Western Cape Government

Department of Environmental Affairs and Development Planning

Western Cape Integrated Waste Management Plan: Situational Analysis (Draft)

2026

Contents

Table of Figures

List of Tables

Acronyms

10YFP	10-year Framework of Programmes
AHP	Absorbent Hygiene Products
AU	African Union
C&DW	Construction and Demolition Waste
CoCT	City of Cape Town
CKDM	Central Karoo District Municipality
CSIR	Council for Scientific and Industrial Research
CWDM	Cape Winelands District Municipality
DCF	District Co-ordinating Forum
DDM	District Development Mode
DCoG	Department of Cooperative Governance
DE	Doughnut Economics
DEA	Department of Environmental Affairs
DEA&DP	Department of Environmental Affairs and Development Planning
DM	District Municipality
DFFE	Department of Forestry, Fisheries and the Environment
DSI	Department of Science and Innovation
DSP	Departmental Strategic Plan
DTPW	Department of Transport and Public Works
EPR	Extended Producer Responsibility
EPWP	Expanded Public Works Programme
G4J	Growth for Jobs
GBV	Gender-based Violence
GDP	Gross Domestic Product
GDPR	Gross Domestic Product per Region
GHG	Green House Gas
GRDM	Garden Route District Municipality
HCRW	Health Care Risk Waste
IDP	Integrated Development Plan
IPWIS	Integrated Pollutant and Waste Information System
IUDG	Integrated Urban Development Grant
IWMF	Industry Waste Management Forum
IWMP	Integrated Waste Management Plan
JDMA	Joint District Metro Approach
LM	Local Municipality
MEA	Multilateral Environmental Agreement
MEC	Member of the Executive Council
MIG	Municipal Infrastructure Grant
MINMEC	Minister and Members of the Executive Council
MINTECH	Ministerial Technical Committee
MRF	Materials Recovery Facility
MTDP	Medium Term Development Plan
MTEF	Medium-Term Expenditure Framework
NDP	National Development Plan
NEMA	National Environmental Management Act, 1998 (Act No.107 of 1998)

NEM: WA	National Environmental Management: Waste Act, 2008 (Act No.59 of 2008)
NPF WEG	The National Policy Framework for Women's Empowerment and Gender Equality
NWMS	National Waste Management Strategy, 2020
ODM	Overberg District Municipality
PERO	Provincial Economic Review and Outlook
PRO	Producer Responsibility Organisation
PSP	Provincial Strategic Plan
R&R	Repair and Refurbishment
S@S	Separation at Source
SALGA	South African Local Government Association
SANEDI	South African National Energy Development Institute
SAWIS	South African Waste Information System
SCP	Sustainable Consumption and Production
SDF	Spatial Development Framework
SDGs	Sustainable Development Goals
SIME	Strategic Integrated Municipal Engagements
SMME	Small, Medium and Micro Enterprise
Stats SA	Statistics South Africa
STRID	Strategy to Reduce Illegal Dumping
TIME	Technical Integrated Municipal Engagements
USDG	Urban Settlements Development Grant
VOCs	Volatile Organic Compounds
WCCCRS	Western Cape Climate Change Response Strategy
WCDM	West Coast District Municipality
WCG	Western Cape Government
WCIWMP	Western Cape Integrated Waste Management Plan
WCRAG	Western Cape Recycling Action Group
WDF	Waste Disposal Facility
WIR	National Waste Information Regulations, 2012
WMF	Waste Management Facility
WML	Waste Management Licence
WtE	Waste-to-Energy
WMO	Waste Management Officer
WMOF	Waste Management Officers' Forum
YES Programme	Youth Environmental Service Programme

Glossary

TERMS	DEFINITION
Buy-back centre	The place that allows residents, informal reclaimers and/or entrepreneurs to sell recyclables.
Circular economy	An economy that is restorative and regenerative by design and aims to keep products, components, and materials at their highest utility and value at all times, distinguishing between technical and biological cycles. This new economic model seeks to ultimately decouple global economic development from finite resource consumption. It enables key policy objectives such as generating economic growth, creating jobs, and reducing environmental impacts, including carbon emissions (DEFF, 2020).
Disposal	Means the burial, disposal, discharge, abandoning, dumping, placing or release of any waste into, or onto, any land (NEM: WA, 2008).
Drop-off facility	Facilities that provide residents with the convenient opportunity to dispose of waste, which they have not put out for collection, into containers for later removal by the municipality.
Extended Producer Responsibility	Means that a producer's responsibility for an identified product is extended to the post-consumer stage of an identified product's life cycle.
Extended Producer Responsibility free riders	Extended Producer Responsibility (EPR) free riders refer to companies that benefit from the environmental and economic advantages of EPR policies without contributing to the costs and efforts of implementing these policies.
Free basic services	Free basic service is defined as the minimum amount of basic levels of services, provided on a day-to-day basis, sufficient to cover or cater for the basic needs of poor households. Various sector departments have set minimum standards outlining the basic amount of services or quantity to be supplied to the indigents concerning water, energy, sanitation and refuse removal.
Gender- responsive	Refers to a policy or program which fulfils two basic criteria: a) gender norms, roles, and relations are considered and b) measures are taken to actively reduce the harmful effects of gender norms, roles, and relations—including gender inequality (GPE and UNGEI, 2017).
Gender-sensitive	Refers to gender awareness and means that a policy or program recognises the important effects of gender norms, roles, and relations. It is often contrasted with being gender-blind, which ignores differences in opportunities and resource allocation for women and men and gender norms, roles, and relations and often reinforces gender-based discrimination (GPE and UNGEI, 2017).
General waste	Waste that does not pose an immediate hazard or threat to health or to the environment, and includes: (a) domestic waste;

	(b) building and demolition waste; (c) business waste; (d) inert waste; or (e) any waste classified as non-hazardous waste in terms of the regulations made under section 69 [of the Waste Act, 2008 (Act No.59 of 2008)], and includes non-hazardous substances, materials or objects within business, domestic, inert or building and demolition wastes
Regional Gross Domestic Product (GDPR)	GDPR at market prices equals the sum of gross value added by all industries at basic prices plus taxes on products minus subsidies on products in a region.
Hazardous waste	Any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment.
Indigent	The term 'indigent' means 'lacking the necessities of life'. In a South African context, the Constitution provides guidance in this regard, leading to the view that the following goods and services are considered necessities for an individual to survive: a) sufficient water b) basic sanitation c) refuse removal in denser settlements d) environmental health e) basic energy f) health care g) housing h) food and clothing Anyone who does not have access to these goods and services is considered indigent.
Industrial Symbiosis	Industrial Symbiosis (IS) is the exchange of materials or services between entities. Specifically, it involves the use of unused or residual resources of one company, by another. Resources could be materials, energy, water or services. These are called synergies. These synergies improve resource efficiency and economic, social and environmental benefits for the companies involved (GreenCape).
Integrated Waste Management	Employing several waste control and disposal methods, i.e. reducing, reusing, recycling, incinerating, and landfilling, to minimise the environmental impact of commercial and industrial waste streams.
Integrated Waste Management Plan	A plan prepared in terms of section 12 of the NEM: WA.
Materials recovery facility	A centre for the reception and transfer of materials recovered from the waste stream for recycling. Materials are sorted by type and treated.
Minimisation	The avoidance of the amount and toxicity of waste that is generated and, in the event, where the waste is generated, the reduction of the amount and toxicity of waste that is disposed (NEM: WA).

Municipal solid waste	Waste generated from residential and non-industrial commercial sources. It includes predominantly household waste (domestic waste) with sometimes the addition of commercial waste collected by a municipality within a given area. It includes either solid or semi-solid wastes and generally excludes industrial hazardous waste.
Polluter Pays Principle	All costs associated with waste management should, where possible, be borne by the waste generator.
Re-use	To utilise the whole, a portion of a specific part of any substance, material or object from the waste stream for a similar or different purpose without changing the form or properties of such substance, material or object (NEM: WA).
Recovery	The controlled extraction of material or the retrieval of any substance, material or object from waste (NEM: WA).
Recycle	A process where waste is reclaimed for further use, which involves the separation of waste from a waste stream for further use and the processing of that separated material as a product or raw material (NEM: WA).
Refurbishment	The repair and reconditioning of products so that they can be returned to use for another life cycle. Refurbishment may be performed by the original manufacturer, or a third party qualified to perform the necessary parts replacement or repairs (DEFF, 2020).
Separation at source (s@s)	Separation at source is the separation of different types of post-consumer waste materials at the site where they are generated. S@S typically focuses on the separation of recyclables (and often further disaggregation into different types of recyclables), organic waste and solid waste. Selective collection of separated materials ensures that they do not contaminate each other and that waste to landfill is minimised.
Sustainable development	Sustainable development reflects a process that meets the needs of the present without compromising the ability of future generations to meet their own needs. Often called intergenerational equality, the idea is that we should share natural resources not just with people who are alive on the planet today but also with future generations of the Earth's inhabitants. While we can use a certain amount of the planet's resources, we should never entirely deplete a natural resource. Sustainable development requires people to rely as much as possible on renewable resources (the kind that can be replenished) by getting power from the sun rather than power from fossil fuels such as oil, coal, and natural gas, which take millions of years to form. Besides the careful stewardship of natural resources, sustainable development promotes the eradication of poverty and extreme income and wealth inequalities, the goal of full employment, the provision of access to quality and affordable basic services to all South Africans, and the fostering of a stable, safe and just society.
Swop shop	This refers to an exchange of recyclable material for goods that are basic needs. The material is valued through a point system, which can be redeemed for selected goods.

Treatment	Means any method, technique or process that is designed to: (i) change the physical, biological or chemical character or composition of a waste or, (ii) remove, separate, concentrate or recover a hazardous or toxic component of a waste, or (iii) destroy or reduce the toxicity of waste, in order to minimise the impact of the waste on the environment prior to further use or disposal.
User Pays Principle	All costs associated with the use of a resource should be included in the price of goods and services developed from that resource.
Waste	Any substance, material or object, that is unwanted, rejected, abandoned, discarded or disposed of, by the holder of the substance, material or object, whether or not such substance, material or object can be reused, recycled or recovered. NEM: WA. Once it is reused, recycled or recovered the material ceases to be a waste.
Waste disposal facility (Landfill site)	Means any site or premises used for the accumulation of waste with the purpose of disposing of that waste at that site or on that premises (NEM: WA, 2008).
Waste management facility	A place, infrastructure, structure or containment of any kind, upon or at, where a waste management activity takes place and includes a waste transfer station, container yard, landfill site, incinerator, a lagoon, recycling or a composting facility (NEM: WA, 2008).
Waste management hierarchy	The "hierarchy of waste management" is a priority sequence for managing waste, the most desirable option being to avoid waste in the first place. Where it is not possible to avoid waste completely, ways to reduce, re-use or recycle the unwanted material should be considered. If waste cannot be made useful, only then should it be collected, treated and disposed of (DEFF, 2020).
Waste management officer	Means a waste management officer designated in terms of section 10 of the Waste Act (NEM: WA).
Waste picker	Someone who collects re-usable and recyclable materials from residential and commercial waste bins, landfill sites and open spaces in order to revalue them and generate an income. (DEFF & DSI, 2020).
Waste picker integration	The creation of a formally planned recycling system that values and improves the present role of waste pickers, builds on the strengths of their existing system for collecting and revaluing materials, and includes waste pickers as key partners in its design, implementation, evaluation and revision. Waste picker integration requires changes in several spheres and includes the integration of waste pickers' work, as well as the political, economic, social, legal and environmental integration of waste pickers (DEFF & DSI, 2020).
Wastepreneur	Portmanteau blending the words "waste" and "entrepreneur".
Waste transfer facility	A facility that is used to accumulate and temporarily store waste before it is transported to a recycling, treatment or waste disposal facility.

Executive Summary

This report serves as the Situational Analysis of the 4th generation Western Cape IWMP 2027-2032 (WC IWMP). The National Environmental Management: Waste Act 59 of 2008, as amended (NEM: WA), requires provincial governments and municipalities to develop Integrated Waste Management Plans (IWMPs) to ensure proper waste management planning. The WC IWMP aims to provide strategic direction for waste management in the province over the short-, medium- and long-term. The specific objectives of the WC IWMP are:

- to provide a review and analysis of the status of implementation of the 3rd generation WC IWMP 2023-2027;
- to provide an overview of the identified waste management gaps and needs in the province;
- to develop a set of goals, objectives, activities and targets that respond to the identified gaps and needs;
- to take cognisance of aspects relating to gender equality and inclusivity, human rights, socio-economic development, sustainability of waste services, and environmental impacts to inform specific goals, objectives, activities and targets;
- to increase the level of leadership, governance, stewardship and participation in integrated waste management; and
- to enhance a resource-efficient society through the development of focused and customised restorative and regenerative approaches for circularity potential.

Prepared by the Department of Environmental Affairs and Development Planning (DEA&DP), the WC IWMP establishes the foundation for the next five-year cycle of strategic planning. It responds to persistent challenges such as illegal dumping, inadequate recycling, strained landfill capacity, rising service costs, and the broader sustainability, climate, and socio-economic pressures that affect the Western Cape.

The Plan is being developed in two phases over a two-year period,

Phase 1: Situational Analysis

2025/2026: The Situational Analysis Phase is taking place during the 2025/26 financial year.

Phase 2: Implementation Plan Phase

2026/2027:The Implementation Plan Phase will take place during the 2026/27 financial year.

Public participation will occur throughout the development of the WC IWMP. An intergovernmental steering committee was established, comprising representatives from various provincial departments, and the national Department of Forestry, Fisheries and the Environment. A database of stakeholders comprising key stakeholders representing municipalities, industry and civil society was compiled and updated throughout the process. The Situational Analysis Report is being made available for public comment from **19 February 2026 to 20 March 2026**. A public participation workshop will be hosted on **3 March 2026.**

Strategic Alignment

The Plan aligns with the National Waste Management Strategy (NWMS) 2020, gender and inclusivity frameworks, the circular economy transition, and global commitments, including the Sustainable Development Goals (SDGs). The Plan is strongly anchored in:

- **SDG 12** Sustainable Consumption & Production and related SDGs on poverty, inequality, health, gender, and climate;
- **NDP 2030**, emphasising waste reduction, job creation and green economic opportunities;
- **NWMS 2020 goals**, including a progressive shift away from landfill and adoption of the waste management hierarchy and shift towards the circular economy;
- **Provincial frameworks**, notably the Provincial Strategic Plan, Growth for Jobs (G4J), Climate Change Response Strategy, OneHealth, Western Cape Infrastructure Framework 2050, and the Provincial Organic Waste Strategy targeting 100% diversion of organic waste from landfill by 2027.

Socio-Economic Context

During 2025, approximately 7.6 million residents resided in the province, with 92% urbanisation and high in-migration, placing pressure on waste services. The province experiences high levels of poverty and inequality; over 50% of residents live below the poverty line, increasing dependence on free basic services.

Waste Generation

Total waste generation increased from approximately 3.35 million tonnes in 2018 to 3.58 million tonnes in 2024. General waste makes up 90–95% of total waste, growing by 12% since 2018. Hazardous waste declined by 44%; sewage sludge and tarry waste remain key streams.

Waste Diversion and Recycling

Overall waste diversion plateaued at 31% in 2024, achieving its highest level of 32% in 2023, which is below the NWMS 40% target for 2025. Organic waste diversion shows progress but is uneven; many municipalities remain far from the provincial 2027 ban requirement.

Waste Infrastructure and Capacity

The Western Cape has 277 waste management facilities (WMFs), including 57 landfills and 42 materials recovery facilities. Many landfills have less than 15 years of airspace left; methane exceedances of 5% were recorded at some sites. Waste-to-Energy projects remain limited, with only a few licensed facilities. The number of DEA&DP compliance audits at WMFs decreased (73 in 2018 compared to 48 in 2024); findings conclude that non-compliance is still widespread at these facilities.

Institutional and Governance Indicators

Currently, 80% of municipalities have designated Waste Management Officers. All 30 municipalities have endorsed IWMPs, but seven have lapsed (invalid) IWMPs.

Waste Collection and Service Access

During 2024, 89% of households received weekly refuse removal, compared to 87% in 2018. Informal settlements remain underserved; refuse bags are the primary service method. Rural households experience inconsistent service provision; many depend on drop-offs.

Waste Minimisation, Extended Producer Responsibility (EPR) and the Circular Economy

EPR participation increased to 530 producers/ Producer Responsibility Organisations (PROs) in 2024 in the Western Cape; registrations are dominated by the Paper & Packaging industry. Waste minimisation initiatives grew between 2020 and 2023 but dipped in 2024. Waste picker integration remains limited, though pilots in Drakenstein and Cape Agulhas Municipalities demonstrate potential.

Review of the WC IWMP 2023–2027

Overall implementation performance thus far: **76% achievement** across four strategic goals. Highlights include:

- Strengthened awareness and training (landfill operator courses, Strategy to Reduce Illegal Dumping, circular economy promotion);
- Improved IWMP alignment and municipal support through forums and onsite audits;
- Growth of refurbishment and repair sector initiatives targeting youth and women;
- Increased enforcement: 42 enforcement actions undertaken in 2023–2024 in response to identified non-compliances.

Key Provincial Gaps Identified

Although the gaps and needs assessment forms part of the second phase of the WC IWMP, preliminary gaps and needs have been identified by the project team and indicated in Chapter 6 of this report. Additional gaps and needs will be identified during public participation. A summary of the waste management gaps identified thus far includes:

- Declining or inconsistent waste data reporting, limiting evidence-based planning;
- Insufficient waste minimisation infrastructure and slow organic waste diversion progress;
- Inadequate fleet, ageing infrastructure and declining collection rates in some districts;
- Limited landfill airspace and slow development of regional waste disposal facilities;
- Weak waste picker integration, gender mainstreaming, and youth empowerment structures;
- Municipal fiscal constraints and insufficient staffing within waste units;
- Persistent illegal dumping driven by service gaps and affordability pressures.

Once all the waste management gaps have been identified, a list of prioritised needs will be compiled.

Implementation Plan

The Implementation Plan will form part of Phase 2.

1 Introduction

Inadequate waste management practices, including illegal dumping, littering, limited recycling, and suboptimal landfill operations, pose significant risks to environmental integrity, public health, and municipal fiscal sustainability. Given South Africa's multifaceted socio-economic challenges and fiscal constraints, strategic planning and optimisation of waste management systems are important. Such measures must ensure efficient service delivery, environmentally sound waste management practices, and the adoption of a circular economy framework to minimise resource consumption and waste generation. Waste management is deeply intertwined with numerous aspects, such as climate change, public health, environmental sustainability, human rights, gender equality, economic development, and consumption habits. It also presents opportunities for job creation, helping to alleviate poverty. Furthermore, external global factors e.g. the Ukraine-Russia conflict and global economic shifts and trade dynamics have the potential to lead to supply chain disruptions, thereby increasing costs of waste management technology and vehicles. As a result, effective waste management planning requires a comprehensive, multidimensional approach that accounts for all these interconnected factors.

The National Environmental Management: Waste Act 59 of 2008 (NEM: WA), as amended, mandates provincial departments responsible for waste management, and municipalities to develop Integrated Waste Management Plans (IWMPs) as foundational instruments for systematic waste governance. IWMPs constitute the primary strategic phase within governmental planning and accountability cycles. In the Western Cape, the Department of Environmental Affairs and Development Planning (DEA&DP), hereafter referred to as 'the Department', is responsible for waste management and is thus required to formulate the Western Cape IWMP (WC IWMP). The five-year validity period of the current 3rd Generation WC IWMP ends in March 2027, necessitating its review and the development the 4th Generation WC IWMP. This report serves as the Situational Analysis (Phase 1) of the 4th-generation WC IWMP 2027-2032, prepared for the 2025/26 financial year. Phase 2, the Implementation Plan, will commence in the 2026/27 financial year.

1.1 Background and Purpose

The WC IWMP aims to provide strategic direction for waste management in the Western Cape over the short-, medium- and long-term and is applicable to the provincial departments, municipalities, the private sector, civil society and the public. The Plan aims to take cognisance of the various social and economic challenges currently facing the province while aligning with key policies such as the National Waste Management Strategy (NWMS), which emphasises the **Waste Management Hierarchy** and the **Circular Economy**. The specific objectives of the 4th generation WC IWMP 2027-2032 are:

- to provide a review and analysis of the status of implementation of the 3rd generation WC IWMP 2023-2027;
- to provide an overview of the identified waste management gaps and needs in the province;
- to develop a set of goals, objectives, activities and targets that respond to the identified gaps and needs;
- to take cognisance of aspects relating to gender equality and inclusivity, human rights, socio-economic development, sustainability of waste services, and environmental impacts to inform specific goals, objectives, activities and targets;

- to increase the level of leadership, governance, stewardship and participation in integrated waste management; and
- to enhance a resource-efficient society through the development of focused and customised restorative and regenerative approaches for circularity potential.

The Role of Integrated Waste Management Plans in Environmental Planning:
The WC IWMP addresses certain environmental impacts and spatial aspects that will influence and inform other policy and planning instruments.

Environmental impacts related to waste management include air pollution, waste transportation, land fill gas emissions, littering and the burning of waste. Water sources and soil may also become polluted through the seepage of leachate from poorly constructed waste disposal facilities (WDFs) and through litter and illegal dumping. Furthermore, unmanaged waste can also be carried into the oceans and cause harm to marine life. These aspects must be considered in environmental impact reports, Environmental Management Frameworks (EMFs) and Strategic Environmental Assessments (SEAs), given their regional context that these instruments cover so that they respond to the goals and objectives contained in the WC IWMP.

Current and future planned waste management facilities (WMFs) are located spatially and will therefore need to be identified within Spatial Development Frameworks (SDFs). Consultation through the establishment of intergovernmental steering committees is critical so that key spatial waste information can be aligned to various sector plans including the WC IWMP, district and municipal IWMPs.

1.2 Scope of the WC IWMP

The WC IWMP covers the geographical area of the Western Cape Province of South Africa, which makes up 10.6% of the country's land surface and covers an area of approximately 129 462 km^2. It is the fourth largest province in South Africa and is divided into one metropolitan municipality and five district municipalities, namely the City of Cape Town Metropolitan Municipality (CoCT), Cape Winelands District Municipality (CWDM), Central Karoo District Municipality (CKDM), Garden Route District Municipality (GRDM), Overberg District Municipality (ODM) and the West Coast District Municipality (WCDM). District Municipalities are further subdivided into 24 local municipalities (Figure 1 and Table 1). The Western Cape has an estimated population of 7.5 million, accounting for nearly 12% of South Africa's population (StatsSA, 2024).

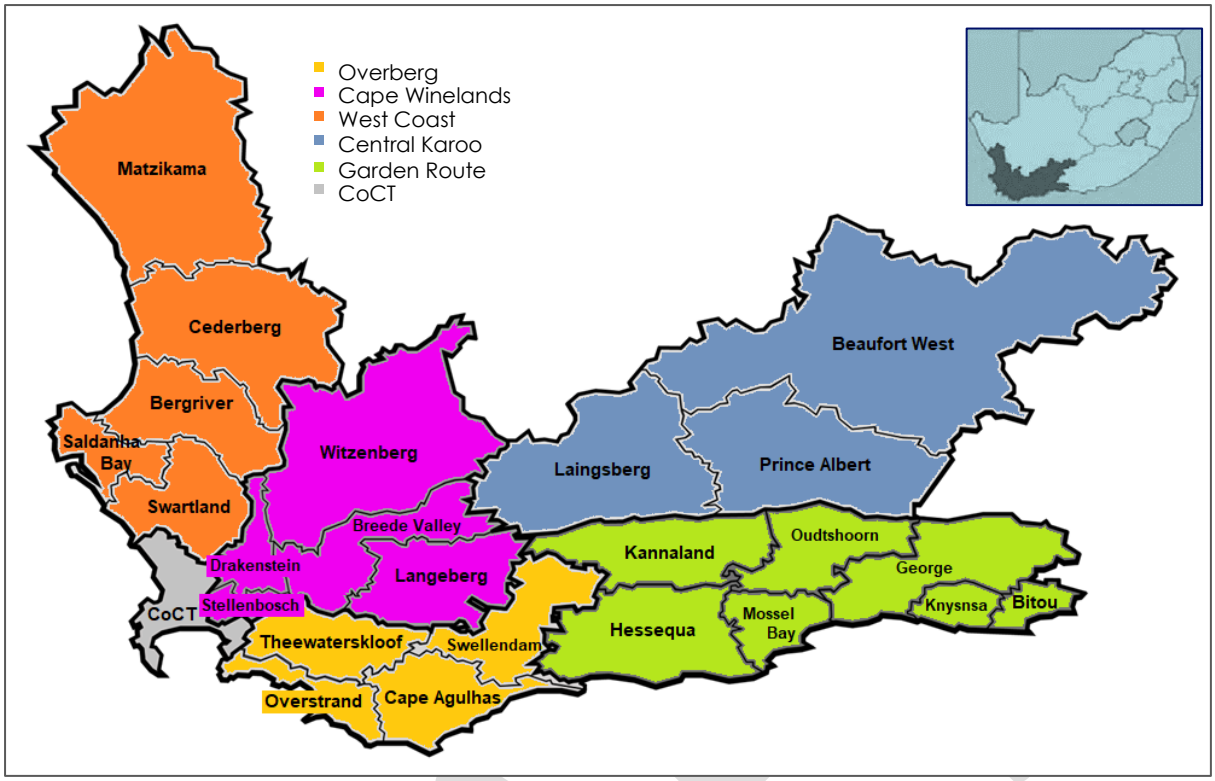


Figure 1: Map of the Western Cape

Table 1: Overview of the districts within the Western Cape

DISTRICT/METROPOLITAN MUNICIPALITIES	LOCAL MUNICIPALITIES
Cape Winelands District	
The CWDM covers an area of 21 473 km^2, which constitutes 17% of the Western Cape's total area and comprises five local municipalities (WESGRO, 2024a). Agriculture is an important economic activity in the district. The region's large rural areas support an extensive agricultural industry that is mostly rural. However, several towns, like Worcester, Paarl and Stellenbosch, function as highly developed nodes. The region also attracts a large number of tourists largely driven by the scenery, mountains, wine and fruit estates (WESGRO, 2024a).	Breede Valley, Drakenstein, Langeberg, Stellenbosch, Witzenberg
Central Karoo District	
The CKDM covers an area of 38 854km^2, which constitutes 30% of the Western Cape's total area and is the largest district in the province. It comprises three local municipalities (WESGRO, 2024b). Agriculture is a key economic activity in the district. The town of Beaufort West constitutes the central economic hub of the district (WESGRO, 2024b).	Beaufort West, Laingsburg, Prince Albert
Garden Route District	
The GRDM covers an area of 23 331 km^2 and comprises seven local municipalities. In terms of economic activity by sector, the finance, insurance, real estate, and business services sector was the largest contributing sector to the district's Regional Gross Value Added (RVGA) in 2023 (WESGRO, 2024c)	Bitou, George, Hessequa, Kannaland, Knysna, Mossel Bay, Oudtshoorn
Overberg District	

The ODM covers an area of 12 241 km² which constitutes 9% of the Western Cape's total land area and is the second smallest district lin the province (WESGRO, 2024d). It comprises four local municipalities. The finance, insurance, real estate and business services sector contributed the most to the district's RGVA in 2023 (WESGRO, 2024d)	Cape Agulhas, Overstrand, Swellendam, Theewaterskloof
West Coast District	
The WCDM covers an area of 31 101 km² and comprises five local municipalities (WESGRO, 2024e). The agriculture, forestry and fishing sectors contributed the most to the West Coast district's RGVA, in 2023 (WESGRO, 2024e).	Bergrivier, Cederberg, Matzikama, Saldanha Bay, Swartland
City of Cape Town	
The Cape Metro covers an area of 2 445km², which constitutes 1,9% of the Western Cape's total area (WCG, 2024). It represents a significant portion of the province's economy and population. Key economic sectors, include finance, insurance, real estate, and business services, transport, storage and communication, and manufacturing (WCG, 2024).	N/A

1.3 Method and Approach

The Department of Environmental Affairs (DEA), now Department of Forestry, Fisheries and the Environment (DFFE), and DEA&DP's guidelines for the development of Integrated Waste Management Plans will be used to inform the approach of the WC IWMP 2027-2032. The IWMP planning process used during the development of the IWMP is as per the DEA IWMP guideline document. Sector plans developed by the Department are also required to follow an inclusivity approach, taking cognisance of vulnerable groups such as women, youth, the elderly and people with disabilities (see section 1.3.1).

1.3.1 Inclusivity Approach

During the development of the WC IWMP 2023-2027, a Gender Gap Analysis was undertaken of the previous WC IWMP to identify priorities and gaps, and to make recommendations based on the findings which could be incorporated going forward. Although a separate Inclusivity/ Gender Gap Analysis report will not be developed as part of the development of the WC IWMP 2027-2032, these aspects will be incorporated at various stages in the development of the IWMP.

INTEGRATED WASTE MANAGEMENT PLAN ASPECTS	INTEGRATION OF INCLUSIVITY ASPECTS
Policy and Legislative Framework, Strategic Alignment	Equality/ Gender equality laws, Sustainable Development Goals,
Situational Analysis	Disaggregated data, stakeholder mapping (vulnerable groups)
Public Participation	Include targeted groups e.g. women's groups, youth forums, informal waste picker cooperatives, and disability rights organisations, focused groups may be required.

Implementation Plan	Ensure that identified activities are responsive to gender and inclusivity issues.
Monitoring, Evaluation (M&E) and Reporting	Include gender and inclusivity indicators in the IWMP's M&E framework.

1.3.2 Planning Process

- **Phase 1: Situational Analysis**

The Situational Analysis Phase will take place during the 2025/26 financial year. The WC IWMP includes a Situational Analysis, which provides an overview of the socio-economic situation in the Western Cape and waste management information relating to e.g. generation and composition, diversion, disposal, compliance and institutional arrangements. The Situational Analysis Report will also contain a review of the implementation of the 3rd Generation WC IWMP 2023-2027.

- **Phase 2: Implementation Plan Phase**

The Implementation Plan Phase will take place during the 2026/27 financial year. The Situational Analysis and stakeholder consultation will assist in identifying waste management gaps and needs. The identification of projects and activities will occur via consultation with the project steering committee, working group and thorough public participation to identify, evaluate and select alternatives that respond to identified waste management gaps and needs. The vision for waste management in the province as well as strategic goals and objectives to achieve this vision is included. The desired end-state aligns to key policies including the global Sustainable Development Goals (SDGs), the National Development Plan 2030 (NDP), the NWMS (2020) and relevant provincial policies, strategies and strategic plans. The WC IWMP will include an action plan with activities, resources and timeframes.

- **Approval Process:**

Once the WC IWMP is drafted, it must be approved by the MEC for Environmental Affairs and Development Planning, whereafter it must be endorsed by the National Minister of the DFFE.

- **Monitoring and Review:**

The implementation of the WC IWMP must be monitored and reported on annually to ensure its implementation. This includes reporting to the DFFE. The WC IWMP will be reviewed yearly and updated every five years.

1.3.3 Public Participation

Public participation will occur throughout the development of the WC IWMP. An intergovernmental steering committee was established comprising representatives from various departments, namely:

- Department of Forestry, Fisheries and the Environment

- Department of Water and Sanitation
- The South African Local Government Association
- Department of Health and Wellness
- Department of Infrastructure
- Department of Mobility
- Department of Local Government
- Department of Environmental Affairs and Development Planning:
  - Chief Directorate: Environmental Governance, Policy Coordination & Enforcement
  - Chief Directorate: Environmental Sustainability
  - Chief Directorate Environmental Quality

A database of stakeholders comprising key stakeholders representing municipalities, industry and civil society was compiled and updated throughout the process. The Situational Analysis Report is being made available for public comment from **19 February 2026 to 20 March 2026**. A public participation workshop will be hosted on **3 March 2026.** The Situational Analysis findings will be presented, and the identification of waste management gaps and needs will be workshopped. Invitations along with a waste services questionnaire were distributed to stakeholders on the database and placed on the departmental website. A separate questionnaire aimed at Waste Management Officers (WMOs) was distributed to each municipality. Proof of public participation is included in **Appendix A.**

1.4 Layout of the Situational Analysis Report

The Report is divided in several sections as indicated below:

SECTION	OVERVIEW
1. Introduction	Provides a background to the WC IWMP, including method and approach undertaken.
2. Legislative Framework	Provides an overview of legislation that informs integrated waste management.
3. Strategic Alignment and Key Waste Management Linkages	Provides the strategic context for waste management and cross-cutting linkages.
4. Situational Analysis	Provides an overview of the socio-economic context and waste management in the Western Cape.
5. Review of the WC IWMP 2023-2027	Provides feedback on the implementation of activities as indicated in the WC IWMP 2023-2027.
6. Gaps and Needs Analysis	Summarises the gaps identified thus far. Will be updated to include gaps and needs identified during public participation. The section will also be updated to include prioritised needs.

2 Strategic Alignment and Key Waste Management Linkages

2.1 Global Strategic Framework

2.1.1 Sustainable Development Goals

The Sustainable Development Goals (SDGs) comprise 17 goals that were adopted by the United Nations member states in 2015 with the aim to end poverty, improve health and education, reduce inequality, spur economic growth and tackle environmental issues (Figure 2). The key SDG to which the WC IWMP is aligned to is **SDG 12: Ensure sustainable consumption and production**, which aims to promote sustainable consumption and production patterns with the goal of achieving sustainable development. The goal is based on technological advancement, resource efficiency and waste minimisation (StatsSA, 2023). Many of the other goals are relevant and interconnected with waste management. Additional SDGs that the WC IWMP is aligned to include:

- **SDG 1**: End poverty in all its forms.
- **SDG 2**: No hunger.
- **SDG 3**: Ensure healthy lives and promote well-being for all at all ages.
- **SDG 5**: Achieve gender equality and empower all women and girls.
- **SDG 6**: Ensure access to water and sanitation for all.
- **SDG 7**: Ensure access to affordable, reliable, sustainable and modern energy.
- **SDG 8**: Promote inclusive and sustainable economic growth, employment and decent work for all.
- **SDG 9**: Build resilient infrastructure, promote sustainable industrialisation and foster innovation.
- **SDG 10**: Reduce inequality between and within countries.
- **SDG 11**: Make cities inclusive, safe, resilient and sustainable.
- **SDG 13**: Take urgent action to combat climate change

Figure 2: United Nations Sustainable Development Goals

2.1.2 G20 South Africa Summit: Leaders Declaration

The G20 Leaders Declaration Document was adopted by group 20 major economies during the G20 Summit in Johannesburg, which took place on 22-23 November 2025. The declaration outlines shared priorities, agreed commitments and actions. According to G20(2025), the G20 leaders reaffirmed their commitment to the temperature goals of the Paris Agreement to tackle climate change. Members were encouraged to bring forward nationally determined net-zero greenhouse-gas (GHG) emissions or climate-neutrality commitments in line with national circumstances. The Declaration also calls for scaling up clean energy, efficiency and climate financing. The Declaration explicitly calls for the reduction of food waste as part of making food systems resilient and sustainable. It further refers to reducing food loss and waste including through zero waste and other initiatives.

