational roles, and with clear processes and mechanisms that promote and protect probity, particularly with respect to finances, procurement and appointments.[15]

[14] See, for example, Baietti A. Kingdom, W. & Van Ginneken M. 2006. Characteristics of well performing Public Water Utilities: World Bank Water Supply and Sanitation working Note No. 9. and Kingdom Bill. Building Utility Resilience. Presentation to DWS Workshop on Water resilience, August 2022, Bill Kingdom

[15] Probity *definition*. Having strong moral principles; honesty and decency. (Oxford English Dictionary)

Effective utility operations also have two further important requirements (i.e. seven in total):

- a supportive enabling environment; and
- leadership and management with the vision, strategy and execution capacity required to achieve the outcomes required.

While municipal business units or entities still form part of the parent municipality and thus governed by parent policies and accountable to Council, the latter two requirements need to be influenced as far as possible.

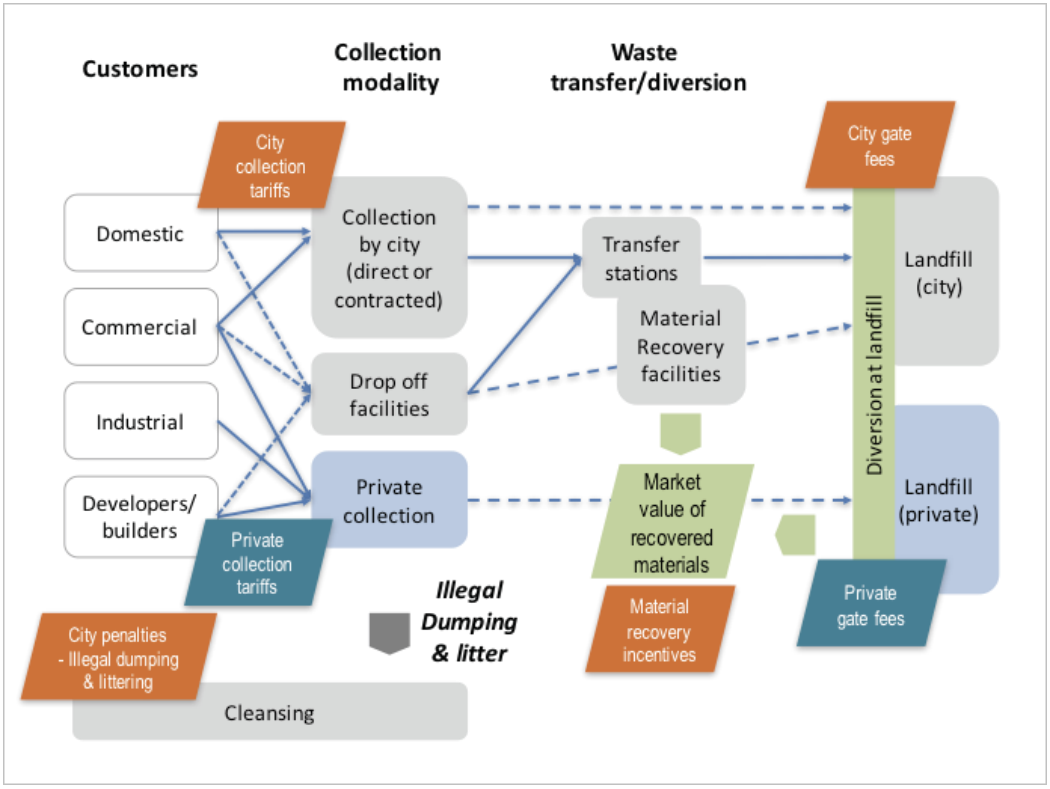
7 Governance

7.1 Why sound governance is important

Weak governance is a fundamental cause of poor performance in municipalities. Elected political office bearers hold ultimate responsibility for the performance of the municipal administration due to their oversight role and the significant influence they have on governance and operational outcomes, including the provision of key services such as solid waste management. Variations in performance within municipalities and among those in similar conditions underscore the critical impact of political governance on municipal effectiveness.

Without robust governance structures, there is limited confidence that scarce resources—such as grants, commercial finance, and payments—will be utilized efficiently and effectively.

Figure 3: Key waste management activities and related incentives[16]



[16] Eberhard, R. Discussion paper: *Waste management in South Africa's cities. 2018.*

There are **three main role-players in managing solid waste**: **waste generators** ("customers", including Government and the city itself), **waste services providers** (both public and private providers) and the **responsible authority for waste management** (government). The core objectives of waste management are clear (reduce, reuse, recycle and safe disposal), but the waste management business is complex and the effective functioning of the business is dependent on a number of inter-related factors as illustrated in Figure 3. Sound governance is fundamental to improved services, value for money and reduced negative environmental impacts.

7.2 Options to improve governance

Improving governance in municipal trading services involves two complementary approaches: (i) protecting against poor practices, and (ii) creating a trading service structure that promotes better governance through clear rules and norms. These strategies are not mutually exclusive but work together to strengthen governance and improve service delivery.

The core ingredients of sound governance and effective management contributing to good performance of a municipal trading service are set out in Table 1.