2.1.3 Agenda 2063

Agenda 2063 is a continent-wide strategic framework endorsed by African Union (AU) member states to guide Africa's political, social and economic transformation over 50 years (2013-2063). The AU is built around seven aspirations (e.g., prosperous & integrated Africa; good governance; peace & security; people-driven development) and detailed into goals, flagship projects and five 10-year implementation plans (Figure 3).

Agenda 2063 aims to achieve a prosperous Africa, based on inclusive growth and sustainable development. A key goal is to ensure environmentally sustainable and climate resilient economies and communities. The priority areas identified in this regards include:

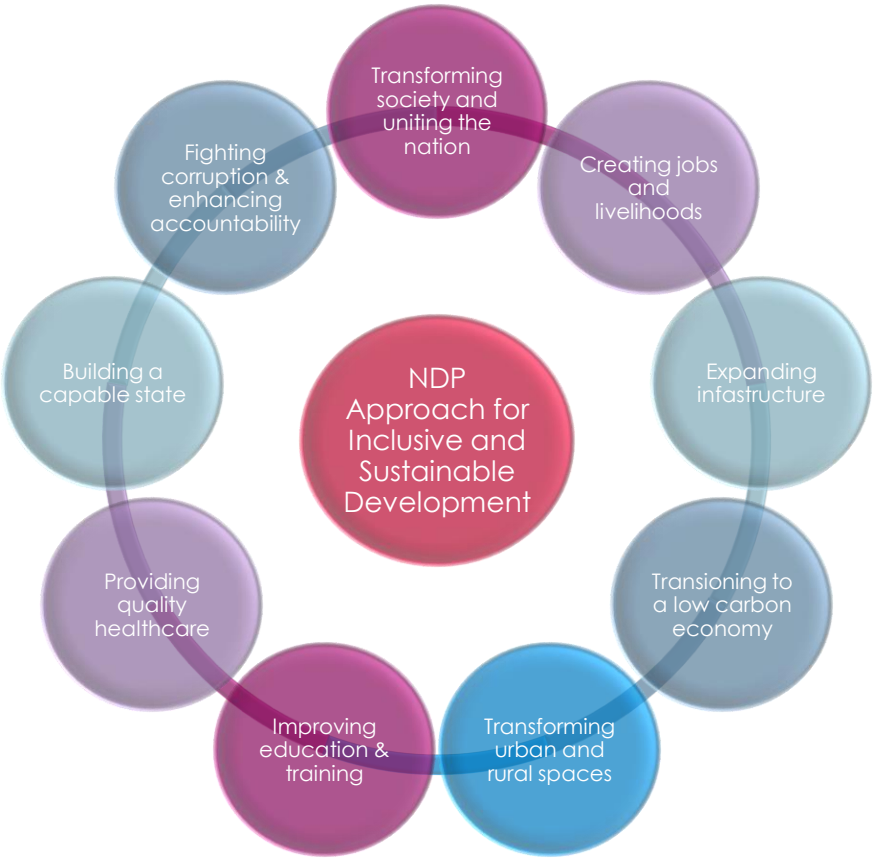
- Sustainable natural resource management •
- Biodiversity conservation, genetic resources and ecosystems •
- Sustainable consumption and production patterns
- Water security
- Climate resilience and natural disasters preparedness and prevention
- Renewable energy

Figure 3: Foundation, aspiration and goals of Agenda 2063

2.2 National Strategic Framework

2.2.1 The National Development Plan 2030

The National Development Plan (NDP) 2030 is a long-term strategic framework that envisions a prosperous and inclusive South Africa with reduced poverty and inequality by 2030 through socio-economic transformation, including economic growth, job creation, education, healthcare, and social cohesion. It aims to transition to a low-carbon, resource-efficient and resilient economy with waste management playing a crucial role. The NDP promotes a circular economy through waste generation avoidance, reuse and recycling initiatives, ensuring the reduction in the total volume of waste disposed of at landfills. It highlights the potential for Small, Medium and Micro Enterprises (SMMEs) in the waste management sector to contribute to poverty alleviation, income inequality and unemployment. The NDP promotes the implementation of a waste management system that will boost economic activity in poor urban communities and build sustainable human settlements through the rapid expansion of recycling infrastructure and organic waste diversion initiatives. The overarching goals of the NDP include the –



- eradication of poverty from 39% of people living below the poverty line (i.e. monthly income below R419 in 2009) to zero;
- reduction of the unemployment rate from 27.6% to 6% by creating 11 million jobs; and
- reduction of inequality from 0.69 to 0.60 Gini coefficient by 2030.

To ensure the NDP objectives and goals are achieved, the government developed the Medium-Term Strategic Framework (MTSF, 2019 – 2024), which provides an overview of the performance for targets achieved with respect to the NDP over the 2019 – 2024 period and includes the following outcomes –

- constrained economic growth, unemployment and no participation, ownership or access for women, the youth and persons with disabilities impacting efforts to raise living standards, reduce poverty and inequality.
- new investments deterred by the electricity shortage challenges, while SMME support, which is key for economic transformation and job creation has been hindered by regulatory and administrative burdens (Red Tape); and
- the COVID-19 pandemic worsened economic growth, unemployment, poverty and inequality.

The Medium-Term Development Plan (MTDP, 2024 – 2029) provides an analysis of the key objectives of the NDP and aims to ensure that the NDP goals are achieved by 2030. It replaces the MTSF (2019 – 2024) to prioritise these NDP goals for implementation. The MDTP provides priority interventions that are required to address the most critical challenges faced by the country over the next five years.

2.2.2 National Waste Management Strategy

The NWMS aims to minimise waste generation and divert waste from landfill to reach a target of zero waste to landfill by 2050. The strategy promotes the circular economy and the waste management hierarchy, which prioritises waste reduction, reuse and recycling over waste disposal (Figure 4). It focuses on key priorities including waste minimisation, waste prevention, waste as a resource, sustainable strategic partnerships and collaboration between government, private sector and communities as well as environmentally sound socio-economic development. The Strategy also emphasises the importance of raising awareness to educate the public about responsible waste management practices. The NWMS 2026 is currently being developed; the WC IWMP will align to the updated Strategy.

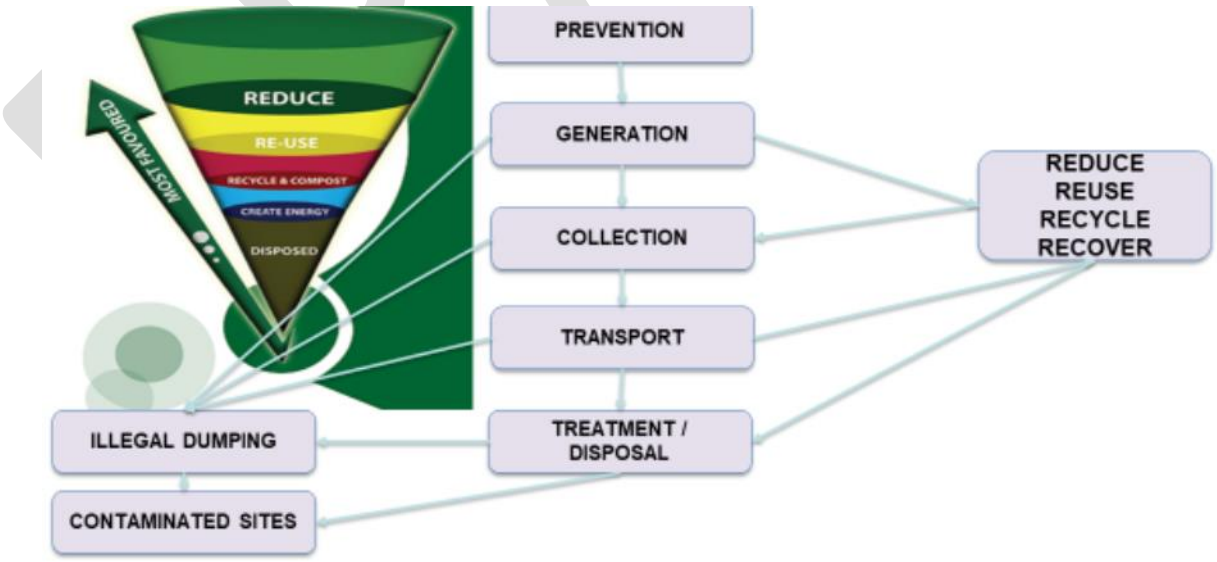


Figure 4: Waste Management Hierarchy

(Source: DFFE, 2020)

2.2.3 National Gender Equality Framework

The framework outlines South Africa's vision for gender equality and sets objectives to achieve this vision across all sectors of society. It focuses on non-discrimination, equality and human rights and outlines strategies and actions needed to address gender inequalities in education, health, employment and politics. The framework promotes gender mainstreaming in all government policies, programs, and practices and includes a system for monitoring and evaluating the progress on gender equality goals.

The National Policy Framework for Women's Empowerment and Gender Equality (NPF WEGE) emphasises the recognition of women's rights as human rights, the importance of affirmative action, and the promotion of women's economic empowerment. It is guided by the principles of the South African Constitution towards equality, non-sexism, and non-racism.

2.2.4 National Sanitary Dignity Framework

The framework aims to ensure that indigent girls and women have access to sanitary products and accurate information about menstruation to manage menstruation in a safe, knowledgeable, and dignified manner. The framework's goal is to prevent school absenteeism due to a lack of sanitary products and to address period poverty. The framework also makes provision for sanitary waste disposal, mandating safe sanitary waste disposal education, infrastructure (bins, toilets), municipal service provision (with alternatives where needed), proper maintenance, and monitoring to protect both the environment and the dignity of women and girls.

2.2.5 Absorbent Hygiene Strategy

South Africa generates approximately 900 000 tonnes of Absorbent Hygienic Product (AHP) waste annually, including items like nappies and sanitary pads, which constitutes about 6% of municipal solid waste sent to landfill. This material can take between 200 and 500 years to decompose. To address this significant waste stream, the DFFE developed a draft Strategy for the Design and Disposal of AHP Waste. The strategy's overarching purpose is to establish a national framework for the sustainable design, collection, treatment, and disposal of AHPs, aiming to mitigate environmental, health, and socio-economic impacts. For municipalities, as the key implementing agents, the strategy provides guidance for integrating AHP management into sustainable collection, treatment, and disposal practices aligned with national goals.

2.3 Provincial Strategic Framework

OneCape 2040	*The OneCape 2040 aims to transition from an unsustainable carbon-intensive resource-use society to sustainable, low carbon resource use to ensure that the Western Cape Province is recognised as the leader and innovator in the Green Economy. The province supports local government and the private sector to improve the recovery of waste material and its beneficial use thereof.*
Green Economy Strategy Framework, 2013	The Strategy has a vision to "position the Western Cape as the lowest carbon province in South Africa and the leading green economic hub of the African Continent". It aims to grow the commercial waste economy in partnership between public and private sectors as a major source of green jobs. To achieve this, innovation in identifying waste materials, enabling an environment to support the waste economy and developing a market by establishing a province-wide waste exchange to support the expansion and creation of new waste enterprises by improving the knowledge of waste resources.
Western Cape Infrastructure Framework 2050	The Framework centres on building a sustainable, inclusive, and resilient future. It positions infrastructure as a key driver of social equity, economic growth, and environmental stewardship, while addressing the province's unique spatial challenges. It focuses on the need for integrated infrastructure planning that considers land use, spatial realities, and equitable development across urban and rural areas and prioritises environmental sustainability and acknowledges the impacts of climate change. It highlights the 4th Industrial Revolution as representing a significant shift in technological development and the emergence of the 5th Industrial Revolution, which emphasises the collaboration between humans and machines.
Provincial Strategic Plan 2025-2030 (PSP)	The Plan sets out the WCG's vision and strategic direction. Its apex priority focuses on helping businesses grow, creating jobs and equipping residents to get those jobs. It is underpinned by four strategic portfolios, namely "Growth for Jobs", "Safety", "Educated, Healthy & Caring Society", and "Innovation, Culture & Governance". The strategic portfolio pertaining to developing an "Educated, Healthy & Caring Society" has the strongest linkage to waste management as it recognises that infrastructure, access to basic services, housing and social spaces must aim to address human needs, reduce inequality and enable social mobility. It also emphasises the One Health approach, stating its aim to improve overall health outcomes by preventing health and well-being threats to humans and animals, protecting the environment, improving human health and well-being, promoting the efficient use of natural resources and improving resilience to climate change.

Living Cape: A Human Settlements Framework, 2017	The Framework aims to improve the quality of human settlements. A key objective of the Framework is to shift the focus from housing delivery to the development of integrated human settlements that enable the sustainable development of communities. This requires alignment of state investments, such as land, social infrastructure and networked infrastructure. The focus of integration efforts must be to create functional and sustainable cities, towns and neighbourhoods.
Western Cape Recovery Plan, 2021	COVID-19 has had a negative impact on the Western Cape economy, and the livelihoods and well-being of people. The Plan was developed in response to these negative impacts. It aligns to and prioritises PSP interventions in light of the greater social and economic challenges, and reduced fiscal resources associated with the pandemic. The Plan is based on key themes, which includes jobs, safety and wellbeing, to achieve dignity.
Western Cape Growth for Jobs Strategy, 2023 and the Growth for Jobs 2025-2023 Implementation Plan	The Growth for Jobs (G4J) Strategic Framework and Strategy has its **vision** for the economy in the Western Cape as one that achieves **break-out economic growth** to drive sufficient employment and opportunity, and which is **sustainable, resilient, diverse and thriving, generating confidence, hope and prosperity for all**. One of the primary principles growth must be uncoupled from wasteful resource usage and fossil fuel dependency so that it can be sustainable over the long term and can meet present needs without further compromising the future. With our natural assets safeguarded, our economy and society will be shielded from the impacts of resource deterioration, climate change and other shocks, while our competitiveness and resilience will be enhanced.
Provincial Spatial Development Framework, 2014	This Plan addresses the lingering spatial inequalities that persist because of the country's apartheid legacy, unsustainable resource consumption and disposal. It identifies regional planning initiatives to address specific economic, social, natural or unique features in a specific area. Three urban and two rural priority areas have been identified. The feasibility of regionalisation of waste management services in the regional planning areas would need to be explored.
Western Cape Climate Change Response Strategy: Vision 2050 (2022)	The Western Cape Climate Change Response Strategy: Vision 2050 describes a future that the Western Cape province will strive towards. The vision is to be a net-zero emissions and climate-resilient province by 2050, built on an equitable and inclusive economy and society that thrives despite the shocks and stresses posed by climate change. Four guiding objectives, aligned to the aspiration expressed in the vision, give structure to the response strategy, including: 1) responding to the climate emergency; 2) transitioning in an equitable and inclusive manner to net zero emissions by 2050; 3) reducing climate risks and increasing resilience; and 4) enabling a just transition through public sector, private sector and civil society collaboration. Integrated waste management, as one of the four main sectors responsible for GHG emissions, plays a key role in implementing actions that will support the reduction in GHG emissions.

Provincial Organic Waste Strategy, 2020	The vision is to assist in the creation of a circular economy where organic waste is not wasted within the entire value chain and is instead largely prevented or beneficiated to reduce the amounts going to landfill and the major impact on climate change. The Strategy includes interventions being implemented by the private sector and other agencies with an aim of forming synergies to create a fully integrated strategy with good collaborative networks amongst all stakeholders. These interventions include Voluntary Agreements as one mechanism to reduce food waste and loss by utilising sector body initiatives (e.g., Industry Waste Management Plans). The strategy also identifies possible policy instruments that can be applied by various organs of state to meet the 50% and 100% organic waste bans for 2022 and 2027 respectively. Good information management, public and private sector awareness, and private sector buy-in are required to achieve the 100% organic waste reduction by 2027 as set out by the Organic Waste Strategy.
Western Cape Air Quality Management Plan, 2021	Aims to ensure the effective and consistent implementation of sustainable air quality management practices, by all spheres of government, relevant stakeholders and civil society to progressively achieve and efficiently maintain clean and healthy air in the Western Cape.
Department of Environmental Affairs and Development Planning (DEA&DP) Strategic Plan, 2025-2030	The DEA&DP Strategic Plan has identified environmental quality, which includes waste management as one of its key strategic focus areas. It envisions a sustainable and resilient environment that supports human dignity, health, well-being, livelihoods, ecosystem integrity and the economy. It contains the following waste target: o 100% diversion of organic waste from landfill by 2030.

2.4 Cross-cutting Aspects

The WC IWMP addresses the cross-cutting nature of waste management, recognising its deep connections to sustainable development's environmental, social, and economic dimensions. This links waste management to critical global issues such as climate change, public health, poverty, food security, and resource efficiency (ECD Monrec, 2018). These aspects align with the SDGs and pertinent national and provincial policies. The key linkages identified are summarised as follows.

2.4.1 Job Creation and Poverty Reduction

Poverty persists as a critical challenge in the Western Cape, evidenced by a steady rise over the past decade in those living below the lower-bound poverty line (Provincial Treasury, 2024). The World Bank (2018) attributes South Africa's entrenched poverty and inequality primarily to the legacy of apartheid, alongside high unemployment, wage gaps, and inadequate education. Addressing this requires sustained, effective interventions, as emphasised by the Provincial Treasury (2024). Economic growth is vital for generating rapid, sustained job creation and increasing societal resources, thereby alleviating poverty and enhancing quality of life (DFID, 2015; WCG, 2023)."

The Provincial Strategic Plan 2025-2030 has identified two focus areas namely, improved access to employability and economic opportunities and driving growth opportunities through investment to increase job opportunities. The WCG's Growth for Jobs Strategy 2035 has set the goal which states that by 2035, the Western Cape will be a R1-trillion inclusive economy in real terms and growing at between 4% and 6% per annum. This will be achieved through enabling a competitive business environment in which growth is driven through businesses exploiting opportunities. To achieve this seven priority focus areas have been identified.

The WCG is committed to raising the overall productivity of the Western Cape economy, through horizontal enablement and supporting private-sector-led market stimulation and growth opportunities. The focus on sustainability offers opportunities to enhance productivity, as the circular economy will enable the region to derive greater use from each resource unit and require fewer resource inputs (WCG, 2023). The strategy further identifies a picture of success whereby, circular infrastructure is advanced, enabling circular economy activity (e.g., re-use, recycle or recover waste), and minimising the amount of material used across the infrastructure lifecycle or value chain.

The waste sector has been identified as an economic sector that can significantly contribute towards social and economic development (Godfrey et al., 2014). Moving waste up the hierarchy i.e., away from landfilling and towards avoidance, re-use, recovery and recycling, is not only beneficial for the environment, but provides social and economic opportunities (Godfrey et al., 2014). According to GAIA (2021), disposal and incineration create significantly fewer jobs than repair and recycling. The Institute for Local Self-Reliance (2002) reports that on a per tonne basis, the sorting and processing of recyclables provides 10 times more jobs than landfilling or incineration. They also found that the biggest economic benefit comes from turning old recyclables into new products. GAIA (2021) further emphasises the job creation potential of moving up the hierarchy. In the case of the repair sector, it can create over 200 times as many jobs as landfills and incinerators (Figure 5).

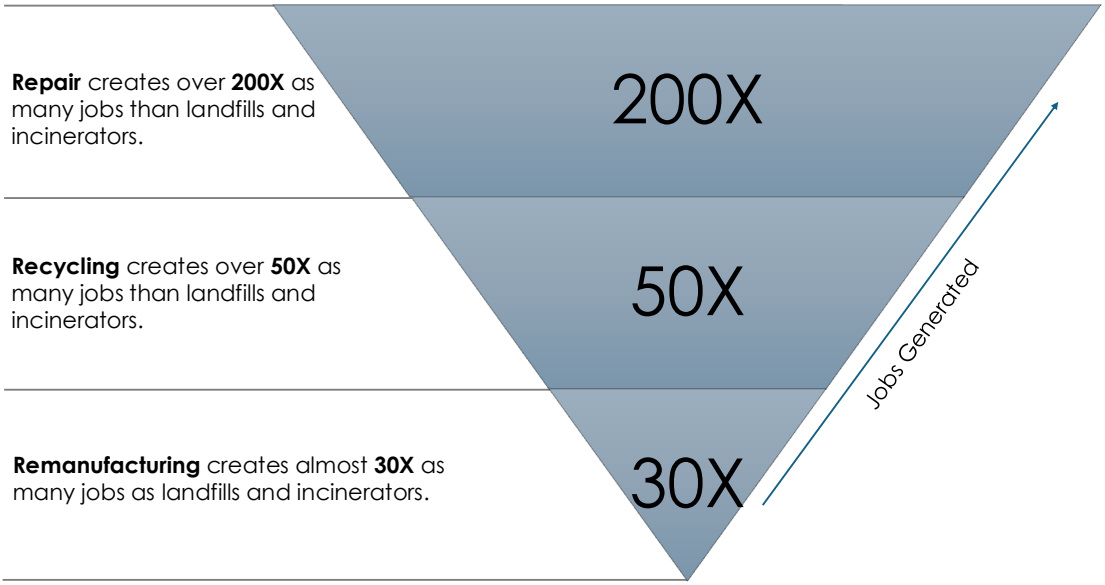


Figure 5: Jobs creation potential of zero waste solutions

(Source: GAIA, 2021 (redrawn))

The Department has in recent years focused on the repair and refurbishment sector to stimulate job creation. A Situational Analysis of the Repair and Refurbish Sector for Household Electrical and Electronic Equipment in the Western Cape reports that it is a growing sector in both the formal and informal economies and through effective sector development strategies, can contribute significantly to skills development and decent job creation opportunities, particularly for the unemployed youth in vulnerable communities (DEA&DP, 2023).

2.4.2 Climate Change

Improper solid waste management practices remain a significant issue for urban environments in sub-Saharan Africa. Poor waste management leads to the emission of greenhouse gases, which is a significant contributor to climate change and poses a significant threat to creating sustainable urban environments (Okorondu et al, 2024). The Provincial Strategic Plan 2025-2030 identifies that climate change could result in more frequent and severe climate hazards which will impact water security, food production, and infrastructure resilience. One of the key Ministerial Priorities of the plan is to future-proof our province through improved disaster and climate change resilience. Some of the key strategies and frameworks to mitigate climate change are the Western Cape Climate Change Response Strategy (WCCCRS) and the 2050 Emissions Pathway Analysis for the Western Cape. Climate change adaptation and mitigation is a driver, with the dual aim of reducing greenhouse gas emissions and adapting to the impacts of climate change. The promotion of renewable energy sources such as solar, wind, and hydroelectric power reflects a significant step toward transitioning away from fossil fuels and reducing carbon footprints. In parallel, sustainable land management practices, including responsible agricultural methods and urban planning that prioritises green spaces and efficient public transport, are essential to maintaining the region's environmental integrity (DEA&DP, 2024).

According to UNEP (2010), all waste management practices generate GHGs either directly (emissions from the process itself) or indirectly, via energy consumption. Sources of GHG emissions during solid waste management practices include emissions from incineration, composting, anaerobic digestion and mechanical biological treatment (Figure 6); however, landfilling has been identified as a major source of CH_4 emissions compared to other waste management practices (UNEP, 2010). One of the contributing activities to climate change from the waste sector is the emissions of landfill gas into the atmosphere. Landfill gas is a complex mix of gases created by the action of microorganisms within a landfill. The mix of gases typically comprises approximately 40% to 60% Methane (CH_4), with the remainder being mostly Carbon dioxide (CO_2) and trace amounts of other Volatile Organic Compounds (VOCs) (<1%). Landfill CH_4 is produced when organic materials are decomposed by bacteria under anaerobic conditions (i.e. in the absence of oxygen). Methane production is a function of waste volume, waste composition, moisture content, landfill design and operating practices, and climate. Unless it is captured by a gas recovery system, CH_4 generated by the disposal facility is emitted directly through the landfill cover surface. Landfill gas contributes to the mechanisms responsible for climate change, as CH_4 is a particularly noxious greenhouse gas (DEA&DP, 2024). The Department has taken upon itself to do early warning landfill gas monitoring at most of the operating WDFs, where it conducts Departmental audits. This is done to detect high levels of CH_4, which carries an explosive or fire risk, and if detected, this is then communicated to the License Holder, who must implement immediate mitigation measures (DEA&DP, 2024).

Organic waste is a recognised global issue which is also affecting South Africa. South Africa is experiencing severe constraints in terms of the availability of landfill space as well as challenges in operating and decommissioning landfills in a manner that is compliant with licensing conditions and the norms and standards of disposal of waste to landfill. The Department took a policy decision in 2017, to institute and set a target of 50% organic waste diversion by 2022 and a full (100%) prohibition of organic waste disposed of to landfill by 2027. The landfill restriction and prohibition on organics will also ensure that national waste diversion targets are met. Furthermore, all licenses issued by the Department have been amended and municipalities are obligated to submit Organic Waste Diversion Plans. An Organic Waste Diversion Plan will enable various organic waste types to be appropriately beneficiated locally or within the district municipality. DEA&DP has developed and workshopped a generic diversion plan aimed at assisting municipalities to develop its own diversion plan (DEA&DP, 2024).

Figure 6: Sources of greenhouse gas emissions during solid waste management practices

(Source: Li et al., 2022)

2.4.3 Sustainable Consumption and Production

South Africa is one of the fastest growing emerging economies in the world with a GDP that has grown from US$159 billion to US$352 billion between 1980 and 2021 (Matenda *et al.,* 2024). As a result, this industrialisation has led to high levels of carbon dioxide due to the burning of fossil fuels, making South Africa the 14th carbon dioxide emitter in the world (Matenda *et al.,* 2024). The South African economy is a carbon and resource-intensive economy that is largely dependent on carbon-based fuels and is envisioned to transition to a low-carbon economy by 2030 (RSA, 2012). Osabohien *et al.* (2025) observed that the depletion of natural resources has a negative effect on economic growth, particularly in West Africa, East Africa and sub-Saharan Africa. The depletion of natural resources can have a negative social impact resulting in conflict over access to remaining resources, which can indirectly affect economic stability and growth (Osabohien *et al.*, 2025).

SDG12 is about ensuring sustainable consumption and production patterns by 2030, as this is key to sustaining the livelihoods of current and future generations. Sustainable patterns of consumption and production are crucial to overcoming climate change, biodiversity loss, pollution and waste. Sustainable Consumption and Production (SCP) is one of the key components of sustainable development that ensures balanced development in environmental, economic and social aspects (Zengi & Çakir, 2024). SCP aims to promote economic growth and social welfare while aiming to minimise waste generation and the efficient use of natural resources (Zengi & Çakir, 2024). South Africa is one of the countries that has agreed to encourage and promote the development of a 10-Year Framework of Programmes (10YFP) in support of SCP (One Planet Network, n.d.). The 10YFP provides a frame and platform towards achieving the shift to sustainable consumption and production (One Planet Network, n.d.). Unsustainable patterns of consumption and production dependent on extracting, processing, using and disposing of natural resources continue to rise at a rate at which extracted materials outpace the population and economic growth as materials are

used inefficiently (One Planet Network, n.d.). The One Planet Network (n.d.) intimates that should this continue, the global resource extraction will increase 110% by 2060.

The linear economy (Figure 7), based on a 'take, make, use, discard' approach involves designing products with short lifespans using virgin materials, which are typically discarded after a single use rather than repaired (One Planet Network, n.d.). This lack of producer responsibility places a burden on the consumer and the state to dispose of the waste at the end of the product's lifetime and there is therefore no incentive for the producer to make products sustainably (One Planet Network, n.d.). This linear economy contributes to environmental and economic impacts such as climate change, biodiversity loss, material scarcity and pollution and as a result there needs to be a shift to an economy that preserves the value of materials and products (One Planet Network, 2023). A shift towards a circular economy is crucial as it focuses on designing products for durability, reuse, and recyclability (One Planet Network, 2023).

Figure 7: Phases of the linear economy model

(Source: Saha& Saha 2024)

The Ellen MacArthur Foundation (2016, Figure 8) defines the Circular Economy as an economy that …" *is one that is restorative and regenerative by design and aims to keep products, components, and materials at their highest utility and value at all times, distinguishing between technical and biological cycles*." The circular economy minimises environmental damage from production and consumption activities while promoting socio-economic development, decoupling economic growth from environmental degradation (One Planet Network, 2023). A circular economy therefore minimises the need for the extraction of primary resources, promotes waste prevention and optimises environmental, social, material and economic values (Velenturf & Purnell, 2021). The One Planet Network (2023) groups the circular economy into three approaches such as rethinking product design and manufacturing, extending the lifespan of products and their parts, and the effective reuse of material (Figure 9).

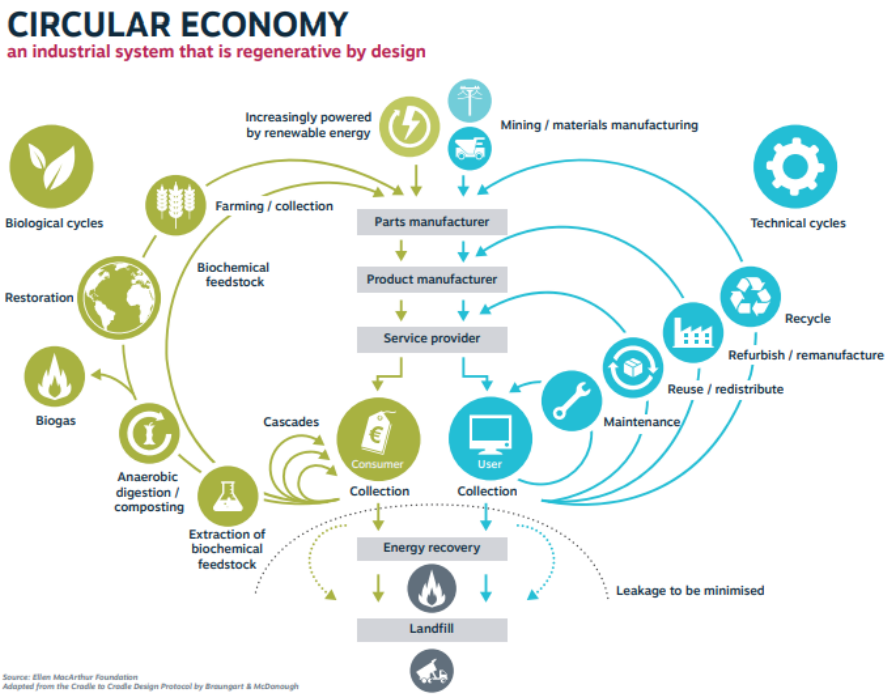


Figure 8: Circular Economy Systems Diagram

(Source: Ellen MacArthur Foundation, 2016)

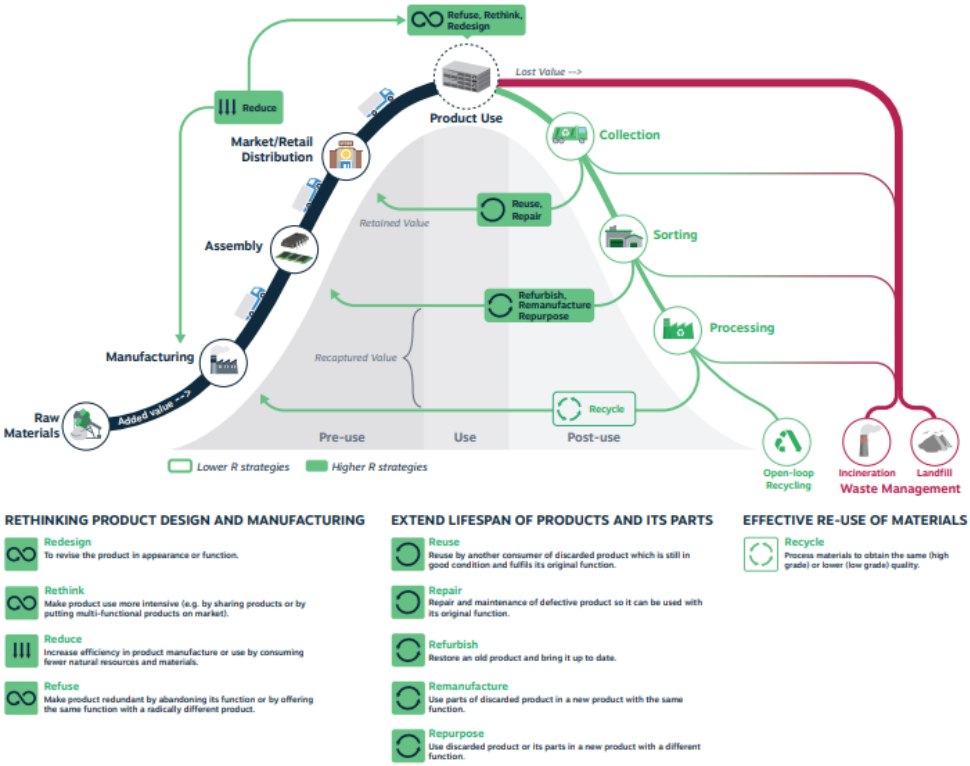


Figure 9: Adapted Value Hill Model with the 9R Framework

(Source: One Planet Network 2023)

The South African Government has made provision through the NEM: WA for the Extended Producer Responsibility (EPR) Regulations (2020), which require producers for identified products to take responsibility for the end-of-life management of their products, including collection, recycling, and disposal. The global circular economy was at 7.2% in 2023, dropping from 9.1% in 2018 and 8.6% 2020, because of rising material extraction and use (Saha & Saha, 2024). The circular economy recognises natural capital and the importance of nature within economics; however, further integration of the social pillar of sustainable development is required (Padilla-Rivera et al., 2020). Doughnut Economics (DE) is an alternative economic model that proposes a shift in thinking about economic growth by aiming to integrate social and economic aspects into an economic framework that a thriving world for people and the planet by taking cognisance of planetary and social boundaries (Everett, 2022). The DE model was developed by economist Kate Raworth and it aims to balance environmental limits with essential social needs creating a "safe and just space for humanity". The doughnut (Figure 10) consists of twelve basic human needs that represent the social foundation and nine planetary boundaries with the ecological ceiling, but economic activity needs to take place in "the safe and just space for humanity" to maintain the social foundation without breaking through the ecological ceiling (Wahlund & Hansen, 2022).