Table 1: Core ingredients of sound governance and effective management

Area	Core ingredients of sound governance and effective management
Leadership	• Public commitment by political leadership • Dashboard on performance published and regularly updated (see strategy & business plan below) • Regular engagement and communications on progress
Strategy & plans	• Council-approved Turnaround Strategy with priorities, targets & milestones (ten-year horizon, updated periodically) • Approved business plan in place covering all aspects of the business, with agreed KPI's (three-year horizon, updated annually) • Council-approved & funded investment plan aligned to strategy & business plan, (updated annually) • Plans and programmes fully embedded /included in / supported by MTREF
Revenue & tariffs	• Council-approved tariff and rates generate sufficient revenue (with available grants) to meet efficient operating costs and necessary investment costs. • Processes and methods for setting tariffs and pricing well-defined and transparent, and based on accepted economic regulation methodologies for public infrastructure • Municipalities must conduct Cost of Supply studies
Governance & oversight	• Oversight committee or Board suitably skilled, experienced and trained • Separate reporting on financial performance for solid waste management business (with full set of financial statements (income statement, balance sheet and cash flow) within metro AFS, audited by A/G) • Clear separation of governance role from day-to-day operations and management • Transparent procurement • Zero tolerance of corruption and patronage

Area	Core ingredients of sound governance and effective management
Management	• Appointment of capable management team with mandate and autonomy to manage • Accountability for performance with incentives (annual performance review linked to remuneration)

Source: Summary Concept: Incentives to support municipal water service turnarounds. Draft: 27 April 2022. Prepared for National Treasury. Prepared by Cities Support Programme.

Strong leadership is essential at both the political level (the Executive Mayor and the Mayoral Executive Committee), and within the senior administration, (the City Manager and the Executive Management Team), to ensure that all governance elements are in place and functioning effectively. However, several risks can undermine effective governance of trading services in municipalities, including:

- **An absence of leadership at the political level (trading services not considered a priority).** This could be because of failure of communication – politicians are not made aware of the full extent of the problem or because short-term considerations trump the decisions, actions and investment priorities (often long-term or repairs and maintenance) necessary to make a significant difference (and to turnaround a business);

  The nature of infrastructure investment requires a long-term approach while political terms are short. This is compounded by much solid waste infrastructure located far away from households and therefore difficult to use in political campaigns compared to other services such as housing;

- **Oversight exercised without the necessary knowledge and skills to oversee a large, complex infrastructure-intensive business.** Some elected representatives may lack experience and appropriate qualifications and an appreciation that solid waste is an infrastructure business;[17]

- **A failure to appoint a capable management team with the necessary management and technical skills.** For large urban trading services, it is essential that professional qualified engineers/transport economists are part of the management team. In addition, the lead executive needs to be suitably skilled to implement a business approach; and

- **Inappropriate interference in the day-to-day management of the business, including in staff appointment and procurement decisions**, leading to poor decision-making and inefficient use of scarce resources.

[17] Former SALGA CEO, Xolile George, noted that, while councillors did not require any particular qualification, their lack of skills had become a problem. "With almost 69% of councillors with either matric or less in the picture, and this is not to say the standard measure is above matric, but there's a need to have a multi-pronged strategy that recognises leadership competencies political leadership and maybe a degree of academic qualifications." (Eyewitness news, 16 April 2021; ewn.co.za/2021/04/16/salga-raises-concerns-over-councillors-lack-of-skills)

The remedy depends on well-informed political leadership that is willing to take a longer-term view (term of office and beyond), and a capable executive management team (city manager, chief financial officer and the executive lead for solid waste management).

8 Structuring the solid waste management service as a business

8.1 Changing landscape of solid waste management

Solid waste management is a global issue impacting individuals and communities. Poor waste management leads to environmental and health hazards, including ocean pollution, flooding, spread disease, respiratory problems, harm to wildlife, and economic losses, including reduced tourism. As countries develop, waste production increases due to urbanization and rising prosperity, making waste collection and disposal more challenging. Poor waste management disproportionately affects the poor, who often live in areas with poor waste services and have little control over waste disposal near their homes, exposing them to severe environmental and health risks. Urgent action is needed at all levels to address the growing problem of unmanaged waste.

Even where development has not lead to prosperity in low to middle-income countries, over the past decade both the composition and volume of waste generated per capita has changed, with a move away from organic waste and an increase in waste collected across the board. Concessional finance and higher tipping fees in the EU and North America, have triggered a trend towards recycling and composting and other waste recovery practices, yet not at the same rate as growth in waste generation. In low and middle-income countries, for example, waste generation is predicted to grow by 40% by 2050.

Solid waste management in South Africa's metropolitan municipalities leads district and rural municipalities in local government, but there is room for improvement. Efficacy of collection is hampered by, for example, illegal dumping and anti-social behaviour, while rapid growth of informal settlements impacts on cleansing programmes. Sophisticated treatment of waste streams away from landfill multiply costs by between 1.5 to 3 times. Strong enforcement is required to motivate users to comply with regulations; unlikely to perform well in countries where rule of law is not a social priority. Equally important there is a need for focused education programmes which will improve and impact on human behaviour that is currently the major source of poor waste management.

8.2 Reorganising for a business approach

The following are defining elements of a business approach to the provision of trading services, thus, in structuring solid waste management in the metros, it would be important to consider and/or factor the following:

1. **Leadership and management**: The service is led by a business-oriented single executive lead ("Chief Executive Officer" or Head of business unit) and managed by a multi-disciplinary management team reporting to, and including, the executive team lead. This team has a dedicated focus on business performance and outcomes, and with individual and collective responsibility for outputs and outcomes, suitably incentivised;