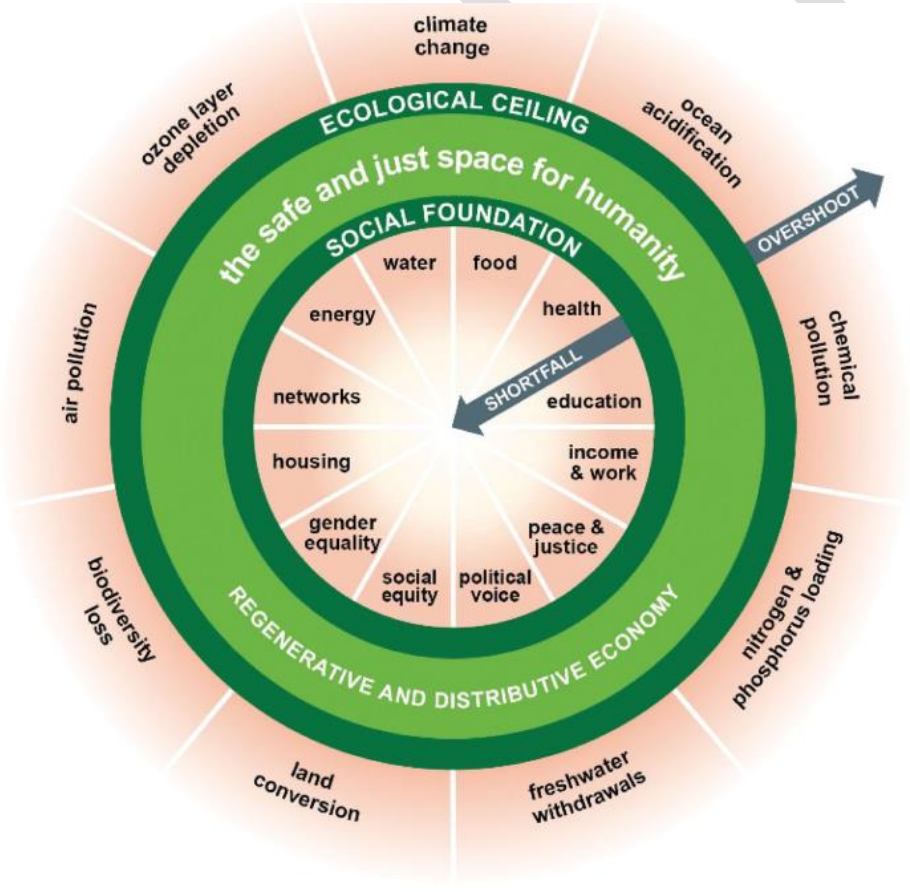


Figure 10: The doughnut of social and planetary boundaries

(Source: Raworth, 2017)

2.4.4 Health and Environmental Impacts

Integrated Waste Management (IWM) is a policy driven by the promotion of a clean, healthy environment as well as to give effect to the public's right to have the environment protected from pollution and degradation. Improper waste management due to inadequate service provision or illegal dumping poses significant health and environmental risks leading to air, water, and soil pollution, contributes to climate change, and can cause various diseases and ecological damage. These impacts disproportionately affect vulnerable populations in low-income areas, particularly those living in informal settlements. Burning waste in open dumps or at landfills causes air pollution as harmful pollutants like particulate matter, dioxins and greenhouse gases are released into the atmosphere and contribute to climate change and respiratory issues such as asthma and bronchitis. Organic waste at landfills decomposes and produces methane, a greenhouse gas contributing to climate change. Illegally dumped waste can pollute surface and groundwater impacting drinking water quality and aquatic life. Drinking contaminated water can lead to waterborne diseases such as cholera, typhoid fever and diarrhoea (Raphela *et al*., 2024). Leachate from landfills can contaminate water and soil. Waste attracts vectors like flies, mosquitoes and rodents, which poses a risk of infectious diseases. Stormwater drains get clogged up by illegally dumped waste and/ or litter including sanitary waste, which is often disposed of with domestic solid waste but sanitary waste is also flushed down the toilets (Kaur *et al.*, 2018).

Exposure to hazardous waste, including e-waste and pesticides, can lead to various health issues, including developmental problems in children. Waste pickers and workers in waste management facilities (WMFs) face significant health risks from exposure to hazardous materials and infectious agents. Waste pickers generally do not have personal protective equipment (PPE) when sorting waste exposing them to health complications (Alam *et al*., 2025). Treating illnesses caused by waste-related pollution and diseases places a burden on healthcare systems. Proper management and disposal of hazardous waste is vital to prevent environmental and health impacts and educating communities about responsible waste management practices is key. Plastics production reached 359 million tons in 2018 worldwide, however, mismanagement of plastic waste leads to contamination of the environment for humans and animals (Prata *et al*., 2021). Microplastics are persistent environmental contaminants as they are less than 5mm in size and are found in freshwater, seawater, sediment, soil, air and biota (Prata *et al*., 2021). It is estimated that over 5 trillion plastic particles are floating in the oceans from land and they cause feeding disruptions, reproductive impairment and metabolic changes to biota (Prata *et al*., 2021). Prata *et al*. (2021) reviewed the impact of microplastic contamination from the perspective of One Health, a collaborative and multisectoral strategy that recognises the interconnectedness of ecosystem health with that of animals and humans. One Health aims to sustainably balance and optimise the health of people, animals and ecosystems by addressing complex issues like disease outbreaks, food safety and environmental health threats (Prata *et al*., 2021).

2.4.5 Human Rights and Inclusivity

A nexus exists between waste management practices and the realisation of fundamental human rights in South Africa. The Constitution guarantees the right to an environment that is not harmful to health or well-being, alongside the right to have the environment protected for present and future generations. It further enshrines the right of access to sufficient food and water. Inadequate waste management jeopardises these constitutional rights by causing environmental degradation, specifically water, soil, and air pollution, and attracting disease vectors, thereby posing significant risks to public health. Moreover, leachate contamination of

groundwater resources and the infiltration of microplastics into the food chain directly threaten the rights to water and food security (de La Torre, 2020).

Given South Africa's context of pervasive poverty and inequality, prioritising the protection and inclusion of vulnerable groups, including women, youth, the elderly, and persons with disabilities in waste management governance is imperative. This aligns with the 2030 Agenda for Sustainable Development, particularly SDG Target 5.5, which seeks to "Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life." Accordingly, the NWMS incorporates measures to ensure the participation of vulnerable groups by:

- **Addressing their specific roles:** Recognising the contributions of vulnerable groups, waste pickers, and the informal sector, while supporting women, youth, and persons with disabilities within the circular economy framework.
- **Bridging sectoral skills gaps:** Implementing targeted skills development programs with a specific focus on women, youth, and persons with disabilities.

Recent policy developments reflect an increased focus on integrating waste pickers into the formal waste economy. Notably, in 2020, the DFFE and the Department of Science and Innovation (DSI) developed the "Waste Picker Integration Guideline for South Africa." This guideline aims to enhance working conditions, livelihoods, and the integration of waste pickers in the waste management system. The emphasis on waste pickers intersects with issues of inequality, exacerbated by high poverty and unemployment rates, gender inequality, and labour rights. Waste pickers frequently operate under hazardous conditions without adequate personal protective equipment, facing risks including injury from landfill site vehicles, exposure to harmful gases and smoke from waste burning, limited shelter, and insufficient access to clean water and sanitation facilities (DFFE and DSI, 2020). Women waste pickers encounter heightened safety challenges due to the prevalence of crime and gender-based violence in South Africa (DFFE and DSI, 2020).

3 Legislative Framework

3.1 Multilateral Environmental Agreements

South Africa is party to several international environmental agreements and must give effect to the provisions contained in these conventions (Table 2):

Table 2: Multilateral environmental agreements to which South Africa is party to

MULTILATERAL ENVIRONMENTAL AGREEMENT	DESCRIPTION	DOMESTICATION
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal	Regulates the transboundary movement (import and export) of hazardous waste. .	Regulations Regarding the Control of the Import or Export of Waste, 2019
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	Aims to facilitate informed decision-making by countries regarding the trade in hazardous chemicals.	Regulations to Domesticate the Requirements of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, 2023.
Stockholm Convention on Persistent Organic Pollutants, Stockholm	Aims to protect human health and the environment from persistent organic pollutants	Development of a National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants, 2012. Regulations to Prohibit the Production, Distribution, Import, Export, Sale, and Use of Persistent Organic Pollutants that are Listed by the Stockholm Convention on Persistent Organic Pollutants, 2023
Minamata Convention on Mercury	Aims to protect human health and the environment from the adverse effects of mercury.	Draft National Regulations for the Management of Mercury in South Africa, 2023

Resolution to "end plastic pollution: towards an international legally binding instrument (not yet finalised)	Recognition that urgent international action is needed by developing an international legally binding instrument on plastic pollution, including in the marine environment (DFFE, 2022)	N/A

3.2 Key Legislation Applicable to Waste Management

As indicated in

Table 3, several policies govern waste management in South Africa. Recent developments include the Climate Change Act, 2024 (Act No. 22 of 2024), which makes provisions for a National Greenhouse Gas Inventory and includes waste as measurable emissions source. Additio2024, the Industry Waste Tyre Management Plan was approved for implementation after extensive consultation. Furthermore, the scope of the Extended Producer Responsibility (EPR) Regulations was expanded in 2023 to include the lubricant oil, portable batteries, and pesticides sectors.

Table 3: Key waste-related legislation in South Africa

LEGISLATION	DESCRIPTION	SUMMARY OF IMPACTS
Acts		
Constitution of South Africa of 1996, as amended	The Constitution is the supreme law of the land. It contains the Bill of Rights, which enshrines the rights of all South Africans.	Section 24 provides all citizens of South Africa to the right to an environment that is not harmful to their health and well-being and to have the environment protected through legislation and other measures. Sets out principles for co-operative governance, to which all spheres of government must adhere to. National, provincial and local governments are seen as distinctive, interdependent and interrelated.
Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947)	Regulates the importation, sale, acquisition, disposal or use of fertilizers, farm feeds, agricultural remedies (pesticides), and stock remedies. This Act has relevance to compost where it is intended for use as a fertilizer and digestate from anaerobic digestion plants intended as fertilizers. It also regulates the disposal of farm feeds, obsolete agricultural remedies (pesticides) and fertilizers.	Contributes to environmental protection by reducing the potential for environmental contamination.
Hazardous Substances Act 15 of 1973	Aims to address substances that are deemed hazardous, to regulate and prohibit the importation, manufacture, sale,	Controls unauthorised dumping and disposal of dangerous substances, contributing to environmental protection.

	use, operation, application, modification, disposal or dumping of such substances.	Reduces public exposure to toxic chemicals, carcinogens, and radioactive substances through regulation and restricted access.
The Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and Regulations	. The Act provides for the development of regulations that protect workers and the public from exposure to asbestos, hazardous chemicals, hazardous waste and lead. The Occupational Health and Safety Act and its regulations are of importance to the management of the health and safety of workers responsible for the handling of waste. This Act could also be applicable to waste harvesters, if they are allowed by a municipality to reclaim waste.	Aims to protect waste workers from harm during the waste management process.
National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended	Statutory framework to enforce Section 24 of the Constitution.	Provides several principles applicable to waste management i.e., life-cycle approach, producer responsibility, precautionary principle and the polluter pays principle. Requires the equitable access to environmental resources, benefits and services to meet basic human needs and ensure human well-being. States that the vital role of women and youth in environmental management and development must be recognised and their full participation therein must be promoted.
Municipal Structures Act, 1998 (Act No. 117 of 1998)	Outlines the roles and functions of municipalities, including their responsibilities for waste management service delivery.	Establishes that local municipalities are responsible for refuse collection and local waste management services. District municipalities supplement local functions where scale or capacity demands regional handling.
National Environmental Management: Waste Act,	The governing Act for waste management which aims to	Provides reasonable measures for the prevention of pollution

2008 (Act No. 59 of 2008), as amended	reform the law regarding waste management to protect health and the environment.	and ecological degradation and for securing ecologically sustainable development. The Act covers a range of issues in integrated waste management including, the requirements for a National Waste Management Strategy, the need for and composition of Integrated Waste Management Plans for organs of state, as well as Industry Waste Management Plans. Key definitions for waste, the licensing of activities and addressing contaminated land are also covered by the Act.
Integrated Coastal Management, 2008 (Act No. 24 of 2008)	Regulates human activities that take place on the coast with the aim of achieving its conservation and sustainable use.	One of the aims is to control dumping at sea, pollution in the coastal zone, inappropriate development of the coastal environment and other adverse effects on the coastal environment.
Carbon Tax Act, 2019 (Act No. 15 of 2019)	Provides the imposition of tax on the CO_2 equivalent of GHG emissions.	Gives effect to the polluter-pays principle and aims to ensure that associated costs are considered in future production, consumption and investment decisions. The aim is to reduce GHG emissions.
Municipal Systems Act, 2000 (Act No. 32 of 2000)	Provides the framework for planning, performance management, and service delivery by municipalities in South Africa	Municipalities must provide services in a sustainable and equitable manner, including refuse removal and overall waste management. Waste services must be planned and budgeted for, including capital and operational costs.
Climate Change Act, 2024 (Act No. 22 of 2024)	Aims to establish a coordinated national response to climate change. Commits the country to making a fair contribution to global climate change efforts, fulfilling international obligations.	Provides that the Minister may identify a list of activities and thresholds for which measurements or estimations of GHG emissions and carbon sinks from stationary, mobile, fugitive, process, agriculture, land use and waste sources must be carried out.

Strategies and Regulations		
National Domestic Waste Collection Standards (GN 21 of 2011)	Provides standards relating to the collection of general waste.	Distinguishes between the levels of service relating to waste collection whilst emphasising that equitable waste collection services must be provided to all households within the jurisdiction of the Municipality.
National Waste Information Regulations (GN 625 of 2012)	Aims to regulate the collection of data and information to fulfil the objectives of the Nation Waste Information System as set out in section 61 of the NEM: WA.	Specify registration and reporting requirements to the South African Waste Information System.
Waste Classification and Management Regulations (GN 634 of 2013)	Aims to regulate the classification and management of waste in a manner that supports and implements the provision of the NEM: WA.	Provides a mechanism and procedure for the listing of waste management activities that do not require a Waste Management License. Prescribes requirements for; disposal to landfill, timeframes for management of certain wastes and general duties of waste generators, transporters and managers.
Norms and Standards for the Assessment of Waste for Landfill (GN 635 of 2013)	Prescribe the requirements for the assessment of waste prior to disposal at landfill.	Provides a standard assessment methodology for waste prior to disposal at landfill and advises on the total and leachable concentration limits.
National Norms and Standards for Disposal of Waste to Landfill (GN 636 of 2013)	Prescribe the requirements for the disposal of waste to landfill.	Provides detail on the different classes of landfills, the containment barrier requirements and the types of waste acceptable at the different classes of landfill. It further stipulates waste disposal restrictions and provides timeframes by which listed waste types would not be allowed on landfills.
National Norms and Standards for the Storage of Waste, (GN 926 of 2013)	Sets minimum requirements for the safe and compliant storage of waste in South Africa.	Helps to reduce pollution and environmental degradation by ensuring proper containment, labelling, and management of stored waste.

National Pricing Strategy for Waste Management (GN 904 of 2016)	Aims to provide the basis and guiding methodology or methodologies for setting waste management charges in South Africa to increase diversion from landfill and encourage reduction, reuse and recycling of waste.	Identifies and details three economic instruments for waste management namely; downstream instruments, upstream instruments and subsidy-based instruments.
Extended Producer Responsibility Regulations (GN 1184 of 2020), as amended	Provides a framework for the development, implementation, monitoring and evaluation of EPR schemes by producers in terms of section 18 of the NEM: WA.	To facilitate the effective and efficient management of identified end of life products and to encourage and enable the implementation of circular economy initiatives. Details and the roles and responsibilities of producers as well as the minimum requirements and criteria for EPR schemes.
Notices in terms of the Extended Producer Responsibility Regulations (GN 1184 of 2020), as amended **Extended producer responsibility scheme for the electrical & electronic equipment sector (GN R1185 of 2020)** **Extended producer responsibility scheme for the lighting sector (GN R1186 of 2020)** **Extended producer responsibility scheme for paper packaging and some single use products (GN R1187 of 5 November 2020).** **Extended producer responsibility scheme for the lubricant oil sector (GN R3178 of 2023).**	Provides a list of identified products that require producers of those products to implement specified EPR measures.	Requires the producers of the identified products to form part of EPR schemes with the aim to reduce the environmental impact of those products. Producers are required to take responsibility for the entire lifecycle of their products. The aim is to reduce waste, promote recycling, and prevent pollution.

Extended producer responsibility scheme for the portable battery sector (GN R3179 of 2023). **Extended producer responsibility scheme for the pesticide sector (GN R3177of 2023).**		
National Norms and Standards for Organic Waste Composting (GN 561 of 2021)	Provides a consistent, national framework for managing organic waste composting at facilities that meet the threshold (i.e. processing over 10 tonnes per day) to avoid disparities across provinces	Aims to minimise the negative bio-physical and socioeconomic impacts of composting activities (e.g. odour, leachate, pests, pollution) by prescribing design, operational, security, monitoring, and emergency response requirements.
National Norms and Standards for the Treatment of Organic Waste (GN 1984 of 2022)	Provides a uniform national approach to regulating organic-waste treatment facilities across South Africa	Supports diversion of biodegradable waste from landfills, thus reducing methane emissions (a key contributor to South Africa's waste-sector greenhouse gas emissions).
Industry Waste Tyre Management Plan (GN 4542 of 2024)	Provides requirements for the implementation of effective and efficient waste management of tyres.	Aims to reduce the negative environmental impacts of waste tyres by facilitating and expanding waste tyre processing in South Africa.

4 Situational Analysis

4.1 Western Cape Economy[1]

According to the latest Provincial Economic Review and Outlook, the Western Cape is a highly attractive destination for investment, with an emphasis on the business services and fintech sectors where the province aims to be a leading destination (Provincial Treasury, 2024). In recent years, tourism in the province has exploded with record numbers of visitors arriving in 2023. The province does however face many challenges such as structural energy, logistics, and mobility constraints linked to the Eskom energy crisis, Port of Cape Town inefficiencies, and the deterioration of the transport system (including rail) which hamper breakout economic growth.

Over the past decade (2014-2023), the Western Cape economy has expanded by 9.1%, at an average annual growth rate of 0.9%. In 2023, the province contributed 14.2% to the national Gross Domestic Product (GDP). As in the case of South Africa, the GDP per capita in the Western Cape declined during the 2014-2023 period (Figure 11). During this time, the province experienced a decline in real GDP per capita of 9.2 %. This implies that population growth in the region has outpaced real GDP expansion, potentially leading to a decline in standards of living for some.

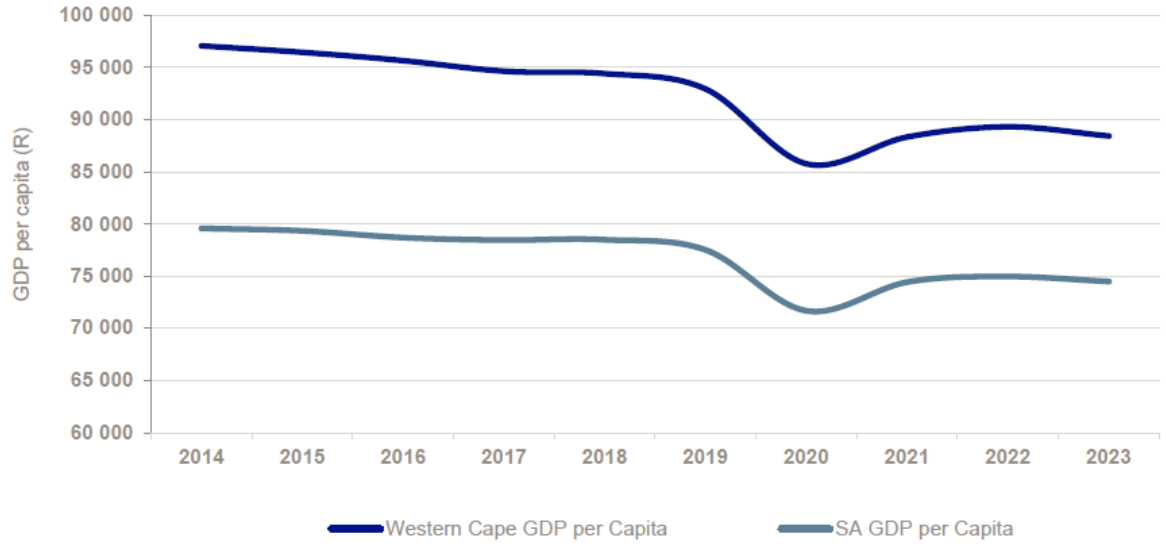


Figure 11: Real GDP per capita in the Western Cape, 2014-2023

(Source: Provincial Treasury, 2024)

The Western Cape economy is considered a service-based economy, dominated by finance, real estate and business services (WESGRO, 2024). While the share of the services sector to gross value added (GVA) increased during the 1995: Quarter 1 to 2023: Quarter 3 period, the

1 Unless otherwise indicated, the source for information included in this section is Provincial Treasury (2024)

secondary services sector declined, while the primary sector remained constant (WESGRO, 2024).

Primary sector: Agriculture, forestry, and fishing dominate the Western Cape's primary 1995 to 2022 (WESGRO, 2024). Between 2014 and 2023, agriculture was the fastest-growing component, expanding by 31.1%, driven largely by increased exports to key markets in Europe and East Asia.

Secondary sector: Manufacturing is the largest industry in the secondary sector, followed by construction (WESGRO, 2024). The manufacturing sector was dominated by the food and beverages industry, followed by the petroleum and metal industries during the 2005-2023 period. During 2014-2023, the construction sector (-27.2 per cent) contributed to the contractions in economic growth. The slowdown in the construction sector could be attributed to an increasingly fiscally constrained environment and lacklustre economy; high interest rates; the infamous construction mafia; and the residual effects of the COVID-19 pandemic lockdowns.

Tertiary sector: The finance sector contributed the largest share (33.5%) to provincial GDP in 2023, ahead of transport (11.8%) and community services (11.2%). Provincial economic growth reached an estimated 0.7% for the year[2]. The finance sector was the primary growth driver, contributing 0.6 percentage points. Transport added 0.5 percentage points and community services 0.2 percentage points. In contrast, retail trade significantly hampered growth. Its 2.1% contraction translated to a -0.3% contribution, primarily linked to reduced consumer spending caused by rising living costs, debt, high interest rates, and inflation.

The province has become the premier destination for venture capital in the country and comprises a well-developed local network of technology organisations. The Western Cape is home to major multinational technology companies (e.g. Amazon and Panasonic) and start-ups, such as Luno, Yoco, Jumo and SweepSouth. The Province must continue its focus on making it easier to do business within the fintech industry through measures such as efficient building permitting, improved infrastructure networks, and enhanced access to critical skills.

[2] GDP data are in Constant 2015 Prices (real)

4.2 Socio-economic Profile

4.2.1 Demographics

Population dynamics, urbanisation and migration patterns heavily influence the generation of waste as more people move to developed cities for job opportunities resulting in increased consumption of goods and resources as well as the demand for waste services. Waste generation is also influenced by income, with higher-income households producing more domestic waste per person due to higher consumption and purchasing power compared to low-income households.

The Western Cape is the third most populated province in South Africa after Gauteng (25.5%) and KwaZulu-Natal (19.4%) and continues to experience population growth, driven by rapid urbanisation and in-migration for better living conditions and job opportunities. In 2025, the province's population is estimated at 7.627 million, 12.1% of the total population (63.10 million) in South Africa (StatsSA, 2025).

Figure 12 shows a slight decline in the population from 7.743 to 7.627 million between 2024 and 2025 (DWS, n.d.). According to StatsSA (2025), the average total fertility rate has been declining across all provinces since 2001 to 2026 with higher total fertility in rural provinces including Limpopo and the Eastern Cape and lower rates of fertility in urban provinces like Gauteng and the Western Cape. The average total fertility rate of the Western Cape declined from 2.27 between 2001 and 2006 to an estimate of 1.79 for 2021 to 2026 (StatsSA, 2025).

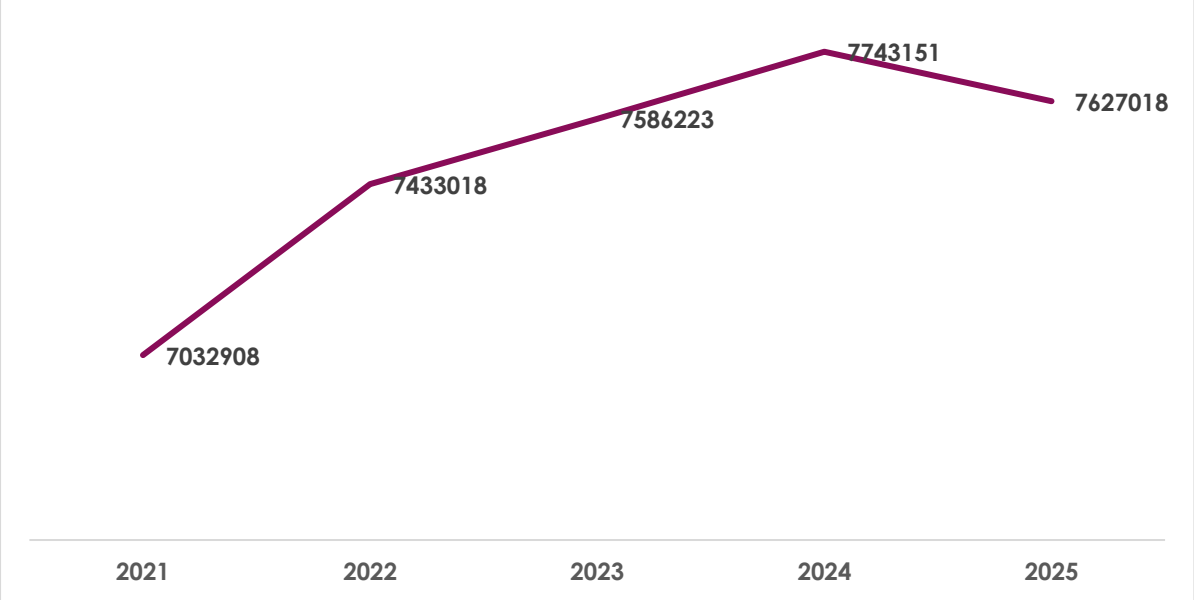


Figure 12: Western Cape Total Population between 2021 – 2025

(Source: DWS, n.d.)

Males account for 49.9% (3 803 million) of the population while females were at 50.1% (3 824 million) (StatsSA, 2025). The population has grown by 19.6% between 2015 - 2024 and is estimated to grow by an additional 1.196 million people over the next decade between 2025 – 2034 (Provincial Treasury, 2024). The Coloured population remains predominant, followed by the African, White and Indian/ Asian population groups at 47%, 37.8%, 14.4% and 0.8%

respectively (Provincial Treasury, 2024). Between 2019 – 2024, the African and Indian/ Asian population groups expanded while the Coloured and White population groups declined, largely due to net in-migration (Provincial Treasury, 2024).

Between 2021 – 2026, the Western Cape continued to have the highest life expectancy at birth for both males and females (67.6 and 72.2 years respectively) followed by Gauteng at 65.3 years for males and 71.2 years for females (StatsSA, 2025). The Western Cape's older labour force in 2024 was at 58.5% compared to the youth labour force at 41.5% with more growth experienced by the African female of older age (Provincial Treasury, 2024). The Province has seen notable population growth in the 60+ age cohort and although the dependency ratio remains fairly stable, the demographic shift towards an older population has implications for social systems, pension systems and service delivery (Provincial Treasury, 2024).

4.2.2 Urbanisation

Provincial Treasury (2024) estimates between 2022 and 2026, net migration will account for 51.2% of the total population growth in the Western Cape. The Gauteng and Eastern Cape provinces account for the majority of the estimated migration at 67 846 and 55 147 people between 2021 – 2026 (StatsSA, 2024). The Gauteng and Western Cape provinces are estimated to experience the largest inflow of migrants of approximately, 1 416 204 and 500 347 respectively, between the period 2021–2026 (StatsSA, 2025).

The majority of the population in the Western Cape is in the CoCT (64.9%) followed by the CWDM (13.8%), GRDM (9.2%), WCDM (6.7%), ODM (4.4%) and CKDM (1.1%) (Figure 13). According to DWS (n.d.), the urban population has been estimated to be 92.4% compared to 7.6% in the rural areas between 2023 – 2025. The higher population density in the CoCT is due to increased urbanisation, which in turn increases pressure on government resources compared to the more rural CKDM with a smaller population.The majority of the population is concentrated in the CoCT (Figure 13) due to economic development and political stability as people move to urban areas for access to better education, healthcare and employment (Provincial Treasury, 2024). This also leads to increased consumerism as more people are employed and consume more goods and services, placing pressure on municipal infrastructure and generating more waste.

Census 2022 data indicated that 83.7% of international migrants were from the Southern African Development Community (SADC) region with a decrease in migrants from the United Kingdom and Europe from 22,3% in 2001 to 4,9% in 2022 (StatsSA, 2024). Internal migration between 2011 and 2022 was due to the search for paid employment for both men (13,7%) and women (9,4%), however, men secondly move for job transfers or new employment while women move to live closer to a spouse, family or friends (StatsSA, 2024). According to StatsSA (2024), this highlights the influence economic factors have on male migration while female migration is driven by social and family ties.

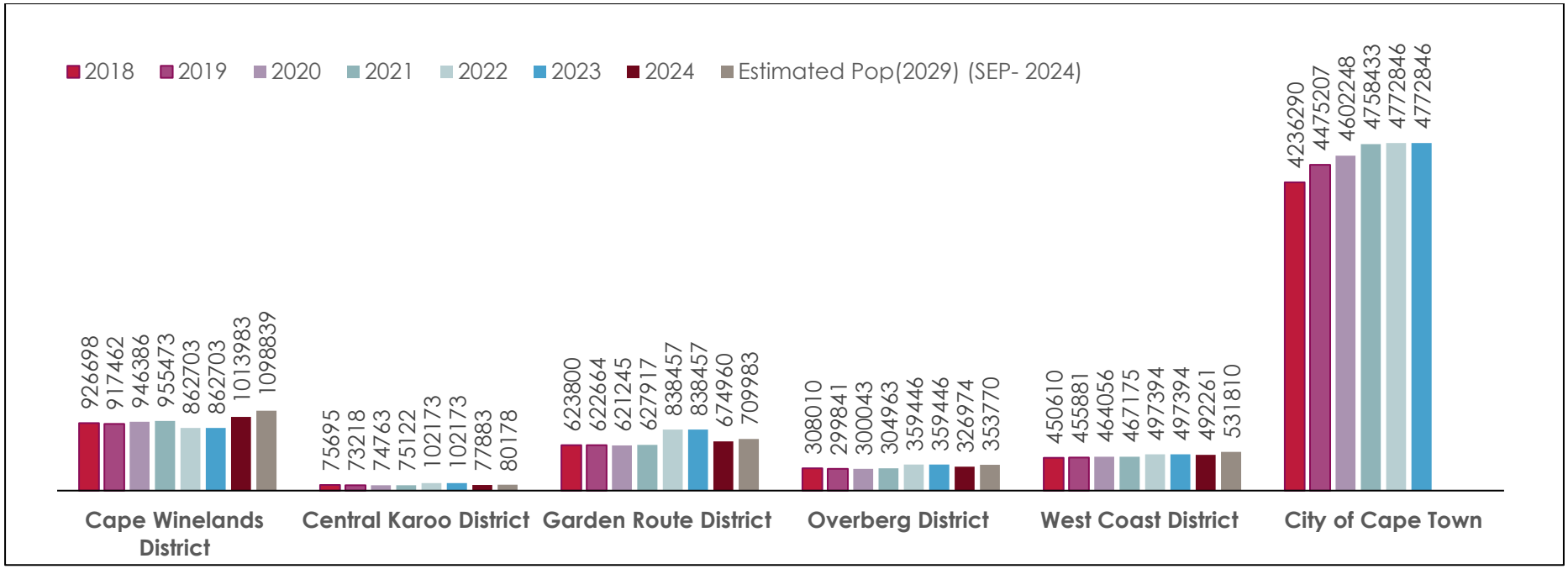


Figure 13: Population per District 2018-2024 and Estimated Population by 2029

(Source: Provincial Treasury 2018-2024

4.2.3 Housing and Informal Settlements

The Provincial Treasury (2024) identifies that it is crucial to address the impacts of in-migration through proper planning as it places pressure on urban infrastructure, widens economic inequality and leads to environmental as well as social challenges. The rapid urbanisation, population growth and in-migration to the province have increased demand for the delivery of services including housing, healthcare, education and employment (Provincial Treasury, 2024). In 2024, the Western Cape had the third largest number of households (2 195 000 million) after Gauteng (5 981 000 million) and KwaZulu-Natal (3 387 000 million) (StatsSA, 2025). The majority of the households in the province are formal dwellings (80.8%), 18.6% are informal dwellings, 0.2% are traditional dwellings and 0.4% described as other dwellings (StatsSA, 2025). The province had the highest percentage of informal dwellings in 2024, followed by Gauteng and North West (both 17.2%), and 81% of the households in the CoCT are formal dwellings, with 18.8% informal dwellings (StatsSA, 2025).

Provincial Treasury (2024) emphasises the need for accelerated provisioning of affordable housing to curb the challenge of informal dwellings in the province. The housing crisis remains a challenge as the demand outweighs the supply and this is compounded by budgetary constraints at the municipal level (Provincial Treasury, 2024). The total registered housing demand between 2015 – 2024 increased by 292 529 (83.2%) to 644 177 in 2024 with most of the demand in the CoCT (60.8%) followed by the CWDM (12.6%) and GRDM (11%) (Provincial Treasury, 2024). There was a decline in the number of households built by the WCG between 2015 – 2024, with 3 315 houses built in 2024 for low-income beneficiaries (Provincial Treasury, 2024). Provincial Treasury (2024) partially attributes this decline to poor contractor performance, community disruptions, construction cartels, policy decisions and budget constraints.

The WCG's Finance Linked Individual Subsidy Programme (FLISP) aims to provide government subsidies to poor, low- to middle-income households earning between R3 501 and R22 000 per month and has an estimated backlog of 425 000 households (Provincial Treasury, 2024). Households in this bracket do not qualify for fully subsidised housing or home loans from banks and the WCG acknowledges the need for more integrated settlements to deal with the housing challenge in the province (Provincial Treasury, 2024). Quality and affordable housing is a basic human right that is essential for survival and well-being, as it provides physical security and comfort.

4.2.4 Employment

Employment in the Western Cape increased by 7.1%, 5% more than national between the second quarter of 2019 and 2024 and contributed 52.2% of all new net employment in the country (Provincial Treasury, 2024). Employment levels increased by 9.6% between the first quarter of 2020 (pre-COVID-19) to the first quarter of 2024 (Provincial Treasury, 2024). The largest contributions to the employment levels were from the Finance (5.2%), Construction (1.9%) and the Trade and Community (1.7%) sectors (Provincial Treasury, 2024). Informal employment increased by 5.9% in the province between 2019 and 2024 (Provincial Treasury, 2024). The province has a lower youth unemployment rate compared to the national rate at 10.2% and only increased by 0.3% between 2019 and 2024 (Provincial Treasury, 2024).

The Western Cape's labour force increased by 6.4% in the African and 5.5% in the Coloured population between the second quarter of 2019 and 2024 and shown in Table 4.

In the second quarter of 2024, more of the Coloured population was employed at 43.4%, followed by the African population at 42.1%, however, employment for the African population increased while employment for the Coloured and White populations decreased (Provincial Treasury, 2024).

Table 4: Composition of the Western Cape Narrow Labour Force 2Q2019-2Q2024

	2Q2019		2Q2024		Change	
	Number (000's)	Share %	Number (000's)	Share %	Number (000's)	%
Narrow labour Force	3 182	100.0	3 439	100.0	257	8.1%
By Race						
African	1 233	38.7%	1 447	42.1%	214	17.3%
Coloured	1 439	45.2%	1 494	43.4%	55	3.8%
White	491	15.4%	465	13.5%	(26)	-5.3%
By Gender						
Male	1 720	54.0%	1 812	52.7%	92	5.4%
Female	1 420	44.6%	1 628	47.3%	208	14.7%
By Age						
Youth (15 - 34 years)	1 361	42.8%	1 429	41.5%	68	5.0%
Older (35 - 64 years)	1 821	57.2%	2 010	58.5%	189	10.4%
By Education						
Less than Secondary	1 481	46.5%	1 411	41.0%	(70)	-4.7%
Secondary	1 072	33.7%	1 293	37.6%	221	20.6%
Tertiary	592	18.6%	656	19.1%	64	10.8%

(Source: Provincial Treasury, 2024)

According to Provincial Treasury (2024), unemployment contributes to poverty, inequality and social unrest as people struggle to meet basic needs without a stable income. Between 2019 – 2024, the Western Cape unemployment rate increased by 1.8% to 22.2% but still had the lowest unemployment rate in the country followed by KwaZulu-Natal (31.1%) and Limpopo (34.1%) (Provincial Treasury, 2024). Over the same period, unemployment rates in the province increased the most for the African population group, youth, females and people with less than a secondary education (Provincial Treasury, 2024). Figure 14 shows the most rural district, CKDM, had the lowest number of unemployed people while the CoCT had the highest and this has been attributed to greater competition for job opportunities in the urban area (Provincial Treasury, 2024). The Human Development Index (HDI), which is a measure of development in health, education, and income per capita, for the Western Cape continues to outperform the national average with the highest HDI recorded for the CKDM in 2022, which implies improvement in the living conditions for people in the region (Provincial Treasury, 2024).

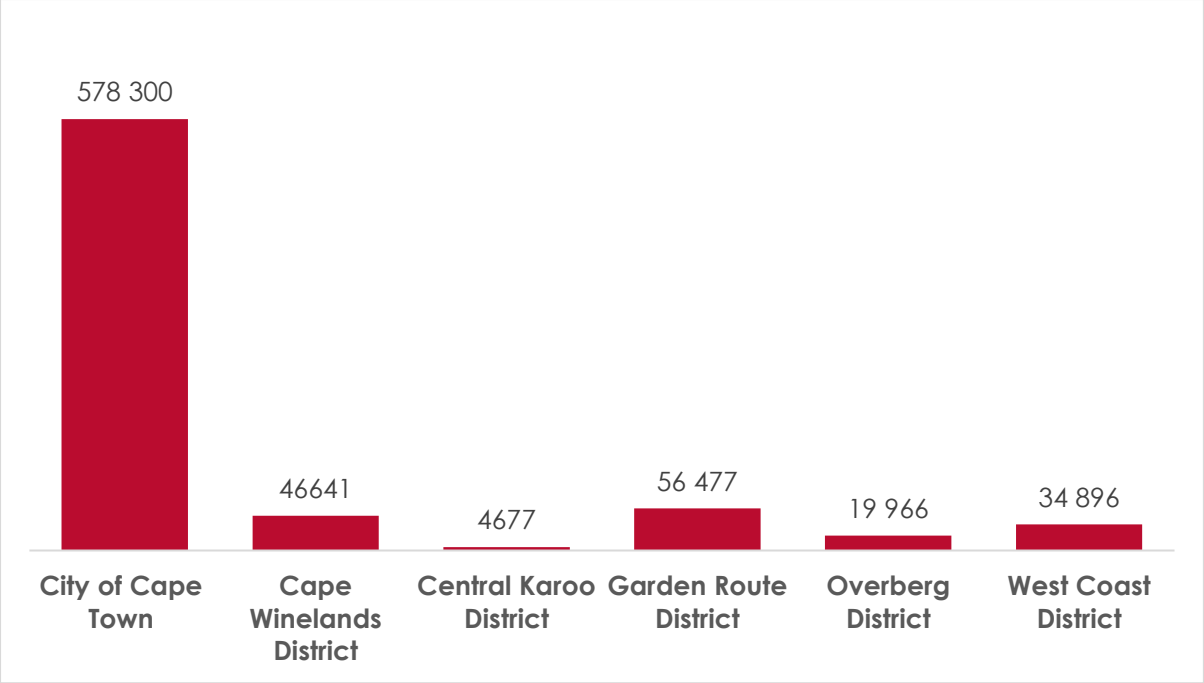


Figure 14: Total no. of unemployed persons by district and metropolitan municipality in 2023

(Source: Provincial Treasury, 2024)

4.2.5 Income

High inflation affects the low-income groups the most as they use a large portion of their income on necessities and essential services such as health care and education (Provincial Treasury, 2024). Low-income households who earn an average of R3500 a month spend a significant amount (38%) of their income commuting between their households and work as a result of spatial inequality (Provincial Treasury, 2024). Between 2019 and 2023, the CoCT had the highest average monthly income (R9 659) while the ODM had the lowest (R6 021) Provincial Treasury (2024). According to Provincial Treasury (2024), the Gini coefficient in the Western Cape declined from 0.66 in 2002 to 0.59 in 2022 showing a slight reduction in income inequality. In the Western Cape, salaries (74.7%) are the most common source of income, which is higher than National (62.2%) and salaries are the least common in the Eastern Cape (49%) (StatsSA, 2025). According to StatsSA (2025), the Eastern Cape (38.9%) has the highest reliance on social grants as a source of income while the Western (14%) has the least in South Africa (23.8%). In 2024, households with inadequate access to food were recorded at 22.2% nationally, 19.5% in the province, and 23% in the CoCT (StatsSA, 2025). Poverty remains a challenge in the province with 3.7 million people recorded living below the lower-bound poverty line in 2020 due to the COVID-19 pandemic and approximately 53% of the population in 2022 (Provincial Treasury, 2024).

4.2.6 Municipal Services

In 2024, the Western Cape had 99% of households with access to piped water in their dwellings, the highest for all provinces with the CoCT at 99.8% and 89.6% of the households in the province believe the water is safe to drink (StatsSA, 2025). Households with access to improved sanitation were the highest in the Western Cape (97.1%) and lowest in the Limpopo (62.2%) in 2024 (StatsSA, 2025). In 2024, 96.7% households had access to flush toilets in the Western Cape,

which is higher than the National of 66.7% and Limpopo had the highest electricity connections at 96.6% followed by the Western Cape at 96% (StatsSA, 2025). South Africa has 63.6% of its households with access to refuse removal at least once a week, which is much lower than the 91.5% of households in the Western Cape for the year 2024 (StatsSA, 2025). Households using a communal refuse dump in the province were at 7.1%, with 1% using their own refuse dump and 0.3% using other methods (StatsSA, 2025).

4.3 The Waste Landscape

4.3.1 Institutional Arrangements and Waste Management Planning

Cooperative governance between national, provincial, and local government, together with industry and Producer Responsibility Organisations (PROs), is fundamental to achieving effective and sustainable waste management in South Africa. This collaboration is guided by the Constitution of the Republic of South Africa, 1996, particularly Chapter 3, which mandates cooperative governance and intergovernmental relations to ensure alignment and mutual support across spheres of government. Under the NEM:WA, stakeholders work together through joint planning, policy development, compliance monitoring, and resource sharing. This collective effort ensures the realisation of constitutional environmental rights, including Section 24 of the Constitution, which guarantees everyone the right to an environment that is not harmful to their health or well-being, while advancing the principles of waste minimisation, recycling, and the circular economy.

4.3.1.1 Institutional Framework of the Waste Sector

The Constitution establishes three interrelated spheres of government i.e. national, provincial, and local, bound by the principle of cooperative governance (Sections 40–41). In waste service delivery, the national government sets policy and legislative frameworks, provincial governments oversee implementation and provide support to municipalities, and local governments are directly responsible for refuse removal, recycling, and the operation of waste facilities (Schedules 4 & 5; Chapter 7, Sections 151–164). This framework ensures the coordinated, accountable, and sustainable delivery of waste management services nationwide.

- At the provincial level (Variable 1)(Figure 15) the Integrated Waste Management Officers' Forum (Provincial WMOF) plays a key role in coordinating waste management functions across districts and local municipalities. This forum provides alignment between provincial priorities and national direction, while also feeding into the District Waste Management Officers' Forums. These district forums ensure that waste management officers (WMOs) at local and district levels engage in knowledge sharing, capacity building, and joint implementation of waste management initiatives.
- The Ministerial Committee on Environment, Forestry and Fisheries (MINMEC), which brings together national and provincial environmental authorities, provides oversight and high-level political guidance on waste management. Supporting this structure is the Ministerial Technical Committee (MINTECH), a technical committee that ensures strategic decisions are informed by robust technical input. Working Group 8 under MINTECH (Variable 3) further refines focus areas, engaging sector experts and specialists to address technical challenges and support implementation. This information informs discussions at provincial and municipal strategic engagements (Variable 2).
- There is a strong emphasis on collaboration with stakeholders through the Industry Forum and Recycling Action Group (Variable 4). These platforms facilitate dialogue between the government and the private sector, particularly recycling industries and other key players in the circular economy. Through this mechanism, industry perspectives are integrated into policy-making and implementation processes, ensuring practical, market-driven solutions to waste challenges.
- The South African Local Government Association (SALGA) Municipal Infrastructure Forum provides a platform for municipalities to share experiences, address challenges in

infrastructure delivery, and promote peer learning. It enables municipal leaders to collaborate on practical solutions for financing, governance, and service delivery improvements.

- The Department of Cooperative Governance (DCoG) MIG Forum, on the other hand, focuses on the management and oversight of the Municipal Infrastructure Grant (MIG). It ensures that funds are used effectively for basic services such as water, sanitation, Specialised waste vehicles and WMFs and roads, while also providing technical support to struggling municipalities and enforcing accountability where performance is weak.
- Together, these forums strengthen municipal capacity by combining collaboration and peer support (SALGA) with funding oversight and accountability (DCoG). The SALGA working group on water and sanitation together with environmental management and climate resilience are important platforms for Municipal portfolio councillors, technical officials and Provincial officials to discuss waste issues.
- In response to fragmented government operations, the President introduced the District Development Model (DDM) in 2019 to promote integrated service delivery. In the Western Cape, it is implemented as the Joint District and Metro Approach (JDMA). The JDMA enhances coordination between national, provincial, and local governments through District Coordinating Forums (DCFs) for joint planning, budgeting, and implementation. The model aims to improve service delivery, project management, and alignment with municipal Integrated Development Plans (IDPs). The Western Cape Department of Environmental Affairs and Development Planning (DEA&DP) actively participates in JDMA processes, integrating outcomes into its municipal support plans.
- PGMTEC reviews provincial budgets to ensure alignment with national priorities and fiscal sustainability. It helps departments like DEA&DP plan targeted, needs-based support. Municipalities influence these budgets indirectly by clearly expressing their needs through tools like the JDMA and IDPs.
- SIME 1, led by the Department of Local Government (Sept–Nov), focuses on planning priorities and service delivery challenges, promoting co-planning and budgeting. DEA&DP uses outcomes to inform its draft budget and support plans.
- SIME 2 (formerly LGMTEC), led by Provincial Treasury (Apr–May), is a legislative process to assess municipal draft budgets and IDPs, as required by the MSA and MFMA. DEA&DP participates to ensure environmental and planning needs are addressed.
- The process identifies issues to be resolved before adoption of IDPs and budgets, and highlights improvements needed for the next fiscal year.
- Technical Integrated Municipal Engagements (TIME) in the Western Cape Government are structured technical forums between provincial departments and municipalities aimed at strengthening governance, financial management, planning, and service delivery. These engagements focus on aligning municipal Integrated Development Plans (IDPs), budgets, and performance systems with provincial priorities, while identifying risks and support needs early. TIME serves as a collaborative mechanism to improve coordination, enhance accountability, and ensure municipalities are technically supported to achieve sustainable and effective service delivery outcomes.

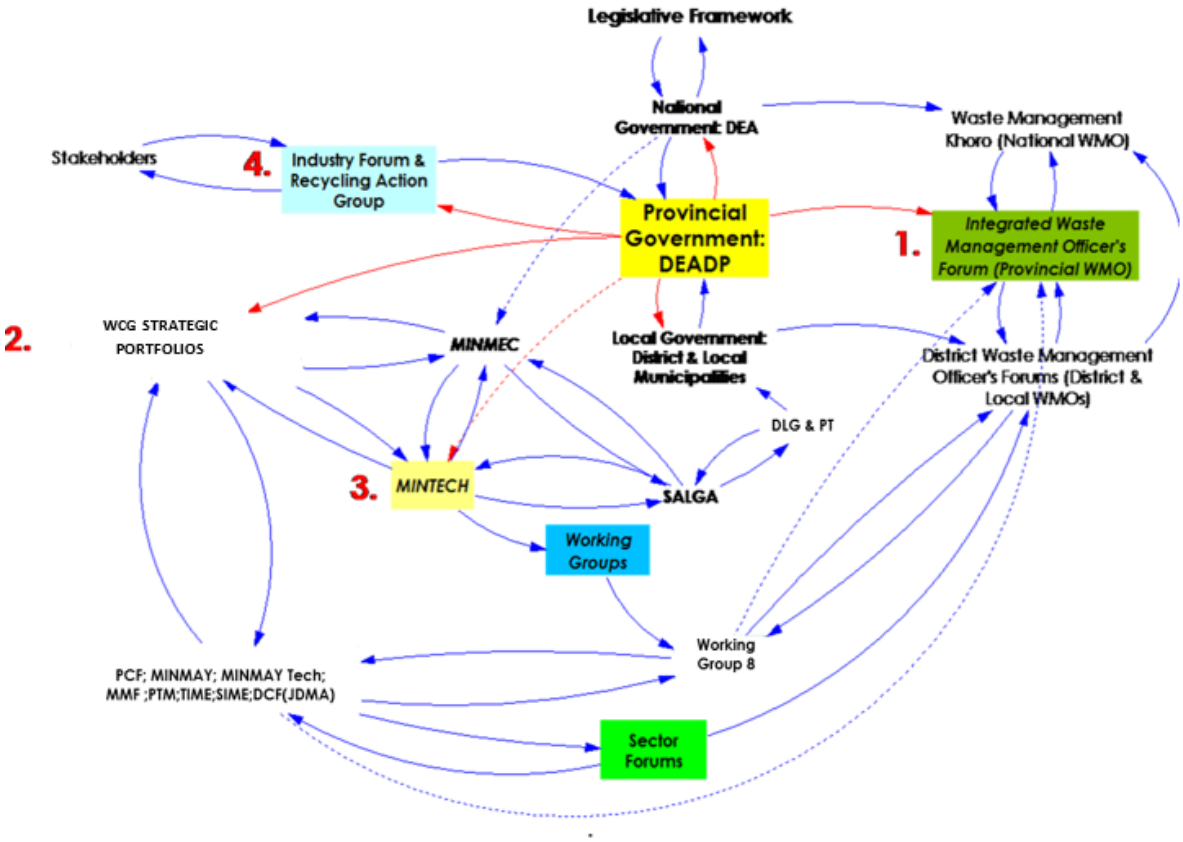


Figure 15: Waste management institutional arrangements

4.3.1.2 The Role of Provincial Government in Waste Management

The NEM: WA requires provincial departments responsible for waste management to develop IWMPs. According to the National Waste Management Strategy, 2020, the primary functions of provincial IWMPs are to plan and guide public and private investment in regional WMFs, to address waste management issues that are specific to the provincial, economic, social and environmental profile and to support municipalities by providing guidelines for the monitoring, reporting and evaluation of IWMPs. Provincial governments have several other functions pertaining to waste management. Within the Department, the following key functions are undertaken:

- **Integrated waste management planning and information management:** working with municipalities and industry to improve how waste is managed and reported in the Western Cape.
- **Regulating WMFs:** technical assistance to municipalities is provided with the aim to improve the construction, management and operation of WMFs in the Western Cape.
- **Policy and waste minimisation:** working with municipalities, industry and the community to promote waste minimisation through awareness campaigns, interventions and capacity building in the Western Cape. Facilitation, development and implementation of waste management policies which will minimise waste and reduce its environmental impacts as well as stimulate the waste economy and job creation.

The Department's **Directorate: Waste Management** is responsible for the development of the provincial IWMP and is located within the Chief Directorate: Environmental Quality (Figure 16).

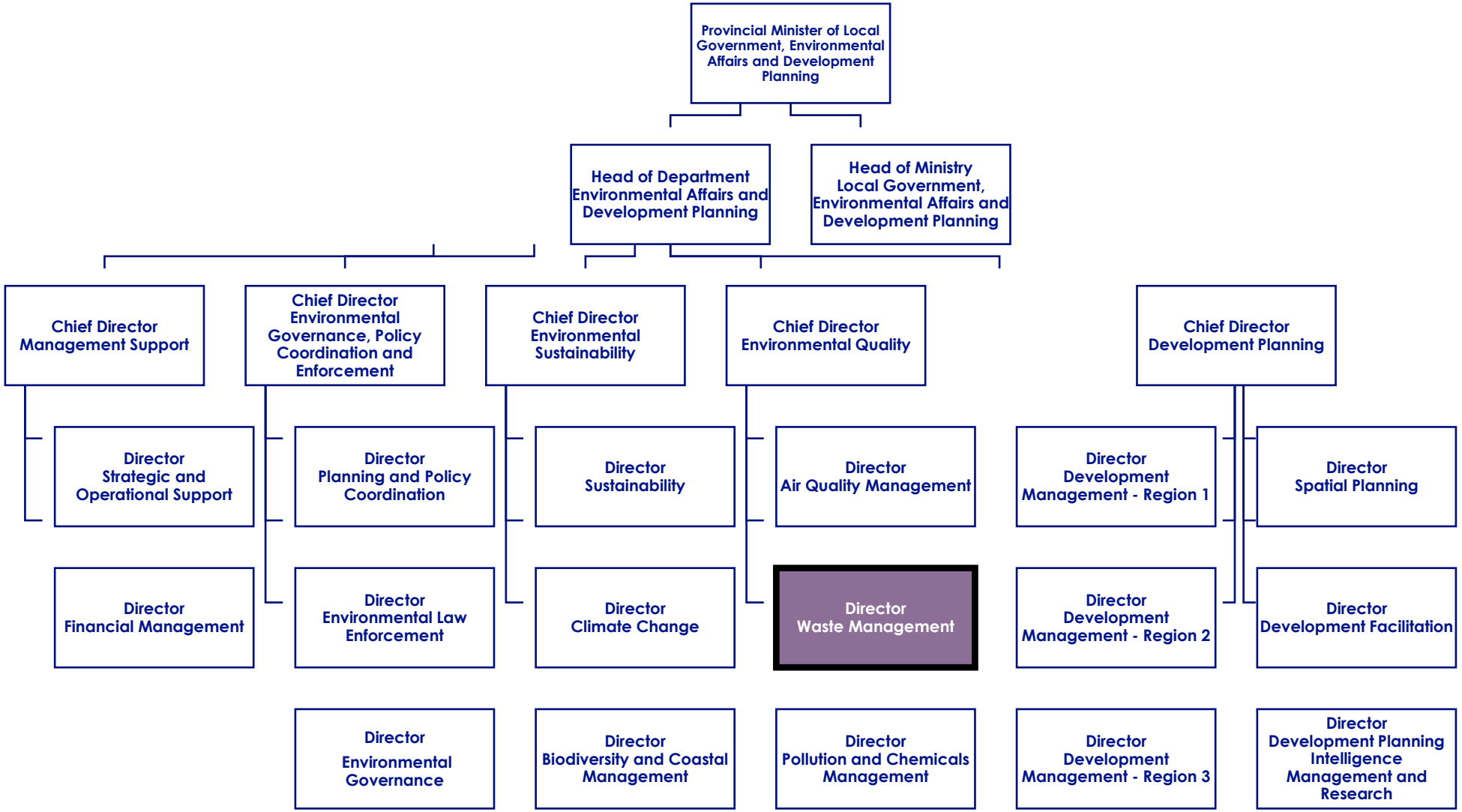


Figure 16: DEA&DP organisational structure

4.3.1.3 Designation of Waste Management Officers

The designation of WMOs at the national, provincial and local levels is a requirement of the NEM: WA. The key duties of a municipal WMO includes to:

- Ensure reliable and effective waste collection and disposal services through policy development, tariff setting, and bylaw implementation.
- Support planning and budgeting for sustainable waste services
- Lead the implementation of the municipality's Integrated Waste Management Plan
- Promote waste reduction, recycling, and private sector involvement
- Oversee waste facilities, vehicles, and equipment
- Manage contracts and monitor waste service providers
- Monitor and report on service provider performance
- Promote clean, healthy, and safe communities
- Ensure compliance with waste and environmental laws

The designation of WMOs within the Western Cape indicates generally high levels of compliance across municipalities. Full compliance (100%) has been achieved by DEA&DP, the CKDM, and the CoCT **(Appendix B).** The CWDM recorded 83% compliance, while the Garden GRDM achieved 75%, and the ODM attained 80%. The WCDM reflected the lowest compliance at 67%, due to outstanding designations in the District and Cederberg LM.

Overall, 80% of municipalities have a designated WMO, which is lower compared to a compliance rating of 87% achieved in 2023 (Table 5). Targeted support and follow-up are required with Breede Valley LM, Knysna LM, Oudtshoorn LM, Theewaterskloof LM, West Coast DM, and Cederberg LMs to achieve full compliance across the province. Compared to 2023, the current number of designated WMOs that are female is higher i.e. three female WMOs in 2023 compared to the current four, representing 12% compared to 17%, respectively.

Table 5: Number of municipalities with designated Waste Management Officers

DESIGNATED WASTE MANAGEMENT OFFICERS	2023		CURRENT	
	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE
Municipalities with designated WMOs	26	**87%**	24	**80%**
Municipalities without designated WMOs	4	**13%**	6	**20%**
Female designated WMOs	3	**12%**	4	**17%**
Male designated WMOs	23	**88%**	20	**83%**

4.3.2 Integrated Waste Management Plan Status

4.3.2.1 Provincial

The NEM: WA requires provincial departments responsible for waste management to develop IWMPs. These plans must be reviewed annually and updated every 5 years in line with the IDP cycle and must be submitted to the Minister of the DFFE for endorsement. The current 3rd Generation WC IWMP was published in 2023 for the 2023/24-2026/2027 period. Once developed the 4th Generation WC IWMP will replace the 3rd Generation WC IWMP and will be applicable to the 2027/28-2031/32 period.

The implementation of the IWMP is reviewed annually and reported on in the Annual State of Waste Management Report (SoWMR).

4.3.2.2 Municipal

All municipalities are required to develop IWMPs, review them annually and update them every five years, in line with the IDP cycle. IWMPs must be submitted to the MEC for endorsement. All Municipalities in the province have developed IWMPs, which have been endorsed, however not all Municipalities have reviewed and updated their latest IWMPs after the five-year expiration period and their IWMPs are thus no longer valid. Currently, seven municipalities/districts have invalid IWMPs. This is fewer compared to 2023, when ten municipalities did not have valid IWMPs. Eight Municipalities requested extensions to enable them to align their IWMP timeframe with the next IDP cycle namely, GRDM, ODM and Hessequa, Kannaland, Bitou, Knysna, Mossel Bay, Oudtshoorn, George and Drakenstein Municipalities. Extensions were allowed with the proviso that their IWMP Implementation Plans be reviewed and amended and submitted to the Department for assessment. Their Implementation Plans must contain activities for implementation, targets, timeframes and financial and human resources.

The WCDM, and Beaufort West Municipality have submitted draft IWMPs to the Department to comment on as part of their public participation process. The CKDM and Prince Albert Municipality have recently submitted their IWMPs for endorsement.

MUNICIPAL IWMP STATUS	2023	CURRENT
Municipalities with endorsed IWMPS	**30**	**30**
Municipalities with valid IWMPs:	**20/30**	**23/30** CoCT, CWDM, Drakenstein LM Stellenbosch LM, Witzenberg LM, Langeberg LM, Cederberg LM, Saldanha Bay LM, Bergrivier, Swartland LM, ODM, Theewaterskloof LM, Cape Agulhas LM, Swellendam LM, GRDM, Hessequa LM, Kannaland LM, Bitou LM, Knysna LM, Mossel Bay LM, Oudtshoorn LM, George LM, Laingsburg LM.
Municipalities without valid IWMPs:	**10/30**	**7/30** Breede Valley LM, WCDM, Overstrand LM, Matzikama LM, CKDM, Prince Albert LM. Beaufort West LM.

Section 13(3) of the Waste Act requires Municipalities to report annually on the implementation of their IWMPs. Section 13 (2) sets out the information requirements that must be included when reporting. Most Municipalities however have not been reporting. The Department has been in discussion with the National DFFE and WMOs of the municipalities to improve reporting. The Department has developed a template to ensure consistent reporting, which is expected to be rolled out in the 2026/27 financial year.

4.3.2.3 Industry Planning

The draft Section 29 Industry Waste Tyre Management Plan (IndWTMP) was published for comment on 10 October 2023 with the intention to submit it to the Minister for approval by December 2023 and possibly appoint implementers by June 2024. The call for plans is currently under litigation and therefore on hold.

4.3.3 Integrated Waste Management By-Law

Municipal by-laws across the Western Cape revealed that most are aligned with the NEM: WA, although the degree of alignment varies. Consequently, these by-laws are broadly categorised as only partially aligned with the NEM: WA. While some municipalities still rely on older by-laws that give limited recognition to waste minimisation, others incorporate

extensive and explicit provisions that mandate recycling and assign this responsibility to all waste generators. Furthermore, district municipalities often integrate their waste management clauses into broader Municipal Health By-Laws. Currently, 28 municipalities (approximately 93%) have waste by-laws in place, while two (approximately 7%) - Matzikama and the West Coast District do not (Figure 17). Encouragingly, Matzikama Municipality has begun developing its own by-law, guided by the DEA&DP's Model By-Law.

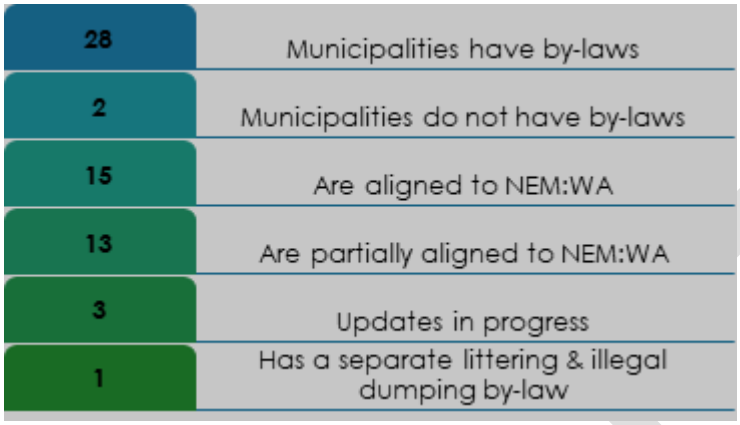


Figure 17:Alignment of municipal by-laws of the NEM:WA

4.3.4 Waste Management Finance

4.3.4.1 Provincial Waste Management Finances

The Department's Directorate: Waste Management is responsible for promoting, implementing, and improving integrated waste management in the province. It comprises three sub-directorates, namely, Waste Management Planning, Waste Policy and Minimisation, and Waste Management Licensing, each with distinct areas of focus. Key activities include implementing legislation, policies, norms and standards, and systems that support communities, municipalities, industry, and the private sector through targeted projects and initiatives.

Although the budget for goods and services has increased from 2022/23 to 2024/25, employee costs have decreased due to staff losses (retirements and resignations) and unfilled posts (Table 6). Ongoing financial constraints and budget cuts have limited the Directorate's ability to meet legislative mandates without affecting staff well-being. Staff costs remain the main budget driver. While these increased between 2022/23 and 2023/24, there was a significant decline in 2024/25 as posts remained vacant and unfunded. This situation continues to constrain capacity, and limits focus on key areas such as hazardous waste management.

Table 6: Budget and expenditure for the Directorate: Waste Management

	2022/23		2023/24		2024/25	
	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure
Cost of Employment	R20 782 500	R20 524 627	R23 343 000	R23 124 774	R19 368 900	R19 392 599
Goods and Services	R999 800	R746 505	R1 713 300	R1 555 015	R1 572 950	R1 492 275
Departmental Agencies	0	R506	R500	R554	R400	R506
Households	R29 000	R261 325	R55 000	R71 011	R186 200	R186 057
Capital	R254 000	R261 325	R127 000	R105 851	R322 000	R367 815
Payments (financial assets)	R0	R0	R0	R0	R0	R3020
Grand Total	**R22 065 300**	**R21 784 289**	**R25 238 800**	**R24 857 205**	**R21 450 450**	**R21 442 271**

NB: The above table must be updated to include the WM Directorate budget and expenditure for the 2025/26 and 2026/27 financial years, if possible.

4.3.4.2 Municipal Waste Management Finances

Municipal waste management finances include capital expenditure, operational expenditure and revenue. Capital expenditure for waste management infrastructure for all local and district municipalities is shown in Figure 18. Operational expenditure provides the costs of rendering the waste management service. The revenue indicated is from Municipalities actively generating their own income via e.g. property taxes, service charges, traffic fines. Municipalities also receive funding from either government grants and subsidies or public donations and contributions.

As per Figure 18, capital expenditure for waste management infrastructure has increased steadily since 2021/22, post-COVID. Operational expenditure across the Province has decreased since 2021/22, whilst the revenue has increased steadily throughout this period.

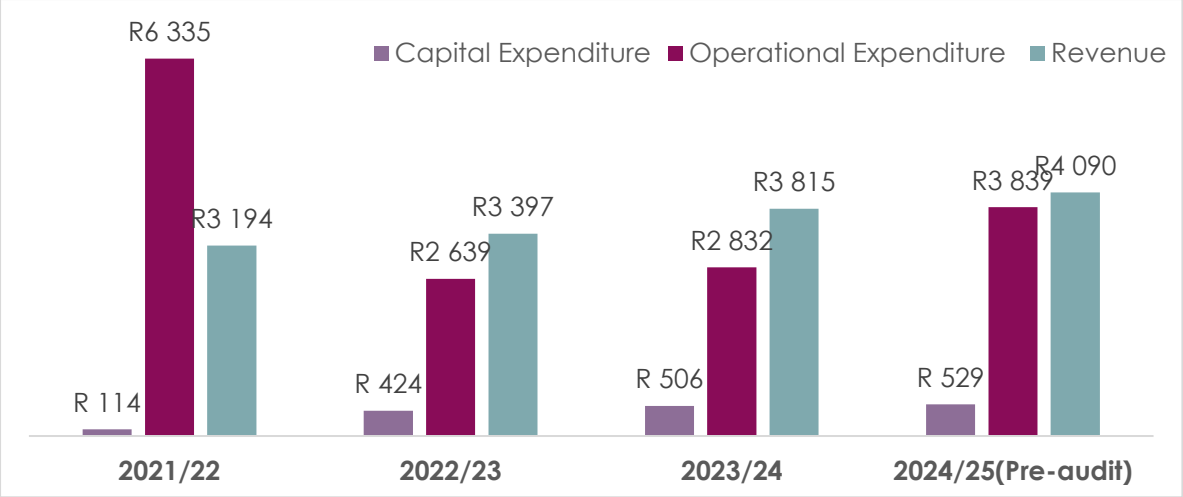


Figure 18: Municipal waste management finances R (M)

Refuse Collection Tariffs

Local Municipalities render weekly refuse collection services to households and charge monthly tariffs for these services. The monthly refuse collection tariffs were extracted from municipal tariff documents and are shown in Figure 19. During the 2024/25 financial year, Bergrivier LM had the highest tariff rate i.e. R400 p/m. During the same timeframe, Beaufort West LM had the lowest tariff rate i.e. R95 p/m. Since Beaufort West LM has two different tariff rates i.e. R89,45 and R99,75, depending on the area, an average rate was calculated. Municipalities increase tariffs annually to ensure that they can continue to deliver refuse collection services. Figure 20 compares the latest tariff increases with the Consumer Price Index (CPI) rates of 6% during 2023/24 and 4,9% during the 2024/25 financial year. During the 2023/24-2024/25 financial year, only eight municipalities had a tariff rate increase of 6% or below.