2. **Time horizon**: Investment and management decisions are taken on the basis of a multi-year and long-term outlook in light of the fact that trading service business is infrastructure intensive;
3. **Financial accounting**: The business entity has a separate income statement, balance sheet and cash flow so that the financial status and performance of the business can be assessed. The financial statements record the assets and liabilities of the business and are audited separately from the municipality's primary accounts;
4. **Performance reporting**: There is a suitable set of integrated performance metrics for the business (financial and technical) that is measured and reported at least annually, along with appropriate benchmarks;
5. **Business integration**: The core functions of the business (human resources, finance, information technology, supply chain management, project management, communications, call centre, fleet management, meter reading, billing, cash collection etc.) are tightly integrated into the business. Where these functions are performed by an external entity to the business, these are performed in terms of well-structured and enforceable service level agreements;
6. **People**: The business has the responsibility to recruit (and dismiss or retrench if necessary) and to set pay and incentive structures subject to relevant legislation;
7. **Trade-offs between operational and capital spending** are routinely taken into account in decision making;
8. **Flexible deployment of resources**: The entity is able to flexibly deploy staff and capital so as to optimise outcomes;
9. **Mandate, performance agreement and managerial autonomy**: The entity or business unit operates within an appropriate mandate of the owner/shareholder, in terms of a performance agreement, and with appropriate managerial autonomy related to the day-to-day operations of the business; and
10. **Shareholder financial agreement:** there is an agreement with the owner/shareholders on how inter-business costs are treated and the contribution provided to and/or from the municipality, and how investments are financed. In general, this is expected to comprise two components: (a) An expectation that the business will earn a profit/surplus that provides a reasonable return on capital invested, and (b) social goals are addressed through explicit Community Service Obligations for which the government pays by way of operational costs and through explicit grant-financing for capital projects that are not expected to earn a return.

8.3 Benefits of structuring solid waste management as a business

Solid waste management contributes close to 8% of metro trading service finances. While this is significantly less than either water or electricity, it is nonetheless substantial in all city budgets with solid waste operational expenditure ranking 6th highest of municipal functions. This is aligned with findings that solid waste accounts for only 4% of municipal budgets in upper income countries, more than 10% in middle income, and as much as 20% in low income countries[18].

The organisational structures that underlie waste management service delivery must respond to the administrative needs of the desired waste management system. Typically, waste management structures have evolved as a conurbation of administrative personnel who landed in the department

[18] Kaza et al., *What a Waste 2.0 : A Global Snapshot of Solid Waste Management to 2050 (English).* Urban Development Series Washington, D.C. : World Bank Group.

in local government without requisite qualifications or experience in solid waste management, resulting in ineffective organisational models. Waste management service delivery models should be based on appropriate financial, operational, and administrative requirements and policy objectives to meet local needs[19].

In this larger context, the needs and imperatives of the trading service are seldom fully appreciated, and do not receive the necessary management attention. Therefore, providing effective trading services is not just a technical function. All of the functions necessary to manage an effective trading service need to be addressed; this includes customer services (communications etc.), financial performance (including billing, credit control etc), human resources (ensuring staff capability and performance), support services (procurement, contract management, IT, fleet management etc.) as well as the more 'technical' aspects of the business (planning, asset creation, asset management, logistics, operations and maintenance etc.).

8.4 Implications of not treating solid waste as a business

To significantly improve the operational and financial efficiency of solid waste management trading services, it is crucial to dedicate considerable and focused management attention to the business. Treating the solid waste management trading service merely as an administrative department with some technical functions can obscure the comprehensive view of the business, which is essential for effective management.

A narrow focus on technical aspects alone often results in overlooking the broader business context, including the intricate interplay of various functions and objectives within the municipality. The implications of not treating trading services as a business typically include the following:

- No clear picture of the true financial position (balance sheet) and financial performance (income statement and cash flow) of the business and hence an inability to assess financial performance of the business as a whole. Instead, the key metrics measured are revenue and expenditure against budget;
- A failure to adequately resource the service in relation to its needs, that is, the capital and operating budgets, which are typically a product of an annual determination of a maximum increment rather than based on actual business needs;
- An inability to make appropriate trade-offs between capital and operational spending;
- An inadequate allocation from the equitable share to cover the cost of services provided to households which are subsidised or free of charge;
- A failure to recognize the specific technical and other competence requirements of the business in recruitment processes;
- Lack of transparency in inter-business costs and performance within the municipality, and absence and/or lack of enforceability of inter-business contracts;
- Decisions based on short-term considerations rather than the long-term sustainability of the business;
- Decisions based on corporate considerations rather than trading services' needs;

[19] World Bank. 2021. Bridging the Gap in Solid Waste Management: Governance Requirements for Results

- Low flexibility in deployment of resources as a result of strong rules against moving money between budget items within year and a lack of flexibility in how people are deployed. This makes it difficult to respond to unplanned challenges or changes during a financial year;
- An organizational culture that is risk averse and that penalises mistakes whereas innovative business cultures actively encourage experimentation and expect failures as part of this process; and
- The absence of clear performance and shareholder (financing) agreements between the shareholder and the business entity.

8.5 Trading service restructuring options

An analysis of the current approach to managing and delivering trading services within municipal departments and state-owned enterprises has led to the following observations:

- **Municipal departments (status quo)**. The outcomes from over 20 years of implementing this structure are overwhelmingly poor and not well capacitated. Alternative options to the current dominant mode of provision are explored in this resource document (business unit or municipal entity);
- **State-owned enterprises**. The provision of trading services by **state-owned enterprises** does not solve the accountability and governance risks in a context where local governments retain constitutional responsibility for service provision; and
- **Lease, concession and full private options**. Unless carefully structured and managed, they can remove public accountability by locking government in long-term contracts with risks of underinvestment or profiteering by the private sector.