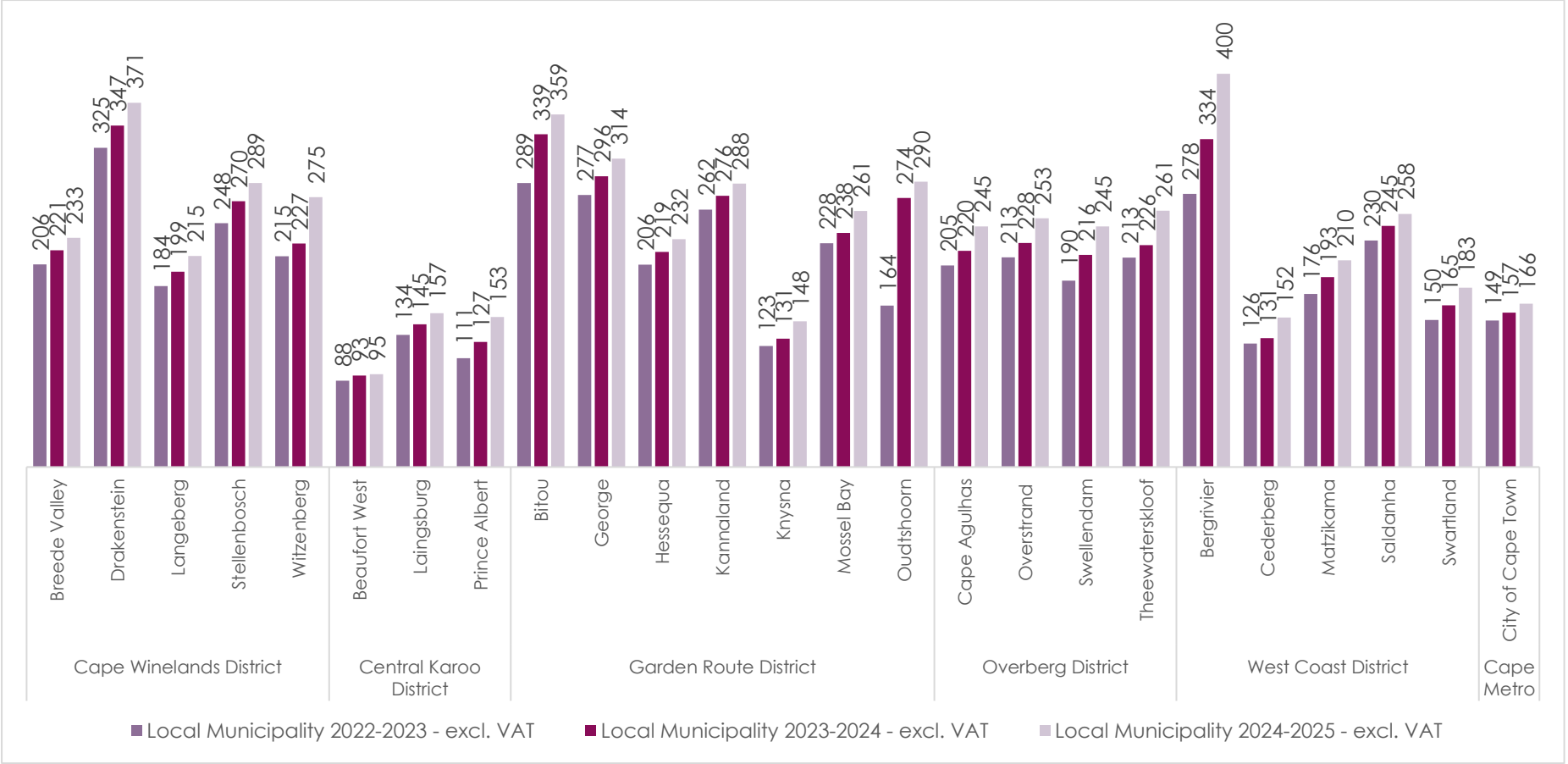


Figure 19: Monthly refuse collection tariffs per municipality (R)- excl.. VAT

(*Source: DEA&DP, 2025)*

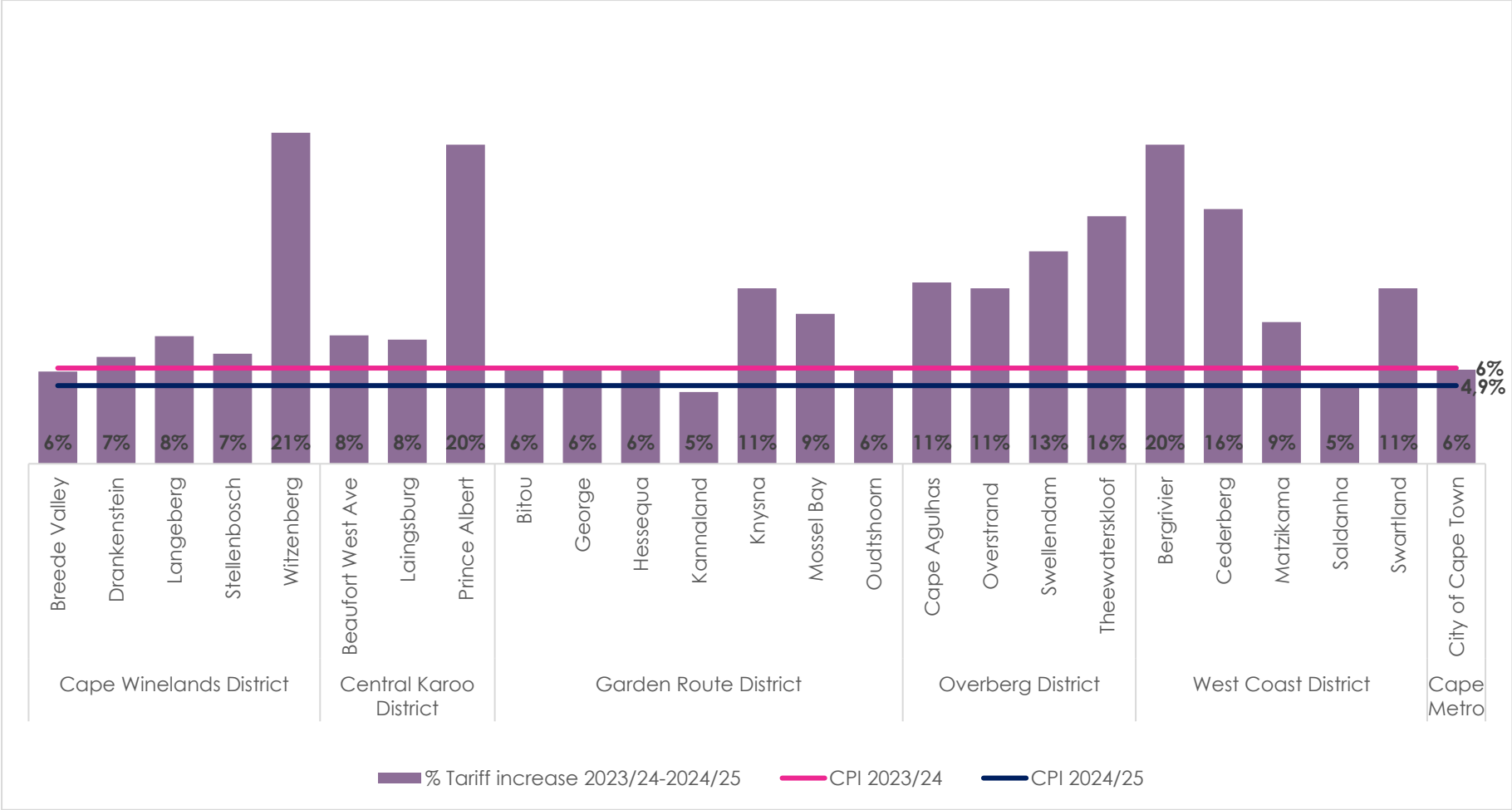


Figure 20: Tariff increase from 2023/34 and 2024/25 vs Consumer Price Index

(*Source: DEA&DP, 2025)*

Free Basic Services

Municipalities play a crucial role in providing a package of free basic services to financially vulnerable households struggling to cover service costs. Municipalities maintain an indigent register of households who apply and meet the criteria (Figure 21). The following information was extracted from the Socio-Economic Profiles for each District (Provincial Treasury, 2024).

Cape Winelands (Provincial Treasury, 2024)

The number of households benefiting from these services in the CWDM witnessed a decline from 2021 to 2022. The prevailing economic stress is expected to heighten household income challenges, potentially increasing the demand for free basic services and the number of indigent households. However, the specifics of this scenario are contingent on area-specific conditions and the criteria employed for qualification.

Central Karoo District (Provincial Treasury, 2024)

The number of households receiving free basic services in the CKDM between 2019 to 2023 fluctuated. In 2023, indigent households were recorded at 7 570. As expected, Beaufort West has the highest number of indigent households at 5 985 , followed by Prince Albert municipal area 1 115 and Laingsburg 470 in 2023.The stressed economic conditions are expected to exert additional pressure on household income, which will likely increase the demand for free basic services and in turn the number of indigent households.

Garden Route District (Provincial Treasury, 2024)

There was a significant surge in registered indigent households in 2020 attributable to the adverse economic impact of the COVID-19 pandemic, which resulted in income losses impeding households' capacity to cover their municipal service expenses. In 2021, a slight reduction occurred, and by 2022, a return to levels resembling the pre-COVID period was evident. As per the 2023/24 Municipal Economic Review and Outlook, in 2022, 43.7 per cent of households in Kannaland LM were registered as indigents, followed by 36.9 per cent in Oudtshoorn LM, underscoring heightened poverty levels in these municipal areas. The stressed economic conditions will continue to exert pressure on household incomes and thereby keep demand for free basic services at elevated levels.

Overberg District (Provincial Treasury, 2024)

In the Overstrand LM, the number of households receiving these free basic services, categorised as indigent households, experienced a notable decline between in 2023, influencing the district total.

West Coast District (Provincial Treasury, 2024)

In the WCDM, the demand for these services has been increasing as economic pressures on households rise. In 2023, municipalities in the region have continued to offer free access to basic services such as water, electricity, and sanitation to qualifying indigent households. These

services are crucial for alleviating financial burdens and ensuring that all residents have access to essential amenities regardless of their economic situation.

Given the ongoing economic challenges, the number of households qualifying for free basic services is expected to grow. This rising demand underscores the need for municipalities to secure the resources necessary to sustain and expand these services, which are essential for improving the quality of life and supporting long-term socio-economic development in the region. Moreover, maintaining and expanding free basic services will be critical for addressing inequalities and ensuring that vulnerable households are not excluded from accessing vital infrastructure.

City of Cape Town (Provincial Treasury, 2024)

The data on indigent households unveils a fluctuating trend from 2018 to 2022. Notably, the number of indigent households in the CoCT has exhibited a decline, from 225 217 in 2018 to 201 707 in 2022. This may suggest varying economic circumstances or interventions aimed at ameliorating indigent conditions. The prevalence of informal dwellings and the nuanced trends in indigent households underscore the need for targeted socio-economic policies and interventions to enhance living conditions and address disparities within the community.

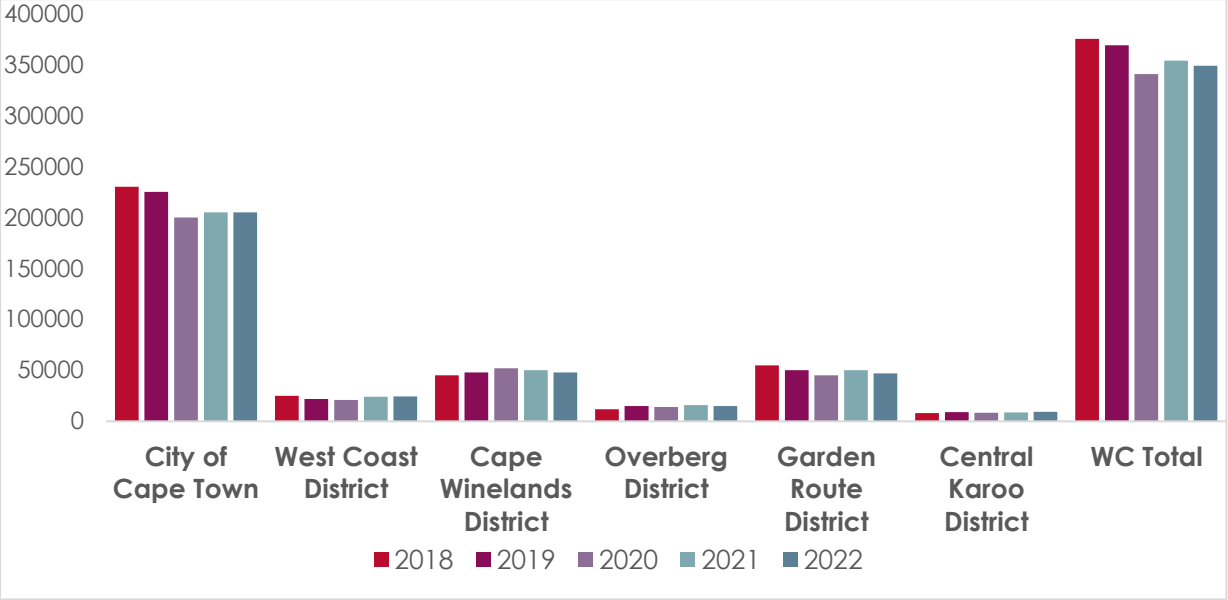


Figure 21: No. of households registered on the indigent database 2018-2022 (estimated)

4.3.5 Waste Data and Reporting

The National Waste Information Regulations (R625 of 2012) (WIR) requires all waste generators and handlers triggering certain thresholds to register and report waste figures to either the national DFFE, through the South African Waste Information System (SAWIS) or the Integrated Pollutant and Waste Information (IPWIS). The WIR divides waste into two main categories, namely, hazardous and general waste and further outlines more categories that waste generators can report on.

4.3.5.1 Waste Data

An overview of the waste generation and disposal data, which includes general and hazardous waste information submitted on the IPWIS over the 2018-2024 period provided is in Table 7.

Table 7: Overall waste data for the Western Cape 2018-2024 (tonnes)

GW+HW	2 018	2 019	2 020	2 021	2 022	2 023	2 024
Total Waste Disposal	2 463 537	2 500 176	2 288 951	2 365 591	2 404 767	2 341 136	2 450 646
Total Waste Diversion	891 227	740 740	635 338	855 970	950 932	1 098 196	1 110 586
Total Waste Generation	3 354 764	3 240 916	2 924 289	3 221 560	3 355 699	3 439 332	3 561 232
Diversion Rate	27%	23%	22%	27%	28%	32%	31%

The IPWIS is aligned and submits reported information to the SAWIS, administered by the DFFE. All public and private entities who are regarded as waste holders by the WIR are required to report on general and/or hazardous waste as the minimum requirement. Municipalities and industry in the province are required to report waste disposal and diversion data on the IPWIS on a monthly basis. WMFs who do not have weighbridges to ensure accurate reporting, must use the Department's Waste Calculator tool and the Gate Control Sheet (estimated tonnage) to record their data. To promote recycling and reuse, municipalities must track not just disposal, but also diversion - how much waste is being diverted from landfills to do recycling, recovery, or composting, and monitor if waste diversion targets are being met by the municipality

The reported data is then uploaded to the national SAWIS. The Department publishes a State of Waste Management Report (SoWMR) on an annual basis, which analyses and incorporates the waste data captured on the IPWIS. Waste data from the 2024 SoWMR (including the latest updated data extract[3]) forms the basis of this waste information presented in section 4.3.

Data limitations as indicated in the annual SoWMR are provided as follows:

[3] Date of last date extract: 14 January 2026

- Municipal general waste data should be considered with a degree of caution due to inconsistencies in definitions, data collection methodologies, data corrections made by municipalities on the IPWIS and completeness of data;
- Tonnages for general waste disposed and as reported by municipalities on the IPWIS, is mostly based on estimation of the total quantity of municipal solid waste disposed in the municipal area;
- The tonnages of general and hazardous waste reported as waste generated is based on quantities of waste recycled, recovered, treated and/or disposed of;
- The tonnages of waste diverted is calculated and as reported by municipalities on the IPWIS, using the reported waste diversion (recycled, recovered and treated) total divided by the sum of waste generated;
- Data collection at municipalities is initially captured by gate controllers at the Waste Disposal Facilities (WDFs). The data is then recaptured by data capturers, for which the accuracy could not always be verified, and this data was used;
- Given the variations in the data accuracy of the different waste types, it is not possible to assign an overall level of accuracy to the calculated tonnages of general and hazardous waste disposed of;
- While many municipalities have calculated and reported on waste diversion in their respective municipalities, these waste diversion calculations and methods differ from municipality to municipality. The data might indicate an over or underestimation of diversion taking place at municipalities.
- The data extracts provided is the latest data verified by the Department at the time this report was approved and is **subject to change due to revision and outstanding reports that are submitted to the IPWIS.**

4.3.5.2 Integrated Pollutant and Waste Information System Reporting Rates

The Department utilises various platforms to engage and liaise with municipalities to ensure compliance to the WIS regulations and to provide an accurate account based on waste disposal and diversion. Inconsistent and irregular waste reporting to the IPWIS still remains a problem and is being dealt with to negate the gaps in reporting and gain momentum in monthly reporting to the IPWIS. The Department validates the waste information being reported to the IPWIS and this is done by conducting IPWIS waste data verifications annually at various identified facilities. Waste data verifications are also carried out at facilities with erroneous data thereby making the data questionable. Once the verifications were completed, feedback was provided to the facilities with stipulated timeframes where data had to be corrected and resubmitted to the IPWIS. IPWIS reporting frequencies for private facilities are indicated in Table 8 and Municipalities are indicated in Table 9; a summary of each district is provided below:

- **Cape Winelands District:** The reporting frequency for WMFs within the CWDM is generally high, except for Breede Valley LM during 2023 and 2024, which had a reporting rate of 78% and 72%, respectively. Private facility reporting is inconsistent, with low rates reported for most years, except for 2021 and 2024, where the reporting rates were 92% and 85%, respectively,
- **Central Karoo District:** The reporting frequency of municipal WMFs within the Laingsburg Municipality is high, with a 100% rate achieved between 2018-2024. **Beaufort West Municipality's** compliance rate with the WIR has been inconsistent over the 2018-2024 period, with good reporting rates only occurring in 2018 and 2023. This is due to non-reporting by three facilities in the Beaufort West LM. Similarly, one facility in Prince Albert

LM has not been reporting, resulting in large gaps in data. Regarding private facilities, there are either no private WMFs operating in the area or registered on the IPWIS.

- **Overberg District:** The reporting frequency of municipal WMFs within the ODM is relatively high, with the exception for Swellendam Municipality, which had a low reporting rate of 79% in 2023 and 67% in 2024. Reporting frequencies of private facilities have declined in 2023 and 2024, with a rate of 0% and 58%, respectively.
- **Garden Route District: Knysna Municipality** had a high reporting rate in 2018, but since then have become non-compliant with the Waste Information Regulations, with 0% reporting in 2024. There has been an improvement in private facilities reporting within the district over time, with a reporting rate of 95% achieved in 2024.
- **West Coast District:** Swartland and Bergrivier Municipalities had high reporting rates during the 2018-2024 period. **Matzikama Municipality** has a very low reporting frequency for 2020 to 2024. This low reporting rate in Matzikama Municipality is because of facilities not being fully staffed and/or utilised for waste management purposes. Currently the Department is in discussions with the Municipality to improve their waste reporting and remove sites that are no longer actively accepting waste onto the working face. Private facilities generally have good reporting rates, ranging between 82%-100% over the same period.
- **City of Cape Town:** The reporting frequency for WMFs within the CoCT during 2018-2024 was relatively high, ranging between 93%-100%. Private facilities generally have good reporting rates, ranging between 86%-98% over the same period.

Table 8: IPWIS private facility reporting rate 2018-2024

DISTRICT	2018	2019	2020	2021	2022	2023	2024
West Coast	100%	97%	99%	99%	82%	98%	98%
CoCT	86%	91%	86%	95%	95%	94%	98%
Overberg	100%	100%	100%	100%	100%	58%	N/A
Garden Route	58%	98%	88%	83%	92%	92%	95%
Central Karoo	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cape Winelands	0%	0%	58%	92%	63%	60%	85%

Table 9: IPWIS municipal facility reporting rate 2018-2024

DISTRICT	MUNICIPALITY	2018	2019	2020	2021	2022	2023	2024
West Coast	Swartland	100%	87%	100%	100%	100%	100%	100%
	Bergrivier	92%	100%	100%	100%	100%	100%	100%
	Cederberg	79%	100%	98%	100%	95%	82%	100%
	Saldanha Bay	100%	72%	100%	100%	100%	100%	100%
	Matzikama	84%	84%	37%	28%	69%	46%	63%
CoCT	CoCT	99%	93%	100%	100%	100%	100%	100%
Overberg	Cape Agulhas	100%	100%	100%	100%	100%	100%	100%
	Overstrand	100%	89%	100%	100%	100%	100%	100%
	Swellendam	100%	100%	100%	100%	100%	79%	100%
	Theewaterskloof	94%	100%	100%	100%	100%	100%	100%
Garden Route	Oudtshoorn	0%	100%	100%	100%	100%	54%	100%
	Kannaland	100%	100%	100%	100%	100%	100%	96%
	George	92%	54%	100%	100%	100%	100%	100%
	Mossel Bay	100%	100%	100%	98%	100%	100%	100%
	Bitou	92%	79%	92%	67%	100%	100%	100%
	Knysna	97%	58%	42%	25%	0%	17%	0%
	Hessequa	90%	99%	95%	98%	100%	100%	100%
Central Karoo	Laingsburg	100%	100%	100%	100%	100%	100%	100%
	Prince Albert	100%	100%	58%	100%	92%	58%	100%
	Beaufort West	88%	54%	0%	33%	35%	100%	44%
Cape Winelands	Drakenstein	100%	100%	100%	100%	100%	100%	100%
	Langeberg	100%	100%	98%	100%	100%	100%	100%
	Breede Valley	100%	100%	97%	100%	97%	78%	72%
	Stellenbosch	100%	100%	89%	100%	100%	97%	100%
	Witzenberg	100%	100%	100%	88%	100%	93%	100%

4.3.6 Waste Generation

Waste generation data in this report is based on the waste classifications of general and hazardous waste that is disposed of and diverted. The waste generation figure is the addition of waste disposal and diversion data that was reported to the IPWIS over the 2018-2024 period. Waste is broadly categorised into two main categories i.e., general or hazardous, based on the risk it poses. General waste includes waste that does not pose an immediate hazard or threat to health or to the environment. Whereas hazardous waste contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological properties of that waste, have a detrimental impact on health or the environment. The total waste generated in the Western Cape between 2018-2024, fluctuated between 2.92 million tonnes during 2020 and 3.36 million tonnes in 2024 (Table 10). The sharp drop in waste generated during 2020 can be attributed to the slowdowns linked to the Covid-19 pandemic. The lockdown measures would have led to a slowdown in the production and manufacturing of goods for local consumption and export. Health and safety took precedence over environmental concerns, resulting in significant changes in municipal solid waste management. The impact of job losses and reduced income on consumer spending because of lockdown measures and restrictions would have likely further reduced consumption. If the year 2020 is excluded, then the average waste generated during the 2018-2024 period was 3 370 041 tonnes per year. Waste generation increased by 6.6 % between 2018 and 2024; this increase is driven by a 12% growth in general waste generation during that period. Over the same period, hazardous waste dropped sharply by 43.7%.

Hazardous waste is increasingly being processed to render it non-hazardous or to recover valuable materials. The fluctuations in the generation of hazardous waste over the years can be attributed to policy-driven diversion and improved management at the various facilities to reduce waste. The trend reflects a shift in how the hazardous waste is managed, not necessarily a reduction in the initial generation of hazardous substances. There is a strong national and provincial push to treat, recycle, and recover hazardous waste, diverting it from landfill disposal. The Extended Producer Regulations (EPR) and its associated EPR schemes for waste oil, lighting, and Electrical and Electronic Equipment (EEE) are key in diverting hazardous components (e.g., mercury, PCBs, heavy metals, etc.).

Table 10: Waste generation data for the Western Cape 2018-2024 (tonnes)

	2018	2019	2020	2021	2022	2023	2024
Total General Waste Generated	3 009 412	2 901 145	2 679 467	3 044 647	3 146 293	3 263 161	3 381 695
Total Hazardous Waste Generated	345 352	339 771	244 821	176 913	209 406	207 861	194 591
Total Waste Generated	**3 354 764**	**3 240 916**	**2 924 289**	**3 221 560**	**3 355 699**	**3 471 021**	**3 576 287**

As per Figure 22, general waste constituted between 90-95% of the waste generated in the province during 2018-2024 and hazardous waste made up the remainder. It is also evident that the amount of hazardous waste has decreased since 2018, when it accounted for 10% of the total waste generated to 5% generated in 2024.

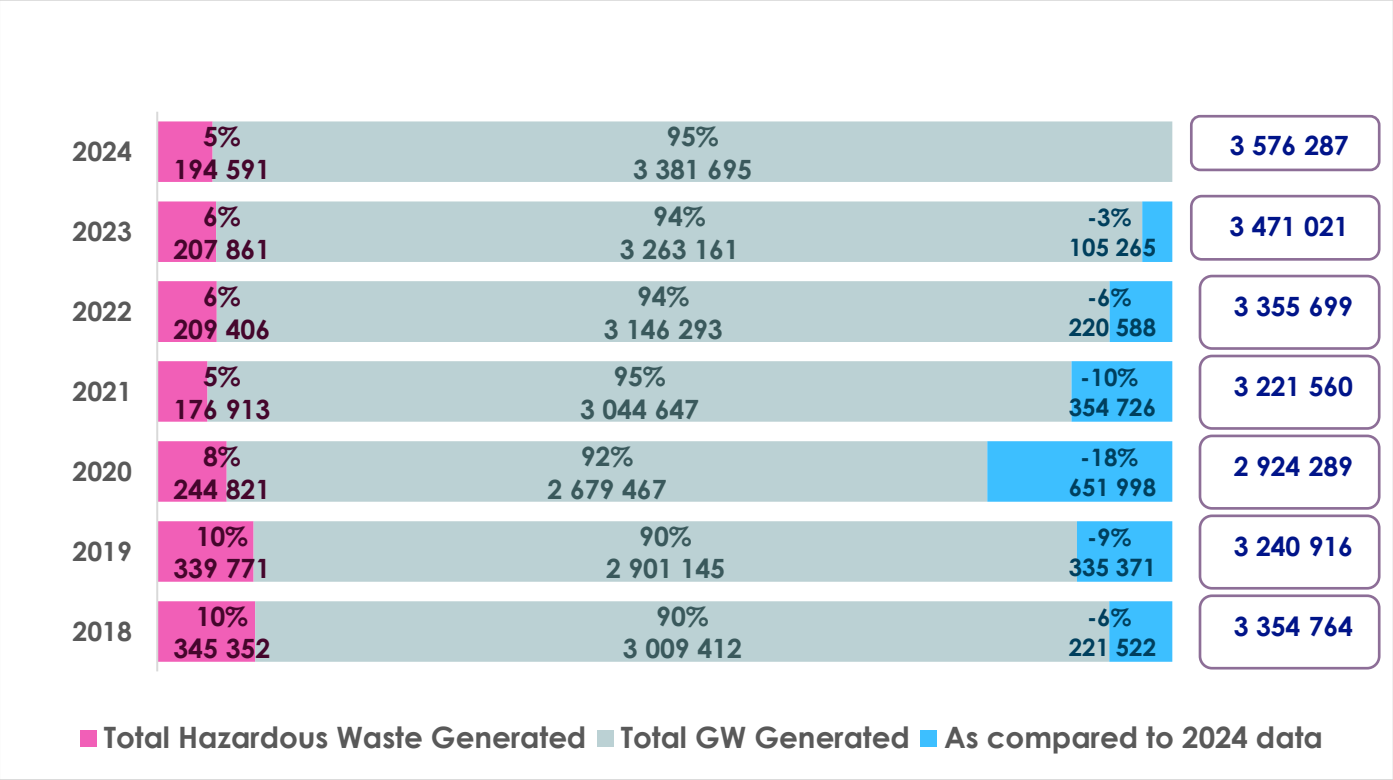


Figure 22: Total waste generated in the Western Cape during 2018-2024

4.3.6.1 General Waste

Figure 23 displays the trend in general waste generation for the 2018-2024 period for all the districts and the province overall. General waste generation in the province has increased from 3 009 412 tonnes in 2018 to 3 381 695 tonnes in 2024, which is an overall growth rate of 12% over the time period. The declared State of Disaster lockdown Risk Adjusted level 5 that was implemented at the end of March 2020 correlated with a reduction in waste generated in most of the districts in April and May 2020. After May 2020, the amount of waste generated gradually increased once the lockdown regulations were relaxed and the risk levels were adjusted downwards, with a steady increase in waste generation observed from 2021. General waste generated is largely driven by the CoCT, which contributed 2 212 186 tonnes in 2024, contributing approximately 65% of the general waste generated in the province. The lowest contributor in that same year being the CKDM, which contributed 12 688 tonnes.

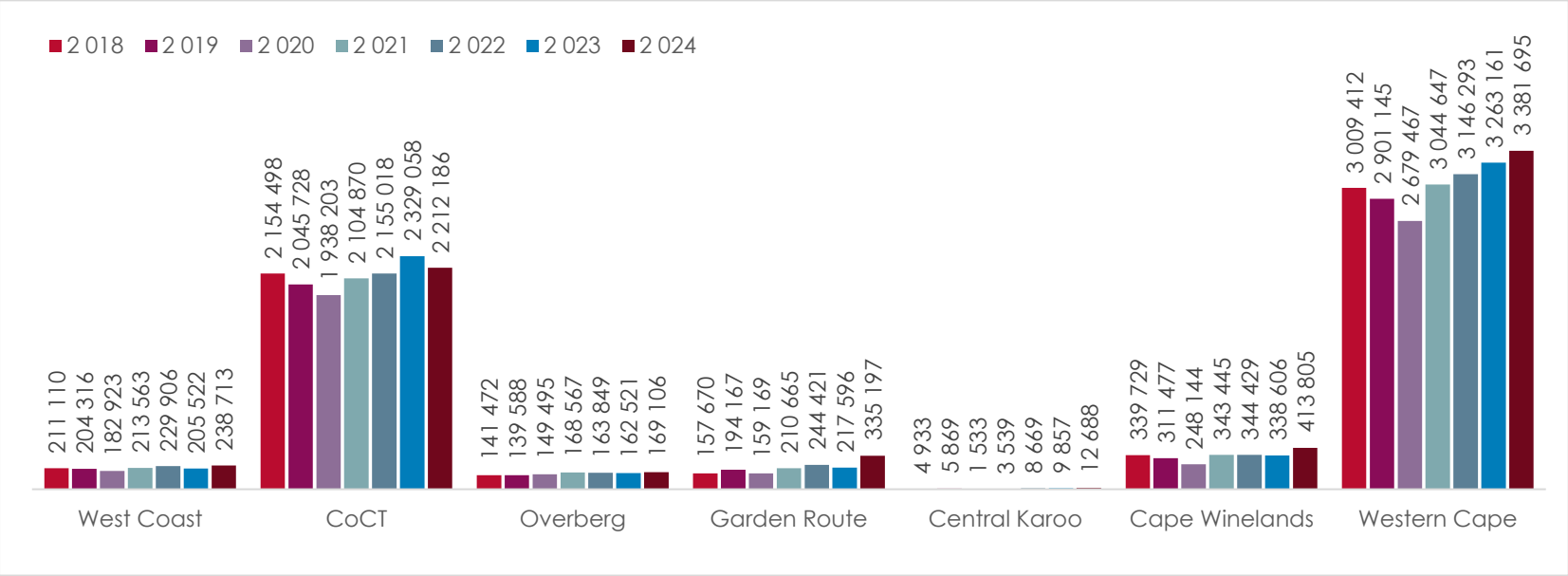


Figure 23: General waste generation per district 2018-2024

4.3.6.2 Hazardous Waste

Hazardous waste generation has declined sharply in the Western Cape over the 2018-2024 period. Previously, hazardous waste generation in the province was mainly due to three (3) main waste types namely, sewage sludge, and inorganic/organic industrial waste streams. In 2024, this has changed where most of the waste is categorised as sewage sludge, miscellaneous and tarry & bituminous waste (Table 11). The decrease in solid inorganic waste is largely attributed to Atlantis Foundries (PTY) Ltd, Faure Water Treatment Plant and Tronox Mineral Sands. The waste being reported by Vissershok (Enviroserv) WDF has sharply fallen in 2022. The waste streams classed as "Other organic waste without halogens" has decreased over the years from 2021, while sewage sludge appears to increase from 2022. When analysing the IPWIS data, it is observed that at times sewage waste can be reported as "Other organic waste without halogens or sulphur" instead of "Sewage waste" because it has gone through some form of treatment. Miscellaneous waste has increased between 2018 and in 2024 where the main contributor to this waste stream rise from SA Metal Group (Pty) Ltd, Atlantis Foundries (Pty) Ltd and Saldanha steel (PTY) Ltd. The ***Combined** category are waste streams that amount to less than 200T per annum and come from industries that generate the following waste types:

1. Gaseous waste
2. Mercury containing waste
3. Batteries
4. Persistent Organic Pollutants waste
5. Organic halogenated and /or sulphur containing solvents
6. Fly ash and dust from miscellaneous filter sources
7. Slag

The CoCT is the dominant generator of sewage sludge in the Western Cape, and quantities generally diminish in less populated, more peripheral municipalities. However, [4] secondary urban/industrial clusters (notably in the Cape Winelands) and local wastewater treatment technologies. The CoCT contains approximately 65% of the Western Cape's population and is the seat of the majority of its industrial, commercial, and tourism activity. Wastewater generation is directly proportional to these factors. Provincial policy pushes for sludge to be treated as a resource (biosolids) where quality permits. The CoCT's scale makes it a potential candidate for large-scale composting or energy recovery (e.g., biogas from anaerobic digestion) projects, but contamination risks from industrial effluent remain a key constraint.

[4] These clusters are "secondary" because they are not part of the dominant CoCT, but they are large and influential enough to have a substantial impact on the provincial economy, infrastructure demands, and waste generation profiles (e.g., Stellenbosch, Paarl/Wellington, Worcester, Somerset West/Strand, Tulbagh, Franschhoek, etc.).

Table 11: Hazardous waste generation quantities and types (tonnes)

Hazardous waste types	2018	2019	2020	2021	2022	2023	2024
Sewage sludge	47 541	48 788	45 806	60 778	83 829	81 259	85 166
Miscellaneous	19 886	13 831	14 888	11 885	9 536	44 904	44 166
Tarry and bituminous waste	919	1 412	1 473	2 352	2 555	3 140	23 280
Asbestos containing waste	8 163	9 161	11 432	8 399	14 536	12 231	10 452
Waste oils	22 338	31 500	25 767	19 705	18 908	16 834	7 971
Inorganic waste	117 267	111 751	25 541	16 724	20 417	10 175	7 212
Healthcare risk waste	3 775	4 696	6 139	7 226	20 186	14 873	7 087
Other organic waste without halogens or sulphur	119 981	117 609	111 756	47 283	28 332	17 979	5 213
Brine	-	36	-	280	9 577	5 183	1 608
Organic solvents without halogens and sulphur	91	472	795	1 195	710	565	689
Mineral waste	5 097	171	376	441	235	223	611
Organic halogenated and /or sulphur containing waste	22	21	5	-	1	109	442
Waste of electric and electronic equipment (WEEE)	0	30	101	34	161	276	258
Bottom ash	78	99	212	73	-	-	222
* Combined	196	195	529	539	422	110	214
Total	**345 056**	**339 427**	**243 974**	**176 268**	**208 822**	**207 366**	**193 455**

4.3.7 Waste Collection

Once waste is generated, it needs to be collected and transported for the purpose of waste recovery, recycling or disposal. Municipalities are responsible for ensuring a refuse removal service is provided to the communities they serve as specified in Schedule 5b: South Africa Constitution Act No. 108 of 1996. The National Domestic Waste Collection Standards, 2013 *provide* standards for waste collection with the aim to redress past imbalances. The Standards state that equitable collection services must be provided to all households within the jurisdiction of the municipality. Refuse removal levels were obtained from the SEPs for each municipality and are indicated as per district average (Figure 24) and per municipality (Figure 25). The Provincial Strategic Plan 2020-2025 set a target refuse removal level for the province at 95%. The National Waste Management, 2020 set a target of 95% for urban and 75% for rural areas. The highest refuse removal achieved by the province over the 2018-2024 period, was during 2020 and 2021. This is largely however due to the higher refuse removal figures of the CoCT during that period. It must be noted that all the other districts experienced a decline in refuse removal levels during that time, most likely due to the Covid-19 pandemic. Districts have generally recovered to pre-pandemic levels, with a notable exception of the CKDM, which experienced refuse removal levels of 81%, down from 91% in 2018 and 2019.

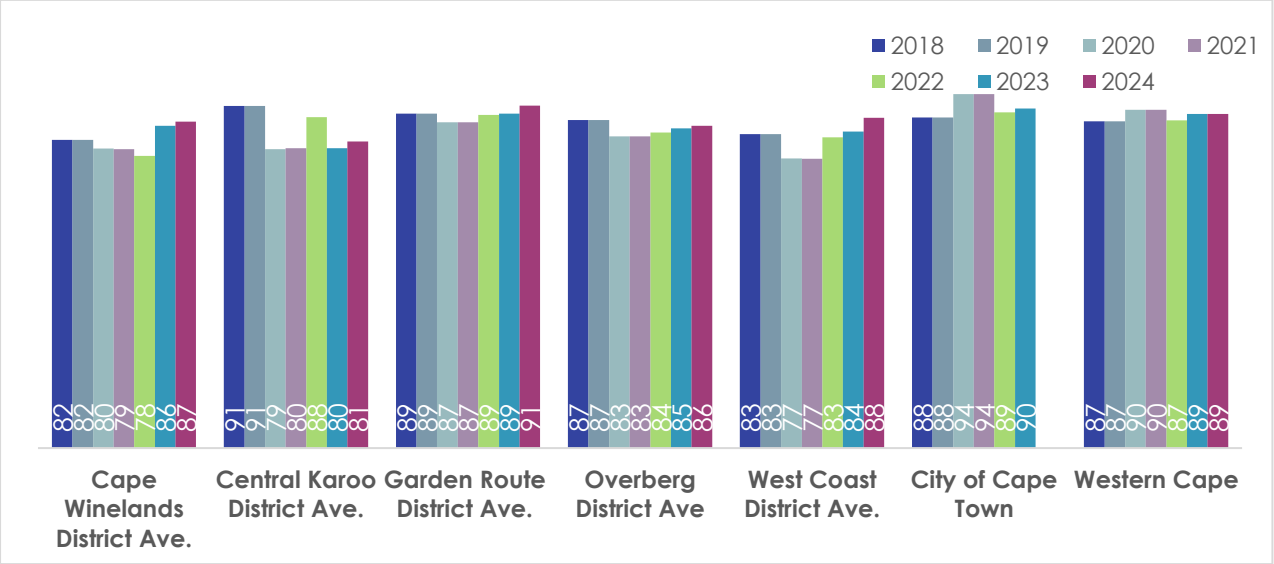


Figure 24: Average refuse removal levels (at least once a week) per district 2018-2024 (%)

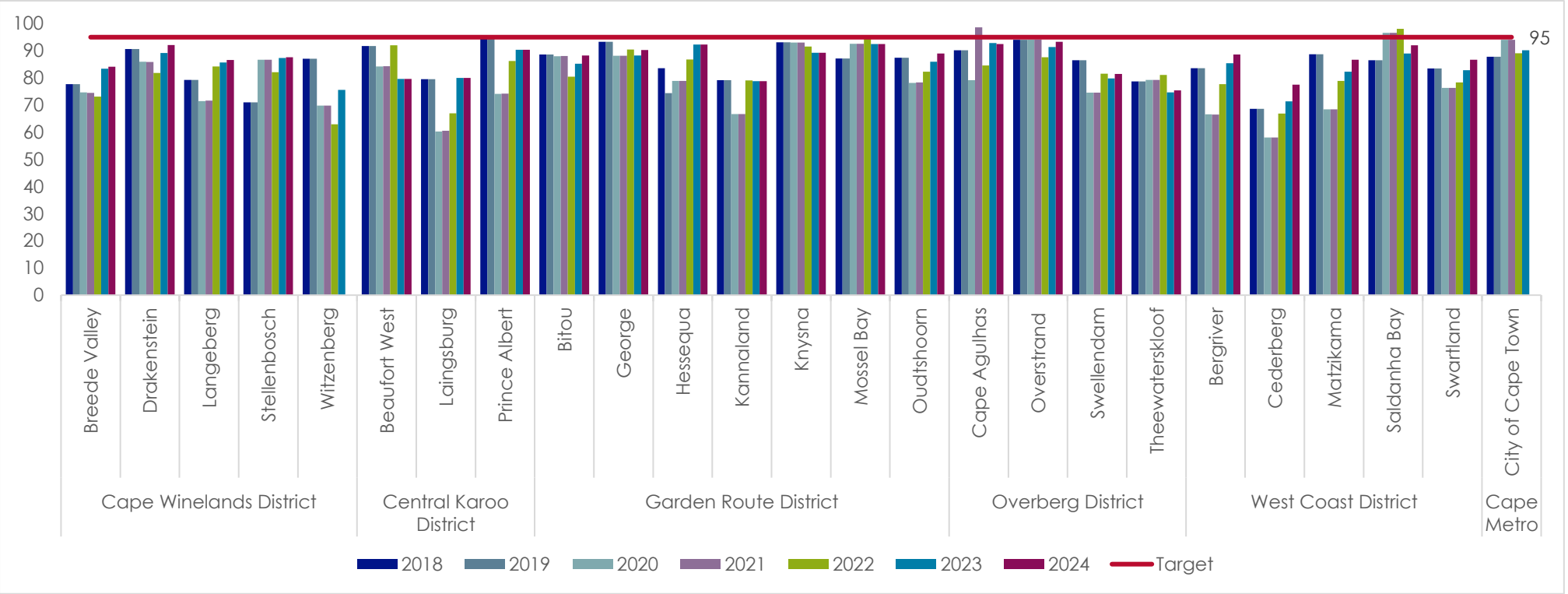


Figure 25: Refuse removal levels (at least once a week) per municipality (%) (2018-2024)

Municipalities face several challenges when delivering refuse removal services. Several reasons could be attributed to the target not being achieved in the province:

- **Rapid urban growth**: The CoCT and surrounding municipalities face increased waste generation without proportional infrastructure upgrades.
- **Informal settlement expansion**: High-density informal areas often lack permanent service points or bins, complicating collection. Narrow roads, which limit the accessibility of refuse collection vehicles to collect waste from individual households.
- **Geographical spread:** Remote rural towns in districts like CKDM face logistical challenges and high fuel costs.
- **Seasonal population surges:** Tourism and agricultural seasons increase waste volumes temporarily, exceeding capacity.
- **High cost of infrastructure:** Landfill development, transfer stations, and fleet maintenance are expensive and often delayed due to funding shortfalls.

4.3.7.1 Waste Collection Services to Informal Settlements and Rural Households

Informal settlements and rural households often pose challenges to municipalities in terms of refuse collection. In informal settlements, effective refuse collection is more challenging due to the physical characteristics of these areas e.g. high density and narrow roads, which limit the accessibility of refuse collection vehicles to collect waste from individual households. Where municipal refuse collection is undertaken, various options are utilised including on foot door-to-door collection, smaller collection points (e.g. mini drop-offs) and communal collection points (e.g. skips and shipping containers).

- **Informal Settlements**

In 2024, the Western Cape was home to 1 229 informal settlements, according to data from the Department of Infrastructure. Of these, 828 were located within the Cape Metro, while 423 were spread across other districts. It is important to note that these figures may have increased since then. These settlements collectively comprised of 477 952 structures (2024) in comparison to 382 039 in 2022, including several backyard dwellings. Given the scale and complexity of these communities, it became essential to assess how municipalities were providing basic services, particularly waste management.

Figure 26 shows the waste services delivered by municipalities to informal settlements across the Western Cape. This data is based on a survey that received 21 responses from 25 municipalities. Survey results indicate that refuse bags are the primary method of waste service provision for informal settlements and backyard dwellers, cited by 48% of municipalities. This points to their status as the most accessible and practical solution in these communities. Supplementary methods include skips, which 14% of respondents provide alongside bags, and a combination of refuse bags, skips, and wheelie bins, reported by 9%. The presence of wheelie bins may reflect varying stages of settlement upgrading, though this was not explicitly confirmed. Waste collection in these areas is typically weekly, though two municipalities reported more frequent services, including daily pickups. Collections generally occur from communal drop-off points like skips, with some highly densified areas implementing door-to-door programmes for more effective service. Despite these efforts, illegal dumping persists, underscoring that the current level and frequency of service provision remain insufficient. The

findings highlight a pressing need for more consistent, comprehensive waste infrastructure and service delivery across informal settlements in the Western Cape.

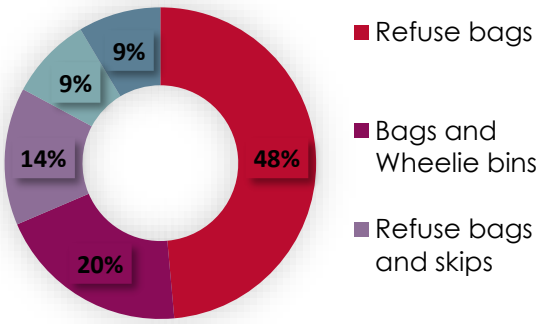


Figure 26: Waste services in informal settlements

Rural Households

The remote locations of rural areas make it more costly for municipalities to provide a refuse collection service to these areas. Many rural households do not receive a weekly refuse collection service; however, some municipalities do provide this service. In many instances, residents are required to drop-off their waste at a landfill or waste drop-off facility (Table 12).

Table 12: Waste collection services provided to rural households

DISTRICT MUNICIPALITY	LOCAL MUNICIPALITY / METRO	WASTE COLLECTION SERVICES
Cape Winelands District	Breede Valley	• Not indicated
	Drakenstein	• Mini drop-off facilities have been built in rural areas (Drakenstein Municipality, 2019). • All rural households receive refuse collection services.
	Langeberg	• Households in rural areas do not have access to refuse collection services. Farmers may bring waste to the closest drop-off or transfer station.
	Stellenbosch	• Some refuse removal services exist in rural areas and farming communities. Communities also have access to drop-off facilities (Stellenbosch Municipality, 2024).
	Witzenberg	• The Municipality does not provide waste collection services to farms (Witzenberg Municipality, 2021). A landfill or drop-off is available.
Central Karoo District	Beaufort West	• All 2527 rural households in the areas of Murraysburg, Nelspoort and Merweville receive a refuse collection service. There are also drop-offs in Murraysburg.
	Laingsburg	• All 150 households receive waste collection services in the areas of Matjiesfontein and Vleiland. Drop-offs are also available.
	Prince Albert	• The rural municipality provides waste collection to most households. Households have the option to drop off their waste at the waste disposal facility.
Garden Route District	Bitou	• Households in rural areas such as Bitou Non-Urban (NU), Bosluiskop and Bossiesgerf typically do not receive a weekly collection service. (Bitou Municipality, 2020) There are waste collection points on the main routes close to rural villages. A waste drop-off facility, transfer station and Skip bins are available where collection is not available.

	George	● The lag in the development of formal housing underscores the challenges faced by the Municipality in keeping pace with the growing demand for services, as well as the difficulties associated with extending services to rural farmlands and informal settlements (George Municipality, 2023).
	Hessequa	● Households that are in rural areas do pose a major challenge in terms of service delivery as they are not connected to any form of municipal basic service (Hessequa Municipality, 2023). The Municipality places 32 refuse containers in the different rural areas - eight different routes are serviced with weekly refuse removal. Waste Disposal Facilities are also available to drop off waste.
	Kannaland	● Households in rural areas such as Kannaland NU typically do not receive a weekly collection service (Kannaland Municipality, 2020).
	Knysna	● Residents living on farms and in outlying areas can place their refuse along the roads for collection by municipal trucks (Knysna Municipality, 2020). ● Brackenhill (appointed service provider for the collection of refuse); Diepwalle - Municipality collects once every second week; Karatara- receives a collection service once a week including surrounding areas which bring their refuse to the nearest main road for collection.
	Mossel Bay	● Households in rural areas such as Mossel Bay NU and Jonkerberg State Forest typically do not receive a weekly collection service. A contractor has been appointed to collect waste from rural areas (Mossel Bay Municipality, 2020).
	Oudtshoorn	● Households in rural areas such as De Hoop, Oudtshoorn NU and Armoed typically do not receive a weekly collection service (Oudtshoorn Municipality, 2020).
Overberg District	Cape Agulhas	● Seventy households in the rural areas of Protem and Klipdale receive refuse collection services. The Municipality does not render refuse removal services to the rural farm areas (Cape Agulhas Municipality, 2023).
	Overstrand	● Drop-off facilities are provided (Overstrand Municipality, 2023). ● Households in the rural towns of Baardskeerdersbos and Buffeljachtbaai receive a refuse collection service. The farms in the rural areas do not receive a waste collection service except for farms in the lower Hemel-en-Aarde Valley which have the option to sign up for a collection service. All farms are

		however allowed to dispose of their general waste at either the Landfill, waste drop -offs or transfer stations. If it is under 1 tonne it is free loads over 1 tonne are charged for.
	Swellendam	● Rural areas include Swellendam, Suurbraak, Barrydale and Infanta. Central waste drop-offs and door-to-door collection are available. Basic services are provided to some villages, but not to farms (Swellendam Municipality, 2023).
	Theewaterskloof	● Not indicated.
West Coast District	Bergrivier	● Collection services are not rendered to farms and rural households due to transport distances (Bergrivier Municipality, 2019). The total number of households in the Municipality is about 19 600. Of the total, about 10 400 households form part of the larger towns and rural towns of Redelinghuys, Aurora, Eendekuil and Dwarskersbos. All these households receive waste collection services from the Municipality. The various farms on the outskirts of the towns and Moravian Church settlements receive private waste collection services. Only Aurora and Eendekuil have drop-offs.
	Cederberg	● The rural areas of Khayelitsha, Riverview and Kompong receive waste collection services; the number of households receiving refuse collection services in each area is 4500, 4725 and 201, respectively. Skips and a Waste Disposal Facility are available for residents to drop off their waste.
	Matzikama	● The Municipality does not deliver door-to-door waste collection services to farms due to the large transport distances and remote residence locations. ● Households in the rural areas of Molsvlei, Kliprand and Stofkraal receive waste collection services.
	Saldanha Bay	● Waste from farms is not collected by the municipality and farmers take their waste to the landfill and transfer station (Saldanha Bay Municipality, 2022). ● Green Village and Koperfontein receive weekly door-to- door waste collection services. Vergelee residents make use of Vredenburg Landfill site, and the Small Holdings in the Hopefield area make use of the Hopefield waste drop-off facility.
	Swartland	● Households outside of urban areas have access to landfill sites, transfer stations and skips. ● All rural households can dispose of waste in the nearest communal skip or transfer station.

(Source: DEA&DP, 2025)

4.3.8 Waste Minimisation, Recycling, Re-use and Recovery

The South African approach to waste management is centered on the waste management hierarchy and the Extended Producer Responsibility (EPR) focusing on waste avoidance/ prevention, reuse, recycling, recovery and treatment before disposal (NWMS, 2020). The NEM:WA requires waste holders and generators to take reasonable steps to avoid waste generation and where unavoidable, to reduce it through reuse, recycling or recovery and eventually safe disposal at licensed landfills as a last resort. The NEM:WA provides definitions for minimisation, recycling, reuse and recovery as follows -

- **Minimisation** – is the **avoidance (prevention)** of the amount and toxicity of waste generated and/ or the **reduction** of the amount and toxicity of waste that is disposed of at landfill;
- **Recycling** – is the reclamation of waste for further use and involves the separation of waste from a waste stream for further use and the processing of that separated material as a product or raw material;
- **Re-use** – is the utilisation of articles from a waste stream again for a similar or different purpose without changing the form or properties of the articles;
- **Recovery** – is the controlled extraction of a material or the retrieval of energy from waste to produce a product.

In the National context, the government has implemented EPR schemes to hold producers accountable for end-of-use consumption and disposal, while the Province has focused on promoting the biological and technical cycles of the circular economy by focusing on organic waste diversion and the refurbishment

4.3.8.1 Overall Waste Diversion

The NWMS has set diversion targets of 40% within 5 years (i.e. to be reached by 2025), 55% within 10 years (i.e. 2030); and 70% within 15 years (i.e. 2035). The Department encourages, facilitates, and supports local government efforts to minimise waste generation and diversion of waste from landfills. During 2018-2023, there was a steady increase in overall waste diversion (i.e. hazardous and general waste) in the Western Cape. The highest diversion rate was achieved in 2023 at 32%, with a 1% decline to 31% in 2024, see Figure 27.

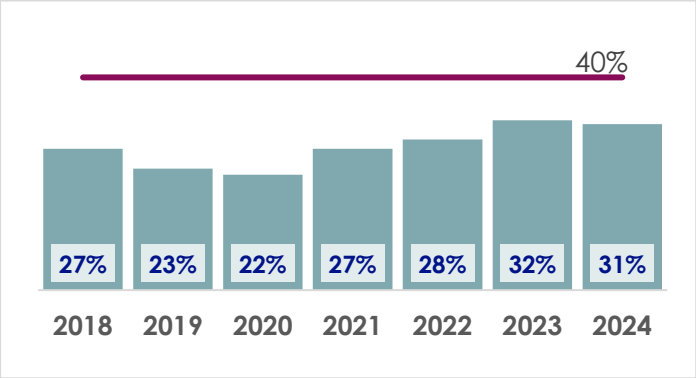


Figure 27: Diversion rate during 2018-2023 compared to 40% target

4.3.8.2 General Waste Diversion

Table 13 presents the general waste diversion tonnages and associated diversion rates for each district. From 2018 to 2024, there has been a steady long-term improvement in overall waste diversion performance. In 2024, the WCDM and ODM recorded the highest diversion rates, each achieving 39%. The CoCT, ODM, GRDM, and CWDM all show notable increases in diversion when comparing 2018 to 2024. In contrast, both the WCDM and CKDM reflect declines over the same period, with CKDM reporting a 0% diversion rate in 2024 due to the limited waste minimisation initiatives implemented within the district. In 2024, the CoCT diverted 67% of the province's total diverted general waste i.e., 743 912 tonnes, making it the main driver of provincial performance.

Table 13: General waste diversion and rate per district municipality 2018-2024

DISTRICT /YEAR	DIVERSION (T)							DIVERSION RATE (%)						
	2 018	2 019	2 020	2 021	2 022	2 023	2 024	2018	2019	2020	2021	2022	2023	2024
WCDM	89213	78354	65932	70577	77177	78911	92502	42%	38%	36%	33%	34%	38%	39%
CoCT	647506	466802	423162	541082	582426	777649	743912	30%	23%	22%	26%	27%	33%	34%
ODM	50458	48939	39147	64795	68989	62883	65453	36%	35%	26%	38%	42%	39%	39%
GRDM	10464	15448	20029	39920	38167	40331	63018	7%	8%	13%	19%	16%	19%	19%
CKDM	100	56	0	0	395	0	0	2%	1%	0%	0%	5%	0%	0%
CWDM	74702	96689	56362	111112	143272	111692	139944	22%	31%	23%	32%	42%	33%	34%
Western Cape	**872443**	**706289**	**604632**	**827487**	**910425**	**1071466**	**1104829**	**29%**	**24%**	**23%**	**27%**	**29%**	**33%**	**33%**

4.3.8.3 Organic Waste Diversion

Since 2018, the West Coast, Overberg and Cape Winelands Municipalities and private entities have made great strides in diverting organic waste by supporting and implementing organic waste initiatives in the province. Figure 28 organic waste diversion targets with the Departmental organic waste target of 50% by 2022 and the municipal organic diversion rates in relation to meeting the set target.

Achieving maximum utilisation of organic materials through diversion and beneficiation not only reduces contamination in other waste streams and cuts greenhouse gas emissions but also conserves valuable landfill airspace. To this end, several municipalities have implemented initiatives such as household garden waste collections, dedicated drop-off sites, and home composting bin programmes. The collected material is typically processed into wood chip/mulch or compost, which is then often provided to the public free of charge, supporting a circular economy. The strategic importance of this diversion is multifaceted. Environmentally, it mitigates potent methane emissions and leachate pollution while extending landfill lifespans. Regulatory compliance, driven by national mandates and the Western Cape's ambitious 100% diversion target by 2027, adds further imperative. Economically, it transforms waste into valuable resources like compost and biogas, stimulates green employment, and generates long-term cost savings.

However, achieving these targets presents significant, interconnected challenges for municipalities. Key barriers include high upfront infrastructure costs, severe budget constraints competing with other essential services, and inconsistent data reporting that undermines accountability. Service delivery gaps - particularly in informal settlements, hinder access to separation systems, while developing sustainable markets for end-products remains difficult. Additionally, institutional fragmentation across departments and the need for sustained public behavioural change pose ongoing hurdles. Consequently, progress remains vulnerable, as evidenced by recent declines in reported diversion rates, underscoring the systemic effort required to translate strategic goals into scalable, practical outcomes.

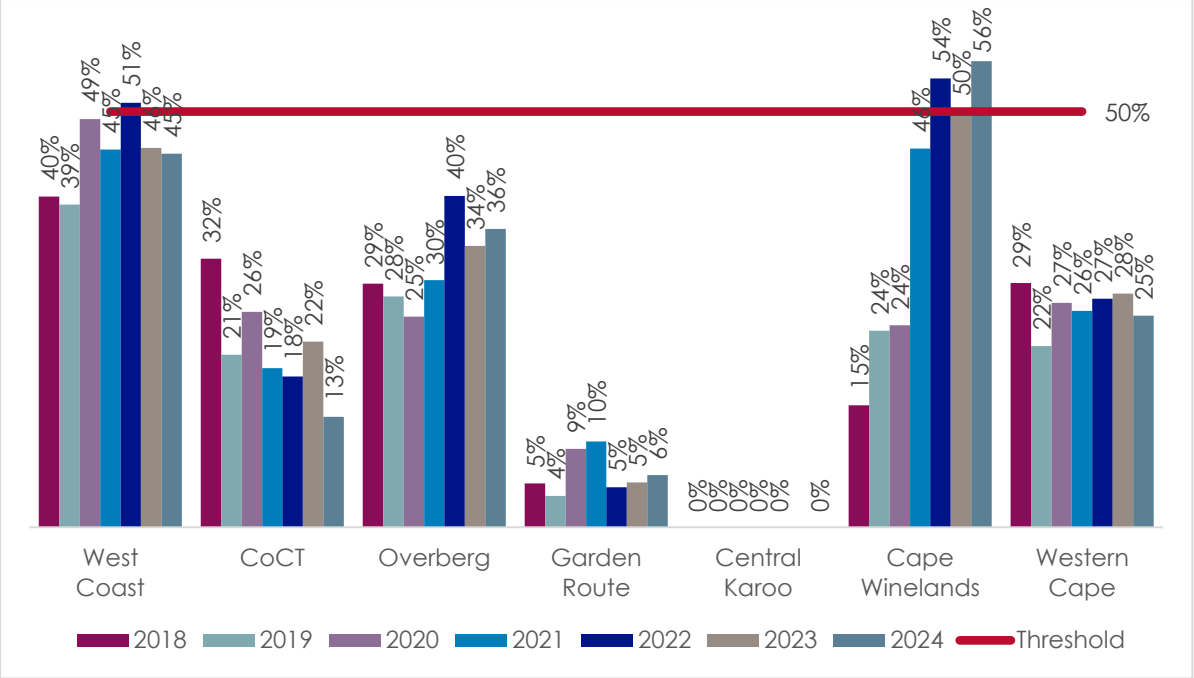


Figure 28: Organic waste diversion in the Western Cape 2018-2024 (with 35% assumption[5])

- **Organic Waste Diversion Plans**

Municipalities are required to develop Organic Waste Diversion Plans (OWDPs) to address organic waste diversion in their areas. Thus far there are 20 finalised plans, seven in draft, and three yet to be submitted to the Department. This total includes three district-level plans from the ODM, CWDM, and GRDM. Notably, most of these plans date from 2021, indicating they have been in place for several years. A departmental pre-assessment of the submitted OWDPs revealed that implementation has been limited, with only approximately one-third of municipalities having initiated their plans. Reported activities by various municipalities include the distribution of home composting bins, garden waste chipping and composting, engagement with large waste generators to submit their own OWDPs, feasibility studies, and awareness campaigns. Despite this, overall implementation remains slow and fragmented. To address this, the Department continues to support municipalities in achieving the diversion targets.

4.3.8.4 Circular Economy Initiatives

- Extended Producer Responsibility

EPR is an environmental policy approach where producers are given significant responsibility for the treatment or disposal of post-consumer products. The goal is to shift the burden of waste management from municipalities to producers, encouraging eco-design and circular economy practices. EPR schemes currently exist for the Paper & Packaging, Electrical & Electronic Equipment (EEE), Lighting, Lubricant Oils, Pesticides and Portable Batteries

[5] The total disposed value per year is the sum of disposed organic waste and 35% of the municipal waste fraction comprises organic waste, based on previous waste characterisation studies.

industries. There are several PROs and producers registered on the DFFE EPR system across South Africa.

There are 1 889 registered PROs and Producers spread across South Africa, with Gauteng being most concentrated with 896 EPR producers and PROs, while the Western Cape stands at 530, which is the second highest in the country. The Paper and Packaging sector is at 73% and Electrical and Electronic Equipment sectors at 14% are well represented across South Africa. EPR representation in the Western Cape has shown consistent growth, rising from 392 in 2022 to 530 by 2024 (Figure 29). New registrations in 2024 were predominantly from producers, who accounted for 98% of new registrants (equating to 82 producers). The Paper and Packaging sector constitutes the majority (81%) of provincial EPR registrations, followed by the Electrical and Electronic Equipment sector at 8%.

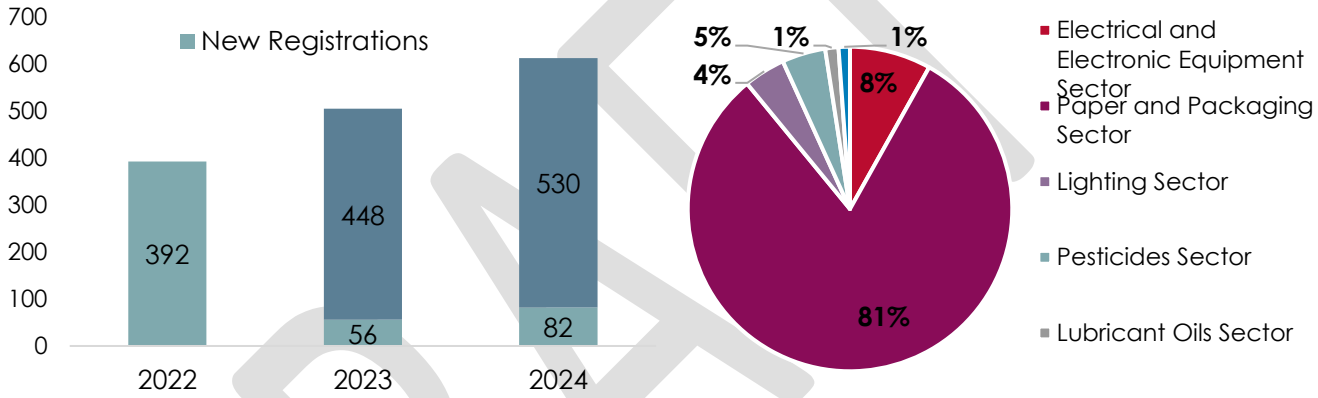


Figure 29: Western Cape EPR growth 2022-2024

Recent DFFE roadshows have highlighted several persistent challenges in EPR implementation. These include ongoing difficulties with the registration process, a lack of transparency in financial reporting, unclear management of surplus funds, problematic payment systems for waste pickers, insufficient progress on environmental labelling, and a notable deficit in infrastructure investment at the municipal level Furthermore, there are still unknown numbers of producers who have not yet registered as producers or with an EPR scheme, thus making them free riders[6]. DFFE have liaised with the Department of Trade & Industry to ascertain the number of producers for each sector, but this detail is still pending. In the interim, measures are in place to ensure that known free riders are issued with compliance notices to ensure participation in the recovery of their produced materials and increase waste diversion.

Repair and Refurbishment Sector

The Repair and Refurbishment (R&R) sector has the potential to slow down the generation of waste and positively impact consumption patterns. In 2023, the Department developed a Situational Analysis and a "Strategy and Action Plan of the Repair and Refurbish Sector for Household Electrical and Electronic Equipment in the Western Cape". Both documents

[6] EPR free riders refer to companies that benefit from the environmental and economic advantages of EPR policies without contributing to the costs and efforts of implementing these policies.

assisted the Department in obtaining the status quo, looking at functionality and opportunities within the sector benefitting economic growth, job creation and skills development. The key findings of the study are that:

- Many formal repairers and refurbishers are centralised within the CoCT, presenting a need for more formal and informal repairers, refurbishers and recyclers throughout the other districts and local municipalities
- E-waste management by municipalities was limited to open days for the collection of household waste EEE (WEEE) and have partnered with the private sector for the collection and recycling of EEE. The intent is to ensure growth and development of the household EEE repair and refurbishment sector, considering challenges that current members of the value chain experience.
- The informal repair sector is undermined by a preference for new goods and is male dominated. In response, the Department launched a Repair and Refurbishment Skills Training Programme to build on the skills development pillar of the subsequent Strategy and Action Plan This initiative targets youth from impoverished, high-crime areas, particularly women, to provide skills, mentoring, and equipment for entering the sector, thereby stimulating job creation.

4.3.8.5 Municipal Waste Minimisation Initiatives

The NWMS sets ambitious waste diversion targets of 55% by 2030 and 70% by 2035, establishing a clear national commitment to reducing landfill dependency. Waste minimisation is the fundamental strategy for achieving these targets, demanding a unified commitment to reducing waste generation and ensuring effective separation of recyclables and municipal initiatives are crucial. Key strategies implemented by Municipalities include education and awareness campaigns, separation-at-source programmes, and drop-off facilities, which ensure recycling access even where household collection is not feasible. Some municipalities partner with service providers to manage recycling operations, such as MRFs or collection services, for contracted periods. The Department strongly encourages all municipalities to prioritise awareness and separation-at-source initiatives to enhance both recyclability and material value. Effective awareness requires proactive, audience-specific approaches that foster participation. Saldanha Bay Municipality has successfully scaled its separation-at-source programme to include low-income areas. Despite such progress, accelerated action is needed to meet the existing targets.

Figure 30 shows that between 2020 and 2024, most Western Cape districts expanded waste minimisation initiatives, reflecting progress toward provincial waste reduction goals. However, there was a slight decline in the overall number of initiatives in 2024. Over the 2020 – 2024 period, CWDM showed the most consistent a growth, increasing steadily from 23 initiatives in 2020 to over 30 in 2024, the highest in the province by the end of the period. The CKDM remains the most underperforming District concerning waste minimisation initiatives (Figure 29). Between 2023 and 2024, 10 municipalities recorded an increase in initiatives, 11 reported a decrease, and four remained unchanged. (Table 14).