Inappropriate structuring results in challenges related to management inefficiencies, accountability, and operational performance. The persistence of these issues underscores the urgent need for structural reform. Based on an overview of international examples for structuring the business (Annexure A), there are several options that could be considered, but for the purpose of the reform, the suggested migration is to either a municipal business unit or a municipal entity such as Pikitup. Given the funding mechanism of solid waste management there is less of an argument for a separate municipal entity. Less obvious options include cooperative models with community ownership, and mixed-ownership companies (Empresa Mixta[20]), that are majority-owned by the municipality (or municipalities). This would be a new model not yet used in South Africa but would be possible under current municipal legislation.

When evaluating restructuring options, several key factors must be considered. First, the involvement of the private sector could significantly enhance management capabilities within the sector, bringing in specialized expertise and efficiency specifically as the solid waste management business lends itself to this. Additionally, given the constrained availability of funding (own revenue and grant funding), and the significant infrastructure needs (existing and new) it is crucial for trading services in urban areas to secure commercial finance to support necessary investments.

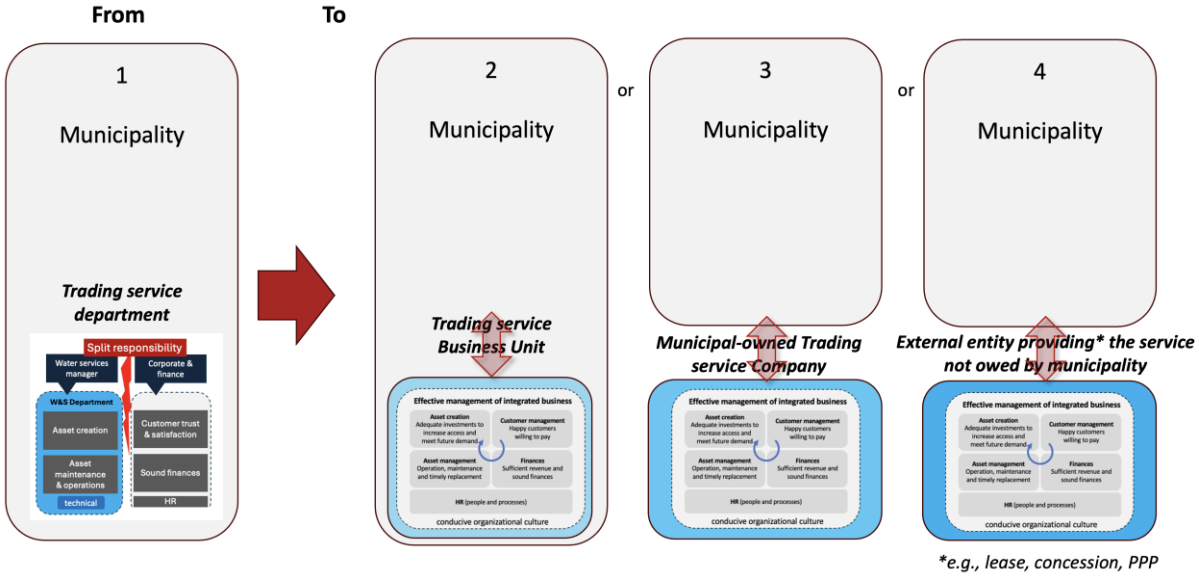
[20] https://ppp.worldbank.org/public-private-partnership/library/mixed-private-public-ownership-companies-empresa-mixta

When providing trading services through a department within the municipality (the dominant status quo model in South Africa), the ownership, oversight and provider roles are all combined in a single organisation. In theory, Council fulfils the ownership and oversight roles, and the administration is assigned the provider role. This blurring of the roles is a significant risk that can result in inadequate oversight and inefficient operations.

When a ring-fenced business unit is created, there is an opportunity to establish management autonomy, clear definition of roles and responsibilities and to structure the business unit as a business within the administrative structure of the city. The establishment of a municipal-owned entity or company structure formally separates the ownership, corporate oversight and management functions. There are two main forms of company structure: (i) a statutory body (formed in terms of specific legislation), or (ii) a company established in terms of private company law or municipal law. (The latter will be applicable for municipal entities in metros if this model is chosen) This is an ideal model, however, it is not protected from an erosion of autonomy and the penetration of corrupt interests and requires strong governance norms to uphold autonomy and professionalism (Annexure B).

The progression of restructuring options is shown in Figure 4.

Figure 4: Direction of travel



The evidence also shows that corporatization on its own is not a sufficient condition for good performance. Pikitup (also set up as a corporate municipal-owned entity) and other municipal entities set up without management contracts have not performed well. The performance of Johannesburg Water after the management contract also declined, showing the need for a more prolonged approach to build internal capacity and to strengthen incentives to create a structure that is more robust and is able to protect and extend performance improvements. Transparency is key to ensuring that once a business unit or entity is established, that accountability remains with the trading service. The long-term benefit of sustainable trading services is that surplus revenue will contribute to the rates account, and in so doing, improve all municipal services. Also see Annexure C.

9 Management and technical capability

As already noted, there has been a significant decline in the necessary management and technical staffing capabilities within municipalities to manage trading services effectively, and these are now in short supply in most municipalities. In solid waste management this shortage has been compounded by the failure to recognise the service as highly complex, requiring engineering, technical, scientific and managerial skills. Two options for strengthening the prevailing skills base are considered.