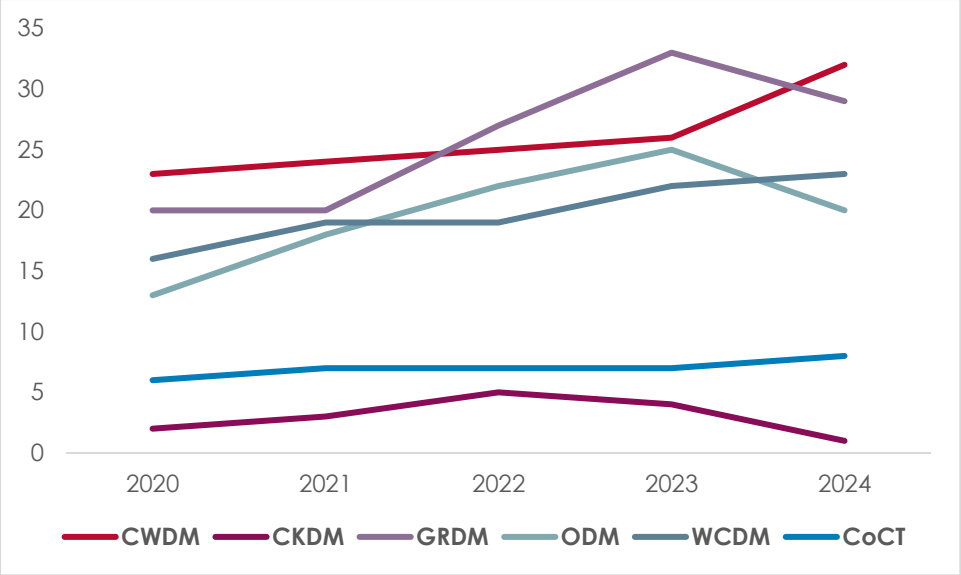


Figure 30: Number of waste minimisation initiatives per district 2020-2024

Table 14: The number of waste minimisation initiatives per municipality 2020-2024

MUNICIPALITY	2020	2021	2022	2023	2024	2023/24 PROGRESS
Breede Valley	3	5	5	5	6	↑
Drakenstein	7	6	6	4	8	↑
Langeberg	4	3	3	5	5	↔
Stellenbosch	6	5	5	6	8	↑
Witzenberg	3	5	6	6	5	↓
Beaufort West	1	2	1	3	0	↓
Prince Albert	0	0	2	0	0	↔
Laingsburg	1	1	2	1	1	↔
Hessequa	4	2	6	5	4	↓
Oudtshoorn	1	1	1	3	2	↓
Bitou	4	4	4	5	3	↓
George	2	2	4	3	6	↑
Kannaland	0	1	0	3	1	↓
Mossel Bay	5	6	6	7	8	↑
Knysna	4	4	6	7	5	↓
Cape Agulhas	4	5	5	6	3	↓
Overstrand	4	7	7	7	8	↑
Swellendam	2	3	5	7	4	↓
Theewaterskloof	3	3	5	5	5	↔
Bergrivier	4	4	5	5	6	↑
Cederberg	0	2	2	4	3	↓
Saldanha Bay	5	7	6	6	7	↑
Swartland	3	4	4	5	6	↑
Matzikama	4	2	2	2	1	↓
CoCT	6	7	7	7	8	↑
Western Cape	**80**	**91**	**105**	**117**	**113**	↓

- Producer Responsibility Organisation Support to Municipalities

The intervention of PROs, as mandated by EPR regulations, is vital. Currently, direct PRO support for recyclable collection is limited to only five municipalities and collaborative examples include:

- eWASA's ongoing awareness campaigns with Stellenbosch Municipality.
- George Municipality's MOUs with Polyco to establish Buy-Back Centres and with eWASA to provide PPE for waste pickers.
- PETCO's MOU with Mossel Bay Municipality, providing bins and recycler training.
- PETCO and MetPac-SA's support for marketing and home-composting projects in Saldanha Bay, alongside eWASA's provision of e-waste containers.
- MetPac-SA's donation of a generator to a Swellendam-based SMME to ensure operational continuity during power outages.

Greater collaboration with PROs is essential to overcome municipal financial constraints in diverting recyclables. Beyond municipal support, PROs provide direct assistance to SMMEs and waste pickers, significantly contributing to diversion. A key example is Polyco's trolley initiative, which distributed fifty waste collection trolleys to buy-back centres across four municipalities (George, Bitou, Bergrivier, and Matzikama) to bolster local waste minimisation efforts.

Adequate waste infrastructure is critical for waste minimisation targets to be realised and implemented. Waste minimisation systems such as separation at source (S@S) are especially vital to ensure that contamination of material is minimised thus increasing recycling rates. Municipalities have implemented systems to divert waste from landfill, including the split-bag system, supporting swop-shops and buy-back centres, organic waste and e-waste initiatives, drop-offs and Material Recovery Facilities (MRFs).

Financial and capacity constraints impede progress in improving and increasing waste minimisation initiatives within municipalities as they cannot source the necessary infrastructure or expand participation (DEA&DP, 2022). Municipalities like those in the CKDM that are in remote areas that are great distances from markets also limit the feasibility of implementing waste minimisation initiatives (DEA&DP, 2022). The EPR Schemes and Regulations have presented an opportunity for municipalities to access funding for infrastructure required to implement waste minimisation initiatives through PROs (DEADP, 2023).

4.3.8.6 Integration of Waste Pickers into the Waste Management System

Waste pickers play a pivotal role in ensuring that valuable materials are not being landfilled. Many operate in the streets, going through waste bins and removing waste from open areas and others are operating on landfills, where they remove the recyclables before it is compacted. In doing so, however, they face many dangers and threats and there is a need to integrate this sector to negate possible future litigation against the Municipality in relation to the conditions of the waste management authorisations. The need to integrate has been realised on a national level, and the NWMS requires municipalities to integrate them into their waste collection services. Furthermore, recent EPR regulations require producers/PROs to integrate waste pickers into post-consumer collection value chains and importantly, compensate them through a collection service fee. For these waste pickers to be remunerated, they must be registered on the National Registration Database. The Department is providing ongoing support to municipalities to support this requirement and linking with buy-back centres and PROs to ensure that support reaches the waste pickers. To date, integration

efforts have been slow and challenged as many municipalities are struggling to engage with this sector, as waste pickers prefer to work on their own, without formalisation or leadership. There is also the need to balance integration efforts with resident sensitisation, as many do not want waste pickers in their areas, mostly due to perceived (and sometimes real) safety concerns. However, some integration has been achieved, viz in Drakenstein LM and Cape Agulhas LM. The Department also continues to engage with Municipalities on this topic and supports integration efforts as much as possible, including promoting consultation with the Waste Picker Integration Guideline for South Africa.

Integration of the guideline has been achieved at certain municipalities, e.g. Drakenstein LM integrated approximately 20 waste pickers at their MRF recovery system initiated in 2022 and Cape Agulhas LM integrated 7 waste pickers in a composting and vegetable farm project. A service provider was appointed in 2023 via a formal contract to run both projects. The Cape Agulhas LM waste pickers have been trained on good quality soil composting, with the support of a company called Soil for Life. The project entails the complete separation of kitchen waste from approximately 100 households in the Zwelitsha informal area. The organic waste vegetable farm is being established on 7 hectares of land near the composting facility. Witzenberg LM employed Extended Public Works Programme (EPWP) workers to sort waste at the MRF, however these contracts are on a 6-month basis only. The Department has encouraged the use of the local waste pickers; however this has not yet been incorporated. Further support is offered through facilitating connections with PROs who are responsible for realising the actions and targets of the EPR schemes. The national registration system has not been finalised and many PROs have, as an alternative, created their own registration systems to ensure that waste pickers get remunerated for collecting identified products. During 2023, Polyco, a PRO working with plastic packaging, assisted in registering approximately 60 waste pickers at a local buy-back centre in Stellenbosch.

The Department has an ongoing project to monitor and support waste pickers operating in the province. The data gathered over time, from engagements with *inter alia* buy-back centres, facility audits, and during landfill visits, shows that waste pickers are present in all the municipal areas, except Swartland LM. It is currently estimated that there are more than 2000 waste pickers across the province. This is likely a gross underestimation, especially as the CoCT was not a focused region in this project, yet many do operate in this area. Of the total estimated waste pickers, 924 or 46% are female, see Table 15. The findings show through engagements with buy-back centres where waste pickers sell the material they collect; they range in age from 15-80 years old and include people with disabilities.

Table 15: Estimated number of waste pickers across the Western Cape[7]

DISTRICT	WASTE PICKERS	FEMALES	MALES
West Coast	289	124	165
Cape Winelands	558	189	369
Central Karoo	58	9	49
Garden Route	531	256	275
Overberg	290	162	128

[7] ***Note**: These are estimates based on various sources (previous datasets, site visits, audits, etc.)*

City of Cape Town	300	184	116
Total	**2026**	**924**	**1102**

4.3.9 Energy Recovery

There are significant challenges in managing municipal waste due to rapid urbanisation and inadequate disposal systems. Most of the waste generated is landfilled or dumped illegally with only small fraction being recycled or recovered. Landfills contribute to environmental pollution, greenhouse gas emissions, and public health risks (SALGA, nd). According to a report by the United Nations Environment Programme (UNEP) and the Council for Scientific and Industrial Research (CSIR), South Africa generates approximately 12.7 million tonnes of municipal waste per year (UNEP, 2022). Waste-to-energy (WtE) projects can provide a sustainable solution to waste management and energy security issues.

WtE conversion refers to the process of transforming non-recyclable waste materials into usable forms of energy, including electricity, heat, and biofuels. This process typically involves thermal or biochemical treatment methods, which break down organic matter within the waste to release energy in the form of heat or gas (SALGA, nd). Some of the WtE technologies include:

- **Incineration:** Incineration involves the combustion of waste at high temperatures, converting organic materials into heat energy. This heat can then be used to generate steam and drive turbines to produce electricity. Incineration is well suited for processing mixed municipal solid waste and can significantly reduce the volume of waste sent to landfills.
- **Anerobic Digestion:** Anaerobic digestion utilises microorganisms to break down organic waste in the absence of oxygen, producing biogas as a by-product. Biogas, primarily composed of methane and carbon dioxide, can be captured and used as a renewable fuel source for heating, electricity generation, or vehicle fuel. Anaerobic digestion is particularly effective for processing organic waste streams such as food waste, sewage sludge, and agricultural residues.
- **Gasification:** Gasification involves heating waste materials in a low-oxygen environment to produce synthesis gas (syngas), a mixture of carbon monoxide, hydrogen, and other gases. Syngas can be combusted directly for heat and power generation or further processed into liquid fuels or chemicals. Gasification offers flexibility in feedstock types and can handle a wide range of waste materials, including biomass, plastics, and municipal solid waste.
- **Pyrolysis:** Pyrolysis involves heating waste materials in the absence of oxygen to produce bio-oil, syngas, and char. Bio-oil can be refined into liquid fuels, syngas can be used for power generation, and char can be utilised as a soil amendment or carbonaceous material. Pyrolysis is well suited for processing biomass and organic waste streams, offering high energy recovery rates and minimal emissions.

The South African National Energy Development Institute has developed a WtE Roadmap to facilitate the integration of WtE technologies in municipalities. The Roadmap has identified the following by-products which WtE technologies can produce (Table 16):

Table 16: By-products from WtE technologies

WTE TECHNOLOGY	BY-PRODUCTS
Incineration	High- pressure steam, ash and exhaust gases
Pyrolysis	Raw syngas, bio-oil, ash, char and metals
Conventional Gasification	Raw syngas, bio-oil, ash, slag and metals
Plasma Arc Gasification	Raw syngas, inorganic materials and vitrified slag
Anaerobic Digestion (Single & Double stage)	Methane gas, Hydrogen, digestate
Landfill Gas Extraction	Biogas, methane gas

(Source: Grewan & Trois, 2023)

Waste-to-energy projects face several challenges that can hinder their success. Sone of these factors include:

- Technological complexities and operational risks due to diverse waste streams.
- High upfront capital costs and financial viability concerns.
- Potential social acceptance issues and community resistance to projects (SALGA, nd).
- The need for a focused WtE policy and clarity on licensing requirements (IEA, 2023).

There have been many licensing applications for WtE projects over the years. Current records show that Environmental Authorisations were issued by DFFE and/or DEAD&DP for 13 biogas plants, two pyrolysis plants and two incineration facilities. It is unknown at this stage how many of these developments have commenced with construction or are currently operating.

The Swellendam Municipality issued a tender for a WtE solution for general and certain hazardous waste types from the Municipality. The dual aim of the project was to divert waste from landfill whilst providing a localized energy solution. The tender ran through several phases, however the Municipality decided that due to various challenges, it was not suitable to pursue this option further. With the roll out of the WtE Roadmap by the South African National Energy Development Institute (SANEDI) and the focus of WtE by SALGA that more Municipalities can implement WtE solutions where suitable.

4.3.10 Waste Treatment

The NEM: WA defines waste treatment as follows "*means any method, technique or process that is designed to change the physical, biological or chemical character or composition of a waste; or remove, separate, concentrate or recover a hazardous or toxic component of a waste; or destroy or reduce the toxicity of a waste, in order to minimise the impact of the waste on the environment prior to further use or disposal*". The treatment of general and hazardous waste is discussed below:

4.3.10.1 General Waste

The Province is actively aiming to shift from a linear disposal model toward a circular economy. This strategy prioritizes waste minimisation and promotes the hierarchy of reduction, reuse, recycling, and recovery (treatment). The province encourages recycling through various drop-

off sites for recyclable materials. This helps in diverting waste from landfills and promoting resource recovery. Diverting organic waste has been a top priority to ensure the province meets the set landfill organic waste diversion targets of 50% of organic waste from going to landfill by 2022, and 100% prohibition of organic waste to landfill by 2027.

The CoCT's Draft Budget 2024/25: Infrastructure Plan, refers to an upgrade and expansion of their existing composting operations at facilities like the Kraaifontein Integrated Waste Management Facility, to increase capacity and efficiency using engineered Aerated Static Pile (ASP) technology and to handle increased volumes of source-separated organic waste (garden greens). ASP composting is an advanced method where piles of organic waste are placed over a network of pipes that blow air into the pile. This controls oxygen and temperature, speeding up decomposition, killing pathogens and weeds, and minimizing odours compared to traditional windrow composting. This move to engineered ASP systems is a direct response to the need for higher throughput, better compliance with compost quality standards, and improved odour management, all critical for processing municipal volumes of organic waste efficiently and acceptably.

4.3.10.2 Hazardous Waste

Healthcare risk waste (HCRW) is regulated under two main laws – the NEM:WA and the National Health Act. It is either treated by incineration or autoclaved and shredded prior to disposal. HCRW treatment facilities face various challenges due to infrastructure and operations due to an over-reliance on a limited number of incineration facilities. Insufficient waste segregation at source often occurs at hospitals and clinics, where poor segregation of HCRW from general waste can lead to increased volumes and cost, as more waste is unnecessarily treated and recycled general waste can become contaminated. BCL Medical Waste Management is the only organization in the CoCT that is currently authorised to operate an incinerator plant. They are one of two (2) incinerator facilities in the Western Cape - BCL Medical Waste and Averda George. BCL operates both incineration and non-burn treatment (autoclaving) at its facility. They sterilize waste, resulting in a sharps-free, non-infectious residual waste that is then sent to landfill. The "ash" is the output of their incineration process, not the non-burn treatment. Compass Medical Waste specialises in autoclave-based treatment, which uses high-pressure steam to sterilize waste. This method is favoured for its lower hazardous air emissions compared to incineration. The infectious and sharp waste is treated via autoclave and anatomical, pharmaceutical and cytotoxic waste is contracted out to licensed incinerators in the service area with the closest proximity to the point of generation.

Greening of Health Care Waste Management

The installation of Alternate Healthcare Risk Waste Disposal Systems at these major public hospitals represents a significant decentralization strategy by the Western Cape Department of Health & Wellness in partnership with the DEA&DP. These systems are strategically installed on-site, non-burn treatment systems - primarily autoclaves at eight major public hospitals, namely:

- Khayelitsha District Hospital
- George Hospital
- Paarl Hospital
- Worcester Hospital
- Karl Bremer Hospital

- Red Cross Children's Hospital
- New Somerset Hospital
- Vredenburg Hospital
- Mitchell's Plain Hospital

This initiative is a core component of a decentralization strategy designed to build a more resilient, cost-effective, and environmentally sound HCRW management system. The primary goal is to eliminate the need for long-distance transport of untreated infectious waste to the province's limited incinerators, thereby cutting logistical and treatment costs, reducing carbon emissions, and mitigating spillage risks. These alternate systems sterilize and compact infectious and sharps waste on-site, reducing its volume by up to 80% and converting it into a non-hazardous residue suitable for landfill disposal. This approach directly addresses critical infrastructure challenges and geographic disparities in service access. However, it is not a complete solution as anatomical, cytotoxic, and pharmaceutical waste still requires off-site incineration.

The selection of hospitals reflects a phased roll-out targeting both high-volume metropolitan facilities and key regional hubs where transport savings are greatest. This program illustrates the province's commitment to implementing Best Environmental Practice (BEP) technologies, aligning with One Health principles and its broader circular economy and waste diversion targets. While it shifts some operational responsibility to hospital staff and requires significant upfront investment, the initiative marks a substantial step toward a sustainable and self-sufficient HCRW treatment network for the Western Cape.

4.3.11 Waste Disposal

4.3.11.1 General Waste

There was a slight increase in the volume of general waste disposed of over the 2018-2024 period, from approximately 2.1 million tonnes in 2018 to 2.3 million tonnes in 2023 (Figure 31). The percentage of waste disposed of has however declined over time, except for 2024, when there was a slight reversal. The decline in disposal percentage is due to an increase in the diversion rate over time. Municipal waste makes up the largest portion of waste disposed of at landfills, followed by commercial and industrial waste. Commercial and industrial waste shows a clear downward disposal trend post-2021, whereas other streams either increase or fluctuate without sustained reduction.

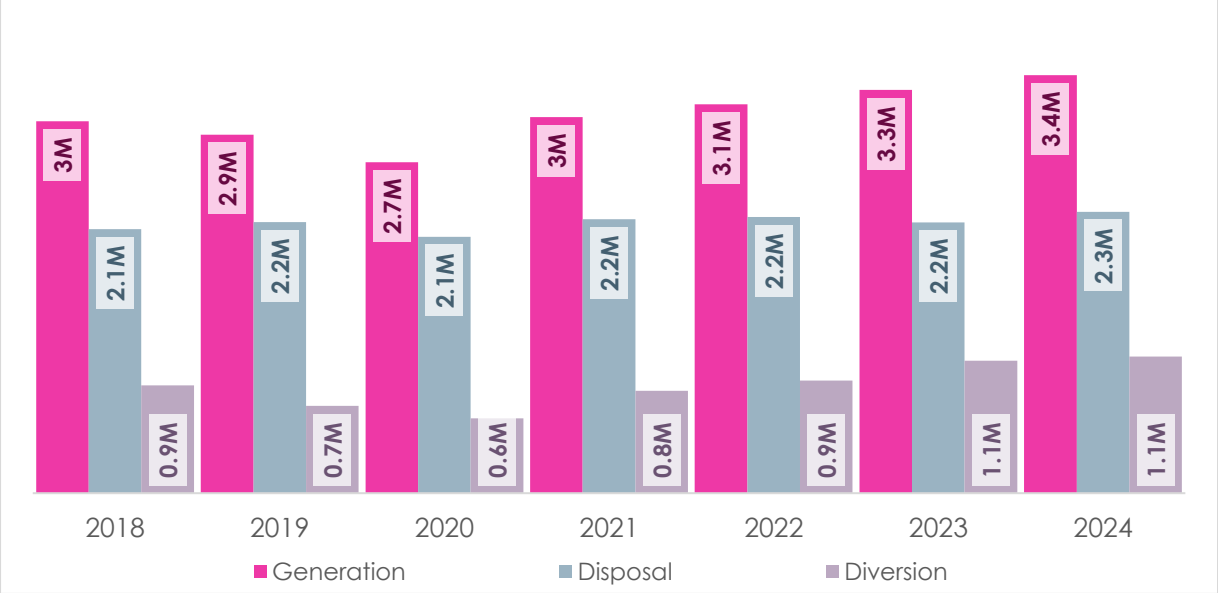


Figure 31: Waste generation, disposal and diversion in the Western Cape 2018-2024

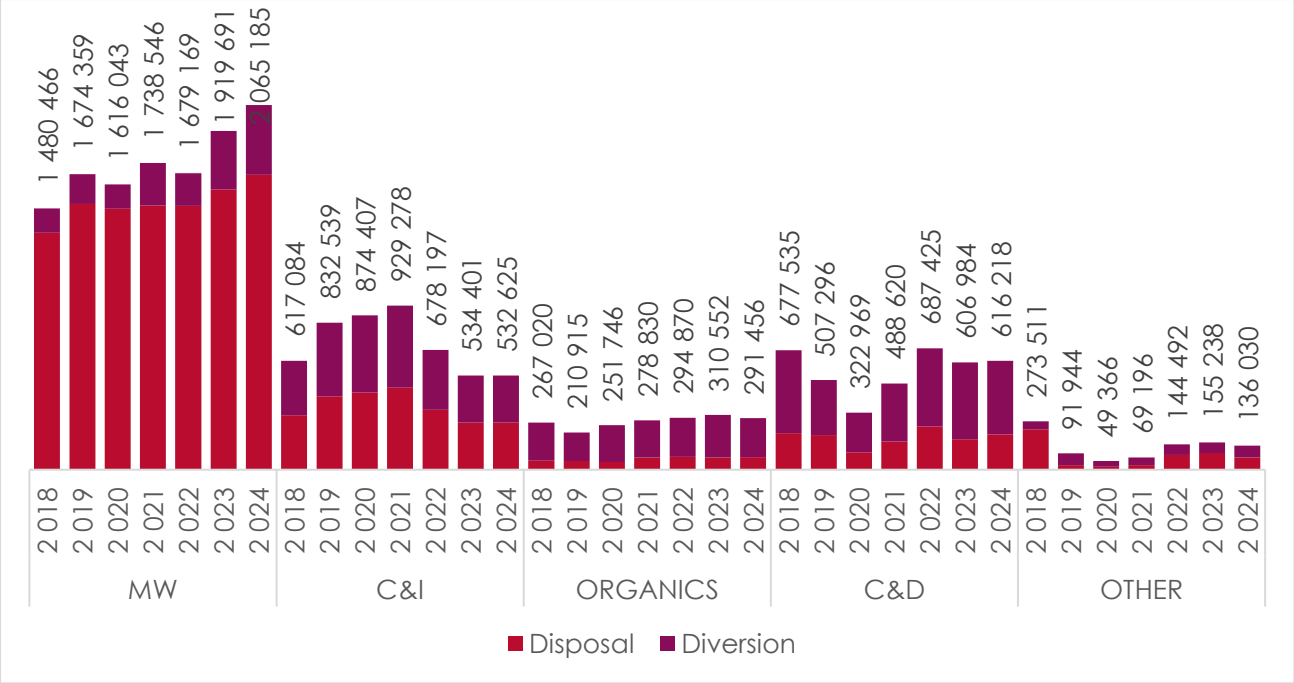


Figure 32: Waste types disposed of 2018-2024 (tonnes)

4.3.11.2 Hazardous Waste

In general, municipalities are not involved with hazardous waste collection from the private sector. There are three (3) sites registered on the IPWIS for Hazardous Waste disposal and located in the CoCT and Mossel Bay, namely Vissershok (municipal) WDF, the privately owned Vissershok (private) WDF and PetroSA WDF in Mossel Bay.

- PetroSA Hazardous Waste Facility

Over the last seven years, PetroSA historically contributed 28% of all hazardous waste disposed of in the Western Cape. Disposal volumes fell from an average of 10,163 tonnes in 2018 to zero tonnes by 2024 (Figure 33). Most of the hazardous waste previously disposed of at PetroSA was classified as "other organic waste without halogens or sulphur", which originates from bacteriological and lime-treated digested sewage sludge, also referred to as biological sludge after treatment. The notable spikes in disposal observed in July 2018, December 2018, and January 2019 resulted from the clearance of stockpiled sludge. This material required drying to comply with landfill prohibitions, which forbid waste with a liquid content exceeding 40%. These clearance periods align with the plant's routine maintenance cycle, which occurs every three years due to the accumulation of biological sludge.

The decline in in waste disposal is due to the facility no longer accepting hazardous waste. This may in turn have create logistical, and cost Implications for industry in the Garden Route who now have to transport hazardous waste further away.

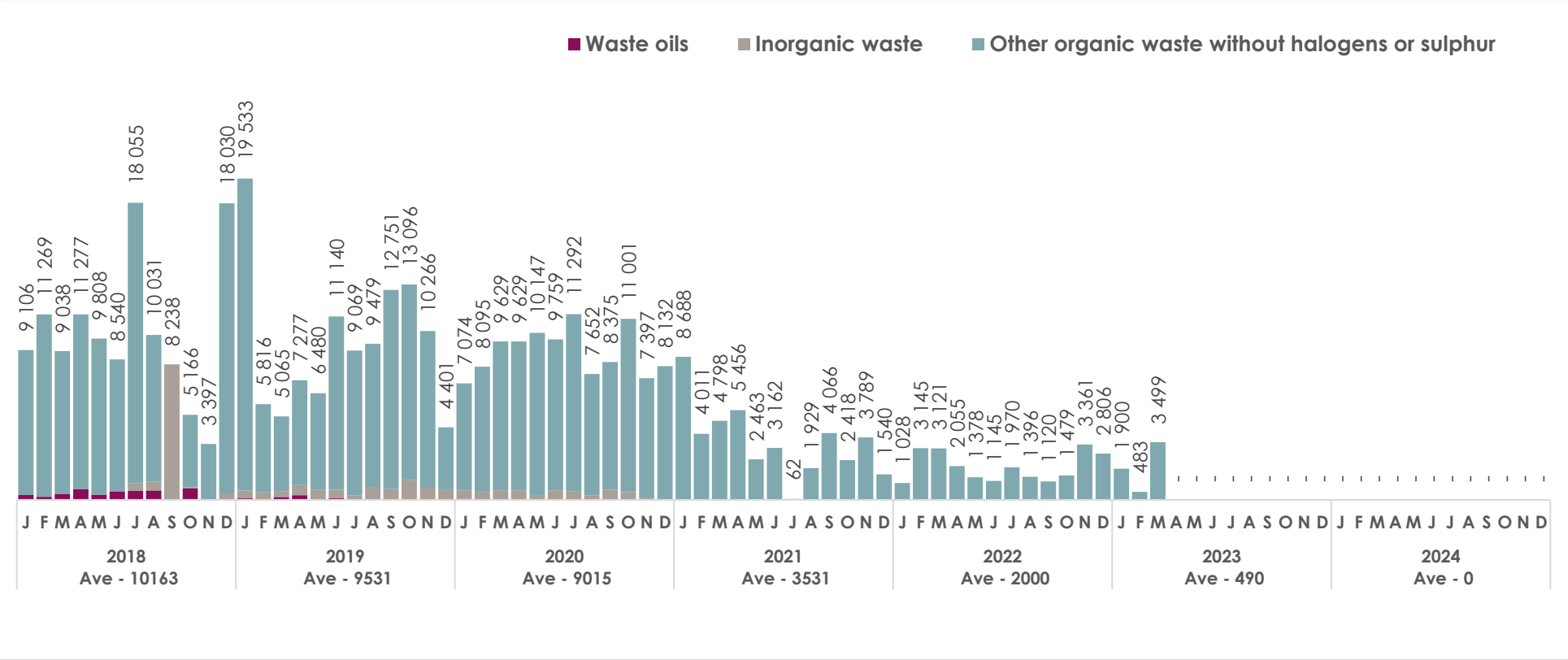


Figure 33: PetroSA hazardous waste disposal 2018-2024 (tonnes)

Vissershok Municipal Waste Disposal Facility

Historically, the Vissershok CoCT municipal site accounted for 4% of all hazardous waste disposal over the last seven years. However, in 2024, this share increased significantly to 11% of total hazardous waste generation. An analysis of waste streams shows that miscellaneous waste and waste oils at the CoCT site decreased substantially after mid-2019 and have remained low since. In contrast, tarry waste volumes have risen gradually

over the years, with the largest amounts recorded in 2024 (Figure 34). Upon investigation, this notable increase in tarry waste has been traced back to activities within the CoCT itself and is likely linked to road construction and related infrastructure projects in the City.

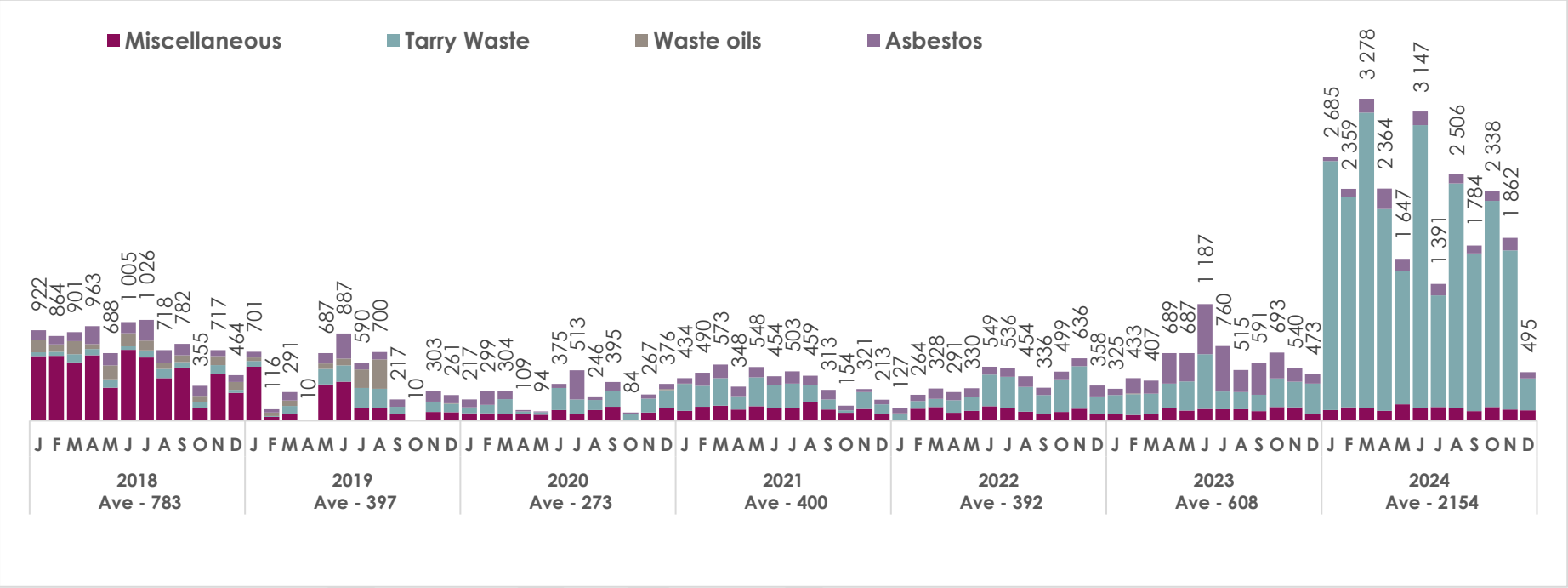


Figure 34:Vissershok CoCT Hazardous Waste disposal 2018-2024 (tonnes)

Vissershok Private Waste Disposal Facility

The Vissershok facility operated by Enviroserv has been the dominant site for hazardous waste disposal in the Western Cape, accounting for 69% of all hazardous waste disposal over the last seven years (Figure 35). This share increased significantly to 86% of total hazardous waste generation in 2024. The facility manages three primary waste streams: inorganic waste, sewage (biological) waste, and miscellaneous waste. Analysis shows a clear shift in their composition over this period where inorganic waste has decreased substantially from 2018 to 2024. Atlantis Foundries, one of the major contributors of inorganic waste has embarked on sand reclamation, initiated in recent years to reduce disposal of this waste stream to

landfill, which could be the reason for the sharp decline. Sewage waste has increased during the same timeframe. Miscellaneous waste has risen significantly since mid-2023. Investigations trace most of this increase to waste originating from two major metal industry entities and petroleum refineries.

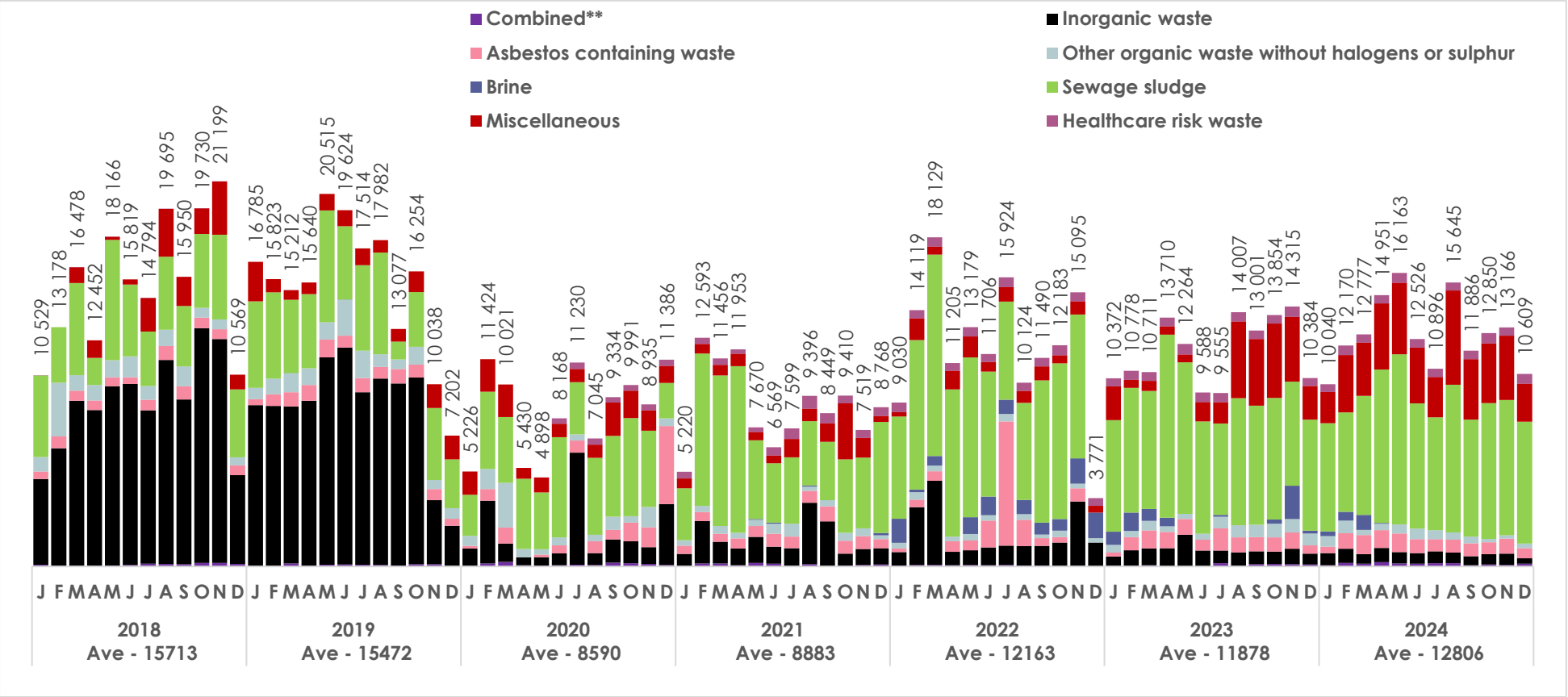


Figure 35: Vissershok private Hazardous Waste disposal 2018-2024 (tonnes)

4.3.11.3 Illegal Dumping

Illegal dumping is prevalent across all municipalities in the Western Cape, with clean-up costs placing a significant burden on municipal budgets. While the total volume of illegally dumped waste has not yet been fully quantified, the scale of the problem is substantial. In 2023, the Department identified priority interventions through the Strategy to Reduce Illegal Dumping (STRID), noting that many measures had not been widely implemented by municipalities. Municipalities largely rely on the Extended Public Works Programme (EPWP) for clean-up operations; however, waste often re-accumulates within days as root causes remain unaddressed. In response, municipalities have implemented pilot projects and awareness campaigns to encourage community participation, though approaches vary due to differing socio-economic conditions and budget constraints.