9.1 Internal capacity building, with external support (keeping the existing delivery model intact)

Municipalities could build their own capacity, through recruitment and training, with external support, while maintaining the existing service delivery model. Various municipal support initiatives have been attempted and some are ongoing.[21]

Success in turning around the performance of municipal trading services as a result of these initiatives is, in general, not apparent.[22] For example, a review of the Siyenza Manje support initiative, specifically focused at increasing technical capacity in the municipal water sector, through deployment of engineers, concluded that the majority of the problems at municipalities are structural, organisational and political in nature, with high municipal vacancy rate in key technical and senior management posts, and that the support requests tended to focus on addressing a short-term crisis rather than capacity development in municipalities.[23]

In light of the above, the strategy of internal capacity building (at least on its own) without appropriately resourcing it may not be sufficient to result in the necessary turnarounds of the municipal trading service business.

9.2 Creating a business unit or municipal entity, supported by a management contract

An alternative route to building capability is to professionalize the service through setting up a sufficiently autonomous business unit or a company structure, and to build capacity through recruitment into the business unit or company structure, supplemented with training initiatives. A management contract offers a possible vehicle to fast-track the creation of both management and technical capacity in this company structure.

The benefits of this approach are two-fold:

- Service conditions within a company structure are likely to be more favourable and it will be more possible to attract the necessary expertise into this structure (MFMA/PFMA prescripts will still exist); and

[21] For example, Project Consolidate (2004-2006**),** Siyenza Manje (2006-2011), Local Government Turnaround Strategy (2009-13); Back-to-basics initiative (2014-18), Municipal Infrastructure Support Agency (MISA) (established in 2012), Cities Support Programme (established in 2011).
[22] A review of the successes and failures of these initiatives is beyond the scope of this report.
[23] pmg.org.za/committee-meeting/12999/

- Management contracts are much more likely to be successful when applied to a company structure rather than a department within a municipality although they can be applied successfully to a business unit as well.[24]

There is precedent in South Africa for the use of a management contract to support the setting up of a company structure and to build the capacity of this structure for the provision of water and sanitation. The example of Joburg Water is useful as it can be applied to electricity entities as well (see Annexure C). Pikitup and City Power on the other hand was established without the use of a management contract, with less favourable results.

Another way to provide capacity is to contract the service out, either to a private or public entity that has this capacity. There are no known public entities that have the technical capacity or experience to be considered. Contracting out the service to a private operator, through a lease, affermage[25] or concession contract is also possible.

10 Process considerations

10.1 Foundational conditions for successful reform

Evidence suggests that specific factors need to be present to start a turnaround process for a trading service business[26]. While these do not ensure success, they are an important starting point:

- A **catalytic event** that triggers a need to change (a crisis);
- **Committed and capable leadership** to guide the utility through the process;
- The possibility of establishing sufficient **managerial autonomy** over key aspects of the business, including operations, finances and contracts; and
- A **political champion** committed to making the necessary changes in the governance environment to support good performance.

10.2 Political and administrative leadership of the process at municipal level

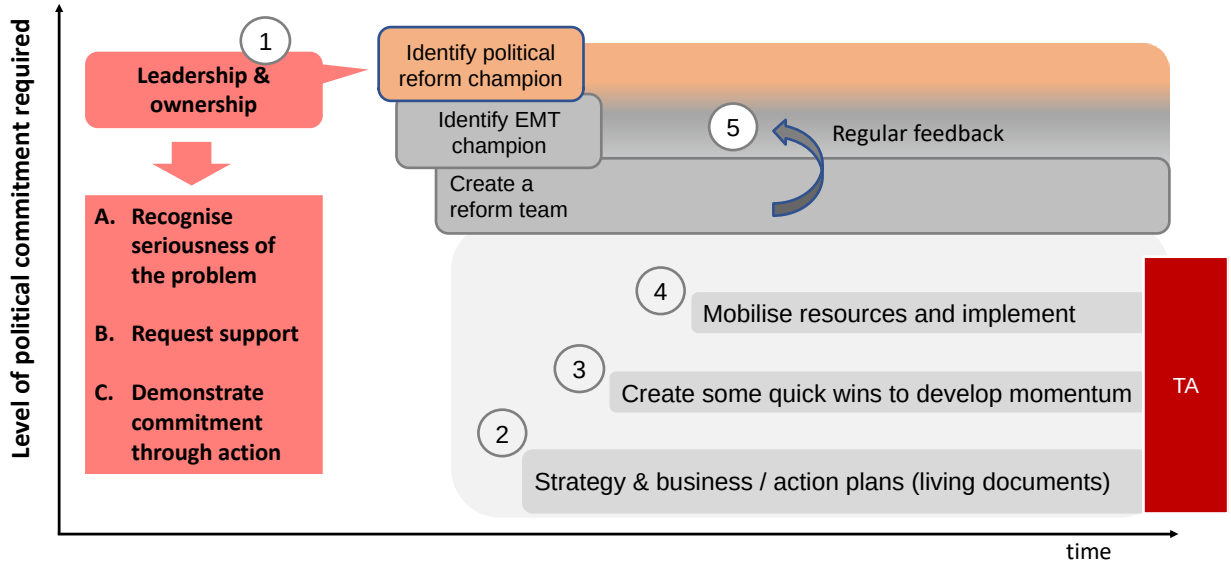
National Treasury emphasises the importance of leadership (as shown in Figure 5) in leading the turnaround of the municipal trading service business. Leadership of a trading service is especially important when business principles are introduced alongside public service obligations. The trading service will continue to operate within the metro as a whole, and thus requires a robust leader, who can withstand political and corporate pressures, while understanding the technical and commercial aspects of the trading service. CSP's approach has been to offer technical assistance and other support where this leadership is evident.

[24] A legal opinion commissioned by National Treasury concluded that "As a legal matter, the creation of a municipal entity undoubtably makes the conclusion of an effective management contract easier for the reasons discussed in this section and the previous section of the Report." (Legal Report on the use of Management Contracts as a mechanism to turnaround municipal water businesses (29 November 2021, World Bank)

[25] https://ppp.worldbank.org/public-private-partnership/agreements/leases-and-affermage-contracts

[26] Heymans, Chris. Fixing NMBM Water Business. Presentation to DWS Workshop on Water resilience, August 2022, Chris Heymans

Figure 5: A leadership first model



Written requests for support from the CSP must identify a political and administrative reform champion as well as a municipal reform team. The municipality must demonstrate its commitment through action. In response to the request, the CSP has provided technical assistance to:

- Support the development of a turnaround strategy and business plan.
- Advise on the implementation of the strategy and business plan, with a focus on quick wins to gain momentum.
- Assist with the mobilisation of further resources to help with implementing the turnaround strategy.

11 Additional resources & references

1. Asian Development Bank, Integrated Solid Waste Management for Local Governments: A Practical Guide, 2017, https://www.adb.org/sites/default/files/institutional-document/324101/tool-kit-solid-waste-management.pdf
2. Baietti A. Kingdom, W. & Van Ginneken M. 2006. Characteristics of well performing Public Water Utilities: World Bank Water Supply and Sanitation working Note No. 9.
3. Cities Support Programme, Building water resilience in South Africa's cities. National Treasury, 2022, https://csp.treasury.gov.za/DocumentsEvents/PIR%20Report%20Water%20Resilience%20RSA.pdf
4. DFFE. 2020. National Waste Management Strategy 2020 (NWMS), https://www.dffe.gov.za/sites/default/files/docs/nationalwaste_management_strategy.pdf.
5. Eberhard, R. Waste management in South Africa's cities. Discussion paper, Supporting waste picker registration & integration: Insights from South Africa
6. Heymans, C. Fixing NMBM Water Business. Presentation to DWS Workshop on Water resilience, August 2022, Chris Heymans
7. Kaza et al., What a Waste 2.0 : A Global Snapshot of Solid Waste Management to 2050. Urban Development Series, Washington, D.C. : World Bank Group.
8. Kingdom Bill. Building Utility Resilience. Presentation to DWS Workshop on Water resilience, August 2022, Bill Kingdom

9. Wilson DC. Development drivers for waste management. Waste Management Research. 2007
10. World Bank. 2021. Bridging the Gap in Solid Waste Management: Governance Requirements for Results, https://documents1.worldbank.org/curated/en/459431622213523067/pdf/Bridging-the-Gap-in-Solid-Waste-Management-Governance-Requirements-for-Results.pdf
11. World Bank. Leases and Affermage Contracts. https://ppp.worldbank.org/public-private-partnership/agreements/leases-and-affermage-contracts
12. World Bank. 2011. Mixed Private-Public Ownership Companies “Empresa Mixta”
13. World Bank. 2020. Strengthening municipal finance and solid waste management services with results-based financing approaches – Experiences from South Asia, https://openknowledge.worldbank.org/server/api/core/bitstreams/7865cf80-baf8-5071-99ac-4bda7660fd17/content
14. World Bank, National Treasury CSP. 2023. Supporting waste picker registration & integration: Insights from South Africa
15. World Bank, National Treasury CSP. 2023. Waste not, want not: A diagnostic of solid waste management in South African Metros, https://csp.treasury.gov.za/DocumentsEvents/Waste%20Not,%20Want%20Not%20-%20A%20Diagnostic%20of%20SWM%20in%20South%20African%20Metros.pdf

Annexure A: Solid Waste Management Delivery models

A 2021 study by the World Bank into solid waste management practices in developing countries, "Bridging the Gap in Solid Waste Management: Governance Requirements for Results" analysed the mechanisms in use for service provision[27]. Applicable to South African metros, direct provision by local authorities, with or without intermunicipal cooperation was analysed. Elsewhere, such as Estonia, Georgia and Azerbaijan, waste management services are nationally administered.

The World Bank global snapshot of Solid Waste Management[28] analysed oversight mechanisms in cities across the world. Of those cities with data, the majority had dedicated departments managing solid waste. The number of cities with a dedicated unit enforcing solid waste by-laws was significantly lower. Much more than the other trading services, solid waste management services are delivered through a number of different models and contracting arrangements. This includes direct municipal provision, intermunicipal, decentralised, mixed public-private and PPPs.

Examples of countries where municipalities are responsible for the service through municipal departments include the Philippines and Vietnam, as is the case in all the metros other than Johannesburg. Waste management services are also typically provided through municipally owned companies, such as Pikitup in Johannesburg. Models vary from a single company undertaking all waste functions to a number of companies specialising only in a specific process in the waste value chain. Country examples of administrative models are reflected in Table 2.

Table 2: Examples of Waste Management Operations and Administrative Models[25]

Country	Region	Administrative model	Operational model
Indonesia	East Asia and Pacific	Highly decentralised, responsibility of the municipality	Communities organize waste collectors. Services are largely paid for and sustained via user fees, producing inequalities for those who cannot pay, or who pay less. City districts and regencies organise secondary waste transport and disposal form local budgets for public areas, informal dumpsites, private operators are typically not involved
Cambodia	East Asia and Pacific	Decentralised waste collection and disposal operated through long-term concession to private sector	Private operator collects user fees and provides waste collection and disposal service
Tanzania	East Africa	Decentralised waste collection and disposal operated through some zoning and enforcement based policy	City government funds bulk waste evacuation from public spaces, government buildings, the CBD, and large markets. For CII and residential waste, five sub-municipalities strategically zone areas to enable cross-subsidization in open tenders. Service providers must cover zones, that include both high-payment/high income areas as

[27] World Bank. 2021. Bridging the Gap in Solid Waste Management: Governance Requirements for Results, https://documents1.worldbank.org/curated/en/459431622213523067/pdf/Bridging-the-Gap-in-Solid-Waste-Management-Governance-Requirements-for-Results.pdf

[28] Kaza et al., *What a Waste 2.0 : A Global Snapshot of Solid Waste Management to 2050 (English)*

Country	Region	Administrative model	Operational model
			well as low-income neighborhoods, where defaults and fees are less favourable.
Nigeria	West Africa	The Lagos Waste Management Authority (LAWMA) provides a one stop shop of strategic oversight, zoning regulation and enforcement for solid waste services and infrastructure	Centralised and waste exclusive authority provides feedstock guarantees to two large privately operated MRFs and various landfills and waste transfer stations. User fee enforcement guarantees and zoning regulations, also provide effective cross subsidisation / an enabling environment for competitive private sector participation in middle and high income areas.
Ghana	West Africa	Large, multi-year PPP agreements for nationwide waste services and recovery operations are negotiated by national government, on behalf of regions/cities.	Large national tenders and awards, for comprehensive service delivery across various regions and cities are defined in SLAs by national government most notably with ZoomLion and Jekora Ventures. Services include supplementary service delivery, such as street cleaning, parks and recreation and logistics/haulage support.
Azerbaijan	Europe and Central Asia	Highly centralised national planning and oversight	Waste services are organized by regional administrations

Intermunicipal cooperation is beneficial where a municipality doesn't generate sufficient waste to achieve the economies of scale such as in smaller towns. Where urban centres are in close proximity, bulk facilities and infrastructure such as regional landfills may also signal such cooperation, where one of the centres is likely to own and operate but with multiple users. Intermunicipal cooperation is common in the European Union, with efficiencies gained in e.g. exchange of technical skills, reduced staffing needs, economies of scale and cost savings through reduced investments. Cooperation between the three metros in Gauteng on forms of waste management is plausible, while the other metropolitan areas are geographically too far apart.

Public private partnerships are common in provision of solid waste management offering efficiency, technical expertise, and financial investment in services ranging from collection to treatment and disposal. While these partnerships can be complex to establish and implement, private operators contribute to improving operations, increasing waste collection coverage, and introducing financial security. PPP contracts commonly take the form of management or concession agreements, often lasting fewer than 10 years. However, contracts for waste disposal services, which involve fixed assets like landfills, tend to be longer-term, with around 35% lasting over a decade. Different cities employ varied models for waste collection, such as San Francisco's monopoly system, where a single operator provides waste services citywide, ensuring consistency and innovation. Conversely, Singapore zones its waste collection services among different operators, promoting competition[26].

It is evident that various models have been implemented across the globe, in an effort to improve services and efficiencies. More than other trading services, solid waste management follows local development, legislation and customs. With lower investment in fixed infrastructure, in theory, solid

waste management should be more adaptable to change, particularly for private sector involvement in both the logistics and disposal aspects of the business.

Annexure B: A governance-protected municipal company

Improving governance through a company structure or business unit

Establishing a corporate structure (particularly in the form of a legally separate company)[29] has several advantages that support a sound governance agenda. A corporate structure:

- Introduces the possibility of independent oversight by a suitable skilled and experienced Board of Directors[30]; (Municipalities must rely on elected representatives[31] to play this role when providing the service themselves through a municipal department.)
- Creates financial transparency through the generation of a separately audited set of financial statements comprising a balance sheet, income statement and cash flow. (These have been lacking when a trading service is provided through a departmental structure within a municipality, although mSCOA makes more financial transparency possible.)
- Creates clearer accountabilities for performance through a dedicated management team with a clear mandate and performance agreement with the Board; (Accountability is much more diffuse when a service is provided by a department within a municipality, with poorly specified and often unenforceable dependencies on other departments. It is easy to shift blame in this context.)
- Creates a clearer separation between the ownership/shareholder and management roles, making inappropriate interference in the day-to-day operations more obvious and easier to manage. (In direct municipal provision there is no separation between ownership/shareholder and management roles.)

Creating a purpose-built governance-protect municipal company

The need for commercial finance combined with the imperative of sound governance creates an opportunity to create a corporate structure with protected governance that would be attractive to commercial lenders.

The proposal is to create a *purpose-built* "South African company" structure and template with *built-in features* that would ensure and protect sound governance.

This company structure could be offered by National Treasury to be used as a vehicle to provide municipal trading services, together with incentives of financing through grants, facilitated access to commercial finance and with technical assistance to establish the company.

The company template would need to go beyond a tick-box exercise to ensure that there is sound governance in substance, not only in form.[32] Special care is needed because public companies, "by their very nature as publicly-funded entities, are not subject to the same market discipline or shareholder oversight as other entities".

Protecting governance

[29] Or at least a business unit within a municipality (see later discussion).
[30] This applies in the municipal owned entity such as Pikitup, Joburg Water, Centlec and City Power
[31] This refers to the portfolio committee which is made up of political representatives
[32] See "SOE Governance Unmasked: A learning journey" (Future Growth, 2018).

The development of this *company template* (and the associated processes to form and govern the company) could learn from practical experience gained in South Africa. A review of governance failures in South Africa's state-owned entities identified four areas where governance can be improved, noting that "corporate governance is better understood as a "web" of oversight by stakeholders (for example, shareholders, directors, employees, regulators, suppliers, financiers, auditors, corporate secretaries) as well as a range of policies, practices, protections and disclosures":[33]

1. **People.** The review noted that "an organisation can have all the trappings of governance such as a board, committees and policies - but if it has corrupt or ill-intentioned shareholders or leaders then policies and practices are all at risk. In the first instance, improving governance means improving the selection and appointment process of individuals on boards, board sub-committees, and executive management." In the case of public companies, this also implies improving the selection process of shareholder representatives.
2. **Processes.** Three key processes need to be given careful attention**:**
    - **Board of directors and board committees**: The review noted that "all corporate governance begins with the board of directors, so its composition and operations must be appropriate."
    - **Governance policies**: Governance policies need to cover all major business areas (e.g., procurement, recruitment, financing) as well as key risk areas (e.g., remuneration, dealing with politically exposed persons and conflicts of interest), be fit-for-purpose and protective of sound governance.
    - **Internal watchdogs**: The review noted that "even the best governance arrangements will degrade without active oversight. There are always witnesses to poor governance – such as executives, auditors, employees, and suppliers – who almost universally fail to speak up. Insiders invariably know the truth and it is self-evident that confidential whistleblowing mechanisms should always be in place, with suitable processes and protection."
3. **External oversight through transparency and reporting**: The review noted that "investors, bankers, ratings agents, regulators and the public are 'always the last to know' when governance goes wrong. External parties need complete and timely reporting of details about the membership and operations of boards, committees and executives, as well as the governance policies and practices." These detailed requirements need to be built into the governance processes above, as explicit reporting requirements.
4. **Shareholder role**. The executive authority is the owner (municipality, or municipalities) and the owner bears the primary responsibility for appropriate oversight and accountability. The review notes that "the layer of governance that exists between the board of the company and its executive authority is embodied in the *shareholder compact*" and that "the shareholder compact should enable the shareholder to monitor 'the extent to which the board as a whole and individual directors achieve the objectives and any specific performance targets set, and where necessary, effect any remedial action'". The review notes that the shareholder compact is in essence "a performance contract, agreed between the executive authority and the board, and designed to hold the board accountable for delivery of the mandate." They note that "the terms and key performance indicators (KPIs), and measurements against set targets" should be disclosed as part of the annual public reporting by the company.

[33] "SOE Governance Unmasked: A learning journey" (Future Growth, 2018: 5-8).

In much the same way that Johannesburg Water was created, a purpose-built and governance-protected municipal trading service company owned by a Municipality could be capacitated through a management contract.

A company structure does not guarantee good governance

While a company structure can support good governance, it does not guarantee it. In the South African municipal environment, where elected representatives often lack the necessary skills to manage large, infrastructure-intensive services, a company structure may be considered a necessary condition for improving governance. However, it is not a sufficient condition. There are numerous examples of failed or poorly governed state-owned and municipal-owned companies. A typical example is Pikitup, which faces challenges similar to those affecting other municipal distributors, despite its corporate structure.

The City of Cape Town provides an example of a partially ring-fenced business unit operating within a municipality. While such units can be successful, they are more susceptible to shifts in political and corporate leadership, which undermines their autonomy compared to a company structure. Although oversight remains the responsibility of the Council, financial transparency can be ensured through the creation of separate financial statements and a transparent, well-defined relationship with the city's corporate finance department. Additionally, the business unit should have clear accountability for all aspects of managing the trading service. While partially ringfenced, Cape Town’s electricity directorate does not conform to a fully ringfenced business unit with autonomy over all critical services supporting its business. This example demonstrates that municipalities should not be fixated on a company structure but rather advocate for an effective governance structure which suites the context.

Annexure C: Using a management contract to reorganize the water utility in Johannesburg34

Before 2000, responsibilities for water and sanitation services in Johannesburg were spread across six separate municipal departments: four geographical departments were in charge of water distribution and sewerage networks (answering to four local councils); one department was in charge of the operation of wastewater treatment plants; and the central level of the municipality directly handled all matters related to customer relationships, revenue management, procurement, and finance. This fragmented structure had generated a “silo mentality” among the staff, with a dilution of responsibility and accountability, and customer service was notoriously poor. To remedy this situation, Johannesburg Water was established in 2000 as a new corporatized public utility responsible for water and sanitation services. The main rationale for bringing in a private operator under a five-year management contract was to establish Johannesburg Water as a viable and efficient water utility.

A major part of the job of the private operator was to organize the newly consolidated utility, putting the proper work procedures in place and training employees. The goal was not just to design a new organization chart; it was, most important, to instil a new corporate culture focused on service and efficiency. This was a major challenge with employees who had previously operated under an old-fashioned bureaucratic culture. Implementing such a change was a long and gradual process, in which the daily coaching by the operator staff played a major role. One example of the many measures taken to foster change was empowering line managers to take more initiative in their daily job, as long as this would benefit the quality of service to customers or result in efficiency savings. The average salary per employee went up by 23 percent in real terms during the management contract.

A major effort to promote a new generation of managers and professionals was carried out in parallel with this cultural change. The 693 promotions that occurred during the management contract mostly benefited staff members belonging to groups that previously had faced discrimination in the apartheid era. Although the total number of staff members remained fairly stable (rising from 2,500 in 1999 to 2,600 in 2006),

945 skilled employees were recruited during the management contract, again largely from previously disadvantaged groups.

[34] Marin, Mas, and Palmer 2009, as presented in Concept Note: The importance of management contracts as an intervention to improve the management of water services in South Africa (February 2021, National Treasury)