As a result, each municipality must adopt a context-specific approach to preventing illegal dumping. The most commonly dumped materials are construction and demolition (C&D) waste and general domestic refuse. Hotspots are typically located in informal settlements, high-density residential areas, open spaces, and along access roads to waste disposal facilities, where after-hours dumping occurs to avoid disposal fees. The CoCT manages approximately 2,700 illegal dumping hotspots, removing about 232,714 tonnes of waste annually, with clean-ups ranging from a few to over 180 times per year. Other municipalities report 20 to over 80 hotspots, requiring 30 to 100 clean-up operations per month,

- **Impacts of Illegal Dumping**

  The environmental impact of illegal dumping is severe, with windblown plastic and paper polluting vast land areas, rivers, and the ocean. This pollution leads to environmental degradation and poses a direct threat to public health. The social impact is profound, exposing residents to health risks from contaminated air and water while degrading their quality of life. The financial burden is significant, with municipalities spending millions annually on clean-up operations. For example, the CoCT spent over R623 million on clean-ups between 2016 and 2020. Major cost drivers include the use of heavy machinery and the need for recurrent visits to the same sites. Current clean-up methods are hindered by systemic issues, including the short-term nature of EPWP contracts and a lack of permanent, supervised municipal staff. Other significant barriers include logistical challenges in waste removal, high worker turnover due to low wages, and a persistent lack of civic responsibility. Ultimately, clean-up efforts have not yielded long-term success, with illegal dumping volumes continuing to rise despite continuous municipal interventions

- **Key Goals, Barriers, and Solutions from the Western Cape STRID**

  A summary of the key goals, barriers, and solutions from the Western Cape STRID as it presents a multifaceted approach to tackle illegal dumping, centred on seven interconnected goals is shown in Table 17 . The strategy concludes that reducing illegal dumping requires a multi-pronged, locally tailored approach. Success depends on community ownership, addressing root causes, and piloting scalable interventions based on evidence from hotspot mapping and engagement.

Table 17: Key goals, barriers, and solutions from the Western Cape STRID

GOAL	BARRIERS	SOLUTIONS
Governance		
Strengthen municipal structures, budgeting, and policies.	Fragmented departments cause confusion and competing priorities. Limited budgets favour reactive clean-ups over prevention. Tariffs do not cover the full cost of waste management.	Improve coordination across departments. Review and align tariffs with true service costs. Use tender agreements to enforce service standards (e.g., cleaning around skips).
Waste Collection Systems		
Improve infrastructure and service delivery, especially in informal settlements.	Inadequate bins and facilities; skips are misused, vandalised, or overflow; narrow streets hinder collection trucks; backyard dwellers often lack access.	Tailor systems (skips, mini-drop-offs) to local needs via community consultation. Increase bin provision. Service skips promptly. Use ramps for accessibility.
Innovation		
Leverage technology and behavioural insights.	Lack of funding, data, and public awareness; resistance to change; bureaucratic hurdles.	Use "green nudges" (e.g., footprints leading to bins). Explore AI and drones for hotspot monitoring. Create illegal dumping databases and public apps for reporting.
Partnerships		
Strengthen collaboration between municipalities, communities, NGOs, and the private sector.	Budget constraints, bureaucratic processes (like PPPs), lack of trust, and restrictive by-laws.	Partner with Extended Producer Responsibility (EPR) schemes and SMMEs. Co-design solutions with communities. Build inter-departmental partnerships, especially with Human Settlements.
Enforcement		
Strengthen by-law implementation and capacity.	By-laws are often unenforced, outdated, or unknown. Lack of dedicated enforcement officers and training.	Adopt and update by-laws aligned with national law. Designate dedicated solid waste law enforcement officials. Train Environmental Management Inspectors (EMIs).

Education and Awareness		
Build public understanding and engagement.	Limited municipal resources, low public trust, ineffective communication channels, and unappealing content.	Use participatory research and social media with local influencers. Employ relatable storytelling and public art. Communicate in local languages and use municipal bills for awareness.
Monitoring and Evaluation		
Track progress and adapt interventions based on evidence.	Random dumping patterns make planning difficult. Lack of funding, resources, and community engagement post-clean-up	Develop tracking systems (GIS mapping of hotspots, costs). Use applications such as SeeClickFix and TrashOut for public reporting. Conduct impact assessments to identify the most cost-effective interventions.

4.3.12 Waste Management Infrastructure

Municipal waste infrastructure is characterised by a network of permitted waste disposal facilities, diverse collection systems, and growing diversion initiatives, but faces severe strain due to critical landfill airspace shortages, service backlogs, and systemic management gaps. Effective management requires integrated infrastructure aligned with the waste hierarchy. Ideally, industrial waste should be reused on-site or treated near its source via material recovery, energy recovery (gasification, anaerobic digestion), or industrial symbiosis networks, while residential systems should enable separation of recyclables and organics, supported by municipal anaerobic digestion, advanced sorting facilities, and refurbishment programs, alongside collection services designed for these diverse output streams. Collected materials should then feed back into manufacturing as recycled feedstock, supporting a circular economy. Core municipal infrastructure, including Drop-Off Facilities, Material Recovery Facilities, composting plants, and WDFs, must be strategically planned and located in collaboration with town planning authorities.

Historically, waste disposal permits did not prioritise preserving remaining airspace, often only specifying maximum fill heights rather than tracking volume. This has led to significant landfill airspace pressures across most facilities. In response, permit-holding municipalities are increasingly adhering to conditions, such as conducting annual topographic surveys, to quantify remaining capacity, a practice previously overlooked. Beyond surveys, aggressive implementation of separation-at-source, waste diversion, alternative treatment and using heavier, modern compactors and improved techniques (e.g., proper layer thickness, more passes) to achieve higher density, squeezing more waste into the same volume, is critical to preserve remaining airspace. Waste collection services remain unevenly distributed. While formal households generally receive weekly kerbside collection, informal settlements often rely on communal skips, refuse bags, and drop-off points, systems vulnerable to inefficiency and illegal dumping. Specialsed infrastructure is also uneven; for instance, authorised C&D waste facilities are concentrated in metros, leaving smaller municipalities to divert rubble to landfills, accelerating airspace loss and causing non-compliance with permit height limits. Significant systemic challenges persist. Many municipalities struggle with financial and

technical constraints, hindering infrastructure planning, maintenance, and compliance with permit conditions, including water monitoring, surface water management, and equipment upkeep. Transport infrastructure remains underdeveloped; waste-to-rail systems, which could reduce road damage and emissions, are largely absent due to high capital costs for rail sidings and limited cost-effectiveness for current waste volumes, as highlighted in a recent Cape Town-Overberg feasibility study.

While the province has foundational infrastructure and circular economy goals, systemic issues, financial shortfalls, inequitable access to specialised facilities, underdeveloped transport options, and ongoing non-compliance, impede the transition to a sustainable, integrated waste management system capable of meeting diversion targets and alleviating acute landfill pressure.

4.3.12.1 Number and Type of Facilities

The Western Cape's waste management system relies on 277 facilities, which are crucial for handling the province's waste. These facilities face significant challenges, including limited landfill airspace, ageing infrastructure, financial constraints, and pressure from rapid urbanisation. Due to the shrinking airspace, there is a growing need to develop regional landfill capacity and implement alternative waste treatment technologies to alleviate pressure on existing WDFs. Addressing these challenges requires a shift toward a circular economy approach. This involves minimising waste generation, designing products for reuse and recycling, and establishing closed-loop systems that support waste beneficiation. The province currently has 16 Transfer Stations (TS) and 42 MRFs that form a foundation for this transition (Table 18).

Table 18: Number and type of Waste Management Facilities in the Western Cape

WASTE MANAGEMENT FACILITIES	CoCT	ODM	CWDM	WCDM	CKDM	GRDM	TOTAL
Operational Waste Disposal Facilities	4	9	14	8	7	15	**57**
Operational Waste Disposal Facilities (Unlicensed)	0	0	0	0	0	0	**0**
Decommissioned Waste Disposal Facilities	21	18	13	32	1	13	**98**
Operational Drop off facilities	27	8	5	12	0	4	**56**
Operational Transfer stations	1	4	4	2	0	5	**16**
Operational Materials Recovery Facilities	27	3	3	5	1	3	**42**
Operational Compost Facilities	3	1	2	0	0	2	**8**
Decomissioned and Operational Waste Management Facilities	**83**	**43**	**41**	**59**	**9**	**42**	**277**

4.3.12.2 Topographical Studies

The Department initiated an airspace assessment project over a 2-year fiscal period(April 2023 to March 2025), to determine the baseline information at selected WDFs, by conducting topographical surveys during the first year (May 2023) and repeat the same surveys 12 months later during the second year (May 2024), to establish airspace utilisation over this 12 month period to determine the remaining airspace availability. The project was finalised in October 2024.

Table 19 presents the various airspace calculation methods considered during the project. It was determined that topographical airspace assessment is the most accurate method for measuring remaining capacity. Based on this approach, the assessed airspace will decline annually from the 2024 baseline. It is important to note that four facilities - Clanwilliam, Laingsburg, Leeu Gamka, and Prince Alfred Hamlet, cannot utilise their assessed airspace until the respective license holders formally update the authorised waste body heights in their Waste Management Licences.

Expanding this network with additional material recovery and drop-off facilities is essential to divert more waste from landfills. This should be coupled with low- to zero-emission treatment technologies for the diverted streams. Together, these efforts will help conserve natural resources, extend landfill lifespans, and promote sustainable recycling practices across the Western Cape.

Table 19: Calculation options for the Airspace Assessment Project

LANDFILL SITE	LIFESPAN BASED ON ESTIMATED POPULATION WASTE DISPOSAL RATES		LIFESPAN BASED ON IPWIS DISPOSAL RATES		LIFESPAN BASED ON SURVEY DATA
YEAR	**2023**	**2024**	**2023**	**2024**	**2023-2024**
Vaalkoppies	15	8	43	24	**64**
Clanwilliam	12	13	6	38	**61**
Laingsburg	12	7	10	6	**6**
Leeu Gamka	31	25	14	13	**70**
Prince Alfred Hamlet*	47	47	30	19	**47**
Tulbagh*	23	23	12	324	**167**
Vanrhysndorp	31	51	N/A	N/A	**148**

4.3.12.3 Landfill Airspace Availability

The Department received topographical studies which have determined the airspace assessment reports for 33 out of 56 operating WDFs. Twenty-three (23) WDFs are operational without monitoring their compliance with airspace limitations. The remaining disposal lifespans of WDFs in the Western Cape are shown in Figure 36. Of the province's 56 operational WDFs, 28 have assessed their remaining airspace. Notably, assessments for four WDFs - Laingsburg, Clanwilliam, Leeu Gamka, and Prince Alfred Hamlet, were funded by the Department but cannot be finalised until the respective license holders update the authorised waste body

heights in their Waste Management Licences. Based on the completed assessments, the remaining airspace across the province varies significantly: 7 WDFs have more than 15 years of capacity remaining, 4 have more than 10 years, and 13 have 5 or more years.

As facilities reach capacity and close, additional pressure is placed on the remaining sites, accelerating the consumption of their available airspace. This trend underscores an urgent and growing need for regional waste disposal solutions and the adoption of alternative waste treatment technologies to divert waste streams, thereby extending the operational lifespans of the province's critical WDF infrastructure.

Figure 36:Lifespan of landfills in the Western Cape

4.3.12.4 Regional Waste Management Facilities

Regionalisation of WMFs offers several benefits to municipalities allowing resources and expertise to be pooled across participating municipalities. Each district is at various stages of development with the regional WMFs:

West Coast District	**The West Coast Regional Landfill Site near Vanrhynsdorp has been constructed and is currently receiving its initial waste loads**, primarily from Matzikama Municipality. Waste from Cederberg Municipality has not yet been received; however, both municipalities are in the process of planning supporting waste management infrastructure, funded through the Municipal Infrastructure Grant (MIG). This includes a drop-off facility in Lambert's Bay for Cederberg by 2025/26, followed by a transfer station and additional drop-off points by 2026/27. For Matzikama, the development of drop-off sites and material recovery facilities is planned for the 2026/27 financial year. The West Coast District Municipality will also need to establish systems to accommodate waste from businesses and other generators. Discussions have

	taken place with Hantam and Kamiesberg Municipalities in the Northern Cape regarding the potential use of the regional site, but no formal decisions have been confirmed to date. Bergrivier Local Municipality has agreements in place with both Saldanha Bay and Swartland Local Municipalities for the use of their landfill disposal facilities. All waste generated within Bergrivier is first transported to either the Velddrif or Piketberg transfer stations. Waste from the Piketberg transfer station is then transported to the Highlands Landfill in Malmesbury, within Swartland Municipality, for final disposal. Waste from the Velddrif transfer station is taken to the Vredenburg Landfill in Saldanha Bay Municipality for final disposal. Bergrivier Municipality is responsible for transporting its waste to the landfill and pays disposal fees to Saldanha Bay and Swartland Municipality based on the volume of waste delivered.
Overberg District	**The Overberg District Municipality (ODM) owns and operates the Karwyderskraal Landfill** near Hawston, within the Overstrand Local Municipality. This facility currently provides disposal services for household general waste for the Theewaterskloof Overstrand and Cape Agulhas Local Municipalities. The Overberg District Municipality is in the process planning for a new cell 5 at Karwyderskraal regional landfill site however there was delays in the approval process. The delays were once again communicated, and the ROD for the new cell 5 at Karwyderskraal is currently being reviewed by DWS. DEA&DP is awaiting the decision on the ROD.
Central Karoo District	To establish regionalisation as a sustainable long-term strategy for waste management services in the Central Karoo, a comprehensive feasibility assessment is essential to evaluate the viability of the proposed options. This formed part of the action plan during discussions facilitated by CoGTA to support the CKDM.
Cape Winelands District	The planning and administrative actions for the Regional WDF in the CWDM experienced **delays.** The Cape Winelands District Municipality has awarded the tender to operate the Regional WDF, subject to strict conditions. The District is in the process of undertaking a public participation process according to Section 33 of the Local Government: Municipal Finance Management Act (MFMA) No. 56 of 2003, which requires municipalities to follow a strict public participation process before signing contracts extending beyond three years. Service Levels Agreements with Municipalities must still be signed, but the understanding is that all local municipalities will participate in the Cape Winelands Regional WDF. The Department of Water Affairs and Sanitation is in the process of compiling a Record of Decision for the above-mentioned facility.
Garden Route District	The planning and administrative actions for the Regional WDF in the GRDM experienced **continuous delays**. Following the

	termination of the Tefla Group contract, Council resolved to advertise a single tender for the completion of Phase 1 of the Regional Waste Management Facility, rather than proceed with emergency procurement, which poses risks of irregular expenditure and project delays. PetroSA has been engaged to extend access to its landfill pending completion of the facility, while legal processes are underway to investigate the contract termination and enforce the R31.9 million performance guarantee. Mossel Bay Municipality has requested approval to negotiate with GRDM on the development of green waste and rubble sites at the Regional Facility, in line with existing licence provisions. The Service Level Agreement with Zutari, due to expire on 30 June 2025, will require extension with associated revised costs, and the statutory public participation process on this amendment closed on 06 June 2025 with no objections received.
City of Cape Town	The CoCT has commenced a **feasibility assessment** for a new regional WDF, as its remaining operational facilities (Coastal Park and Vissershok) have approximately 15 years of disposal airspace left. A previous attempt to gain approval for a regional WDF was prolonged for over 20 years due to appeals and court orders.

4.3.12.5 Conditions of Waste Management Facilities

Table 20 highlights key issues experienced at WDFs during 2024 and identifies the common non-compliances which have a direct link to the environmental impact at WDFs if not managed as per the applicable waste management licence conditions.

Table 20: Key issues at Waste Disposal Facilities- 2024

ISSUES	IMPACTS
Landfill airspace	• Risk of facility closure due to non-compliance. • Causes widespread windblown litter. • Unplanned financial needs for height extensions and expensive containment liners. Height extensions are not granted by DWAS if the facility does not have containment barriers.
Organic Waste	• Management not in line with approved plans. • Leads to leachate generation and groundwater contamination in landfills. • Decomposition produces flammable methane gas.
Broken perimeter fences	• Unauthorised entry of waste pickers onto the waste body. • Spread of windblown litter and facility footprint creep/illegal dumping. • Fires are lit to recover metals and save landfill airspace increasing safety risks. • Conflicts, injuries, and health risks from scavenging hazardous waste. • Loss of recyclable materials for formal municipal recovery.
Lack of stormwater management channels	• Stormwater becomes contaminated and escapes the facility footprint. • Causes surface water, groundwater, and soil pollution. • Leads to waste cell erosion and increased leachate production. • Creates flooding risks and long-term ecosystem damage. • Results in regulatory non-compliance and potential fines.
Lack of cover material	• Increased windblown litter, causing blockages and aesthetic nuisances. • Higher fire risk and attraction of pests, animals, and illegal pickers. • Increased operational costs for clean-ups and odour emissions. • Disease risks from vermin and accelerated landfill degradation.
Lack of access control at facilities	• Unmonitored waste volumes and inadequate waste checking. • Increased risk of fires, injuries, and illegal dumping of hazardous waste. • Theft of equipment and difficulty tracking waste sources. • Higher security costs due to vandalism and unauthorised access.
Lack of groundwater monitoring at facilities	• Unknown groundwater contamination prevents timely action. • Health risks to downstream users and legal liability for pollution.

	• High long-term remediation costs and loss of community trust. • Potential facility shutdown if contamination is severe.
Detection of landfill gas	• Methane levels above 5% create explosion and fire risks. • Uncapped methane escapes, contributing to climate change. • Gas migration threatens nearby infrastructure and causes odour complaints. • Leads to costly retrofits for gas capture and regulatory penalties.

4.3.12.6 Landfill Gas Monitoring

Landfill gas forms as organic waste decomposes, first through an aerobic phase that produces carbon dioxide and then through an anaerobic phase that generates methane. Methane is a colourless, odourless, and flammable gas that is lighter than air. It becomes explosive when its concentration in the air reaches between 5% and 15%, a range known as its explosive limits. To monitor this risk, measurement points are selected at areas of older waste and visible cracks where gas is likely to escape. A hole is dug at each point, and a probe is inserted to record levels of oxygen, carbon dioxide, hydrogen sulphide, and methane. All ignition sources, such as smoking, must be strictly avoided during this process. Municipalities must also control water ingress, as it speeds up the anaerobic decomposition that creates methane. Measurements were taken at various WDFs. During 2024, methane was detected at the Grootkop, Highlands and Wellington WDFs (Table 21).

Table 21: Landfill gas monitoring (CH_4 Levels) - 2024

QUARTER	FACILITY	TYPE	DATE	MAX. AND AVERAGE CH_4 (BY VOLUME) LEVEL DETECTED (%)
January - March 2024	**Struisbaai**	WDF	16 January 2024	0
	Klaarstroom	WDF	23 January 2024	0
	Laingsburg	WDF	24 January 2024	0
	Prince Albert	WDF	24 January 2024	0
	Gwaing	WDF	9 February 2024	0
	Citrusdal	WDF	14 February 2024	0
	Clanwilliam	WDF	14 February 2024	0
	Ladismith	WDF	23 February 2024	0
April - June 2024	**Porterville**	WDF	3 April 2024	0
	Redelinghuys	WDF	3 April 2024	0
	Darling	WDF	10 April 2024	0
	Moorreesburg	WDF	10 April 2024	0

	Albertinia	WDF	16 April 2024	0
	Herbertsdale	WDF	17 April 2024	0
	Dysselsdorp	WDF	13 May 2024	0
	Wellington	WDF	20 June 2024	49, 13.5
July - September 2024	**McGregor**	WDF	3 July 2024	0
	Bessiekop	WDF	3 July 2024	0
	Grootkop	WDF	25 July 2024	0.1, 0.025
	Melkhoutfontein	WDF	5 August 2024	0
	Caledon	WDF	7 August 2024	0
	Op die Berg	WDF	8 August 2024	0
	Highlands	WDF	3 September 2024	2.3, 0.7
	Wellington	WDF	3 September 2024	8.4, 1.82
October - December 2024	**Bontebok**	WDF	16 October 2024	0
	Waenhuiskrans	WDF	16 October 2024	0
	Infanta	WDF	17 October 2024	0
	Vanrhynsdorp	WDF	24 October 2024	0
	Lambert's Bay	WDF	24 October 2024	0
	Leeu Gamka	WDF	1 November 2024	0
	Vredendal	WDF	12 November 2024	0
	Bellville South	WDF	28 November 2024	0

4.3.12.7 Groundwater Monitoring

Given South Africa's status as a water-scarce country, every effort to protect groundwater resources is critical. A major source of groundwater contamination within the waste sector is historical and operational WDFs that lack adequate leachate containment barriers and treatment infrastructure. Consequently, these sites contribute to ongoing groundwater pollution. While WMLs require annual groundwater quality monitoring, most municipalities fail to implement this due to insufficient funding allocated to waste management services. To address this gap and improve regulatory compliance, the Department initiated a groundwater monitoring project funded through the Provincial Treasury. This project aimed to assist selected municipalities in identifying groundwater impacts, improving facility operations, and underscoring the importance of diverting leachate-producing waste away from disposal sites.

With an allocation of R1.8 million, the project supported six facilities across five municipalities. Each participating site was required to establish two groundwater monitoring boreholes and conduct one round of water quality analysis, establishing a foundation for the ongoing annual monitoring mandated by their WMLs. The facilities included in the project were:

Prince Alfred Hamlet WDF

- Lamberts Bay WDF
- Clanwilliam WDF
- Bontebok WDF
- Prince Albert WDF
- Grootkop WDF

Each site received two monitoring boreholes and one full water quality monitoring cycle, enabling these municipalities to begin meeting their compliance obligations and better safeguard vital groundwater resources.

4.3.12.8 Waste-related Complaints

Based on complaints received over the 2028-2024 period, illegal dumping operational; challenges at WMFs remains the most prevalent concerns province-wide (Figure 37). The CoCT received the most waste-related complaints compared to other districts. Illegal dumping remains the most prevalent concern province-wide. Compared to the other districts, the CKDM has fewer complaints, likely due to a smaller population and fewer waste-handling operations.

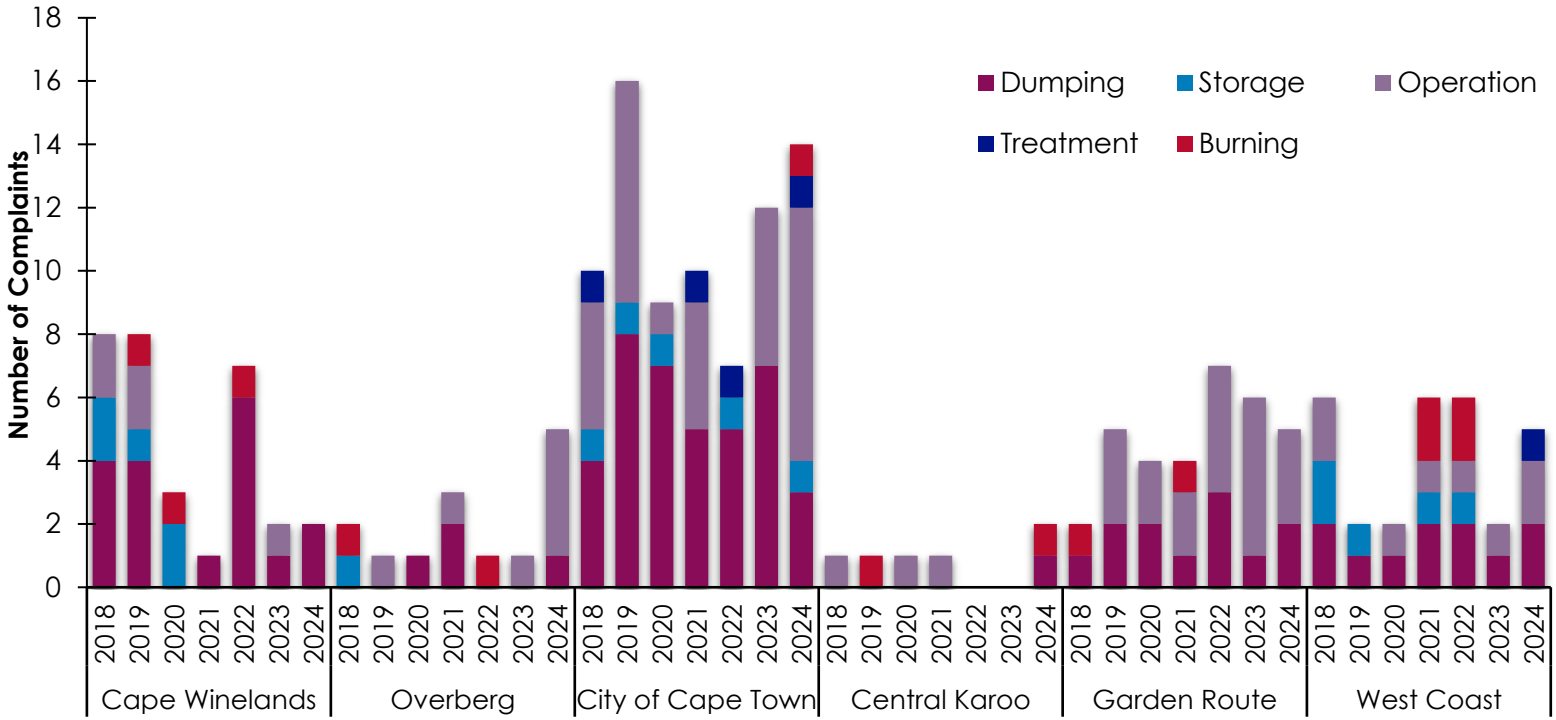


Figure 37: Waste-related complaints received during 2018-2024

4.3.12.9 Compliance at Wate Management Facilities

The Department undertakes audits at selected WMFs to ensure compliance with Environmental Authorisation conditions. The number of audits undertaken by the Department has declined from 73 in 2018 to 48 in 2024; this is largely due to resource constraints. Compliance rating criteria includes three categories ranging from compliant to non-compliant (Table 22). Between 2018 and 2024, there has been an increase in compliant facilities from 12% to 25% (Figure 38); meanwhile facilities obtaining partial compliance fluctuated over the time period, making up the smallest category in 2024 at 15%. Over the same period, non-compliant facilities remain the largest category every year, peaking in 2021 at 65%, indicating persistent compliance issues. These facilities are required to implement corrective actions and to ensure ongoing compliance through regular monitoring, as these non-compliances can lead to serious consequences, both legally and environmentally.

Table 22: Waste Management Facility compliance status indicators

COMPLIANCE RATING CRITERIA	STATUS INDICATOR	REQUIRED ACTION
84.5% ≤ X ≤ 100%	**Compliant**	Minor Improvements
64.5% ≤ X < 84.5%	**Partially Compliant**	Improvements
X < 64.5%	**Non-Compliant**	Major Improvements

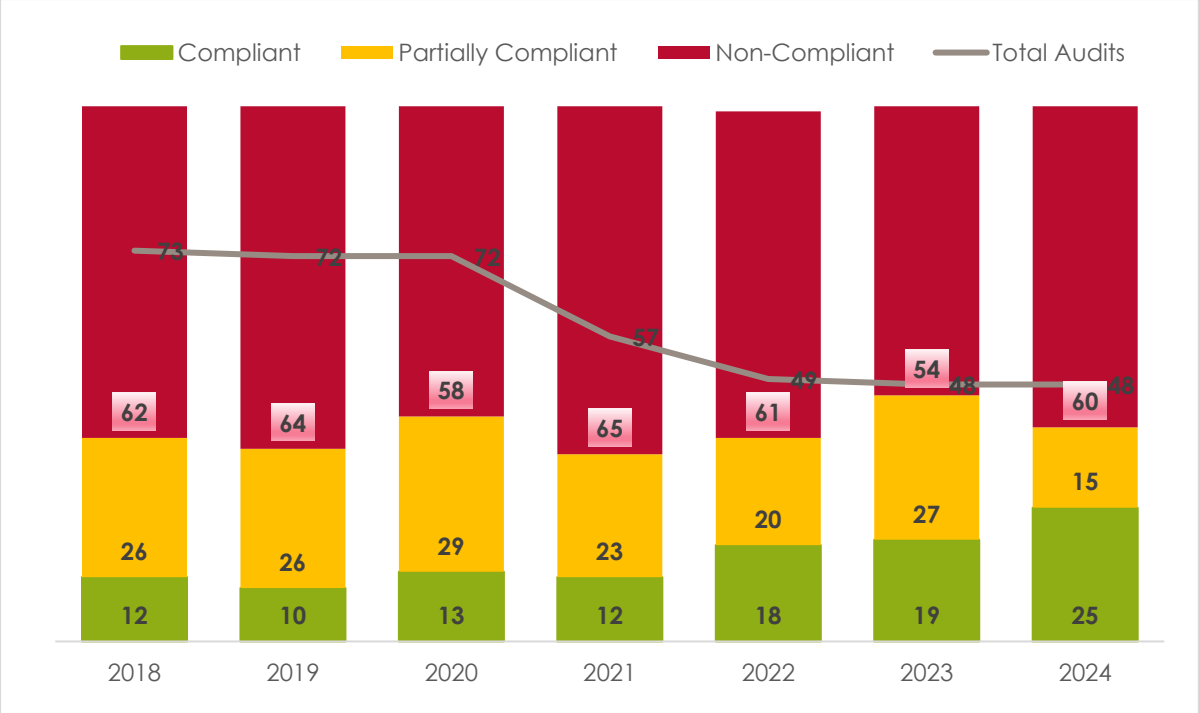


Figure 38: Compliance at Waste Management Facilities audited by DEA&DP 2018-2024

4.3.12.10 Alternative Waste Treatment Technologies

The implementation of alternative waste management technologies in South Africa is overdue. Such systems are needed to align with international standards and address local challenges like job creation, energy production, and conserving landfill airspace. Mandated by the NEM: WA and the NWMS, municipalities are required to support these technologies to divert waste from landfills. To aid this process, the Department has developed an Alternative Waste Management Tool. This planning tool is designed to be part of a feasibility assessment, helping municipalities make informed decisions before committing to new infrastructure. It requires waste managers to critically analyse the types and volumes of waste in their area.

The tool provides:

- Baseline financial costs for proposed infrastructure options.
- Waste volume and landfill airspace projections for future planning.

Despite being presented at the Integrated Waste Management Officers' Forum quarterly forums, this tool has not been adopted by all municipalities.

4.3.13 Waste Awareness and Capacity Building Initiatives

The NWMS (2020) emphasises the importance of raising awareness to educate the public about responsible waste management practices. It also highlights environmental awareness for consumers and producers and incentives to motivate behaviour change as key enablers for the development and implementation of effective waste prevention policies, action plans and initiatives (DEFF, 2020). The Province developed a waste awareness strategy to assist municipalities with various means of communication with communities and stakeholders and a strategy to reduce illegal dumping (STRID) is in the process of finalisation, which will assist municipalities to create awareness on the management of illegal dumping. An organic waste strategy and guide for organic waste diversion planning was also developed by the Province, which requires municipalities to draft Organic Waste Management Diversion Plans with targets for diversion of organic waste from landfill in order to meet the Provincial target of 100% diversion of organic waste from landfill. The Province has also developed the following policies to assist municipalities –

- a separation at source (S@S) guideline to assist with implementation of the S@S programmes and initiatives;
- a waste management services procurement guideline to assist with integrating SMMEs and waste pickers into the municipal waste diversion system;
- a guide on co-designing solutions with informal settlement communities to minimise the impacts of waste on health and the environment; and
- various knowledge sharing workshops and capacity building engagements are hosted with various stakeholders including the following –
    - Western Cape Integrated Waste Management Officers' Forum (WC IWMOF), a quarterly engagement with WMOs aimed at informing municipalities of the current challenges and opportunities in waste management and waste management legislation reform. ents and improvements in waste management and waste management legislation;

- Western Cape Recycling Action Group (WCRAG), a quarterly engagement aimed at creating awareness and education, promoting the circular economy, minimising the consumption of resources, stimulating job creation and increasing waste diversion through reuse, recovery and recycling;
- Integrated Waste Management Capacity-Building Workshop hosted annually to provide training to municipal officials on integrated waste management principles covering key waste management areas; and the
- Western Cape Industry Waste Management Forum (WC IWMF), an annual engagement aimed at informing industry of the current challenges and opportunities in waste management and waste management legislation reform.

4.3.14 Waste Management Jobs

4.3.14.1 Provincial Government

The Directorate consists of three sub-directorates namely, Waste Management Planning (WMP), Waste Policy and Minimisation (WPM) and Waste Management Licensing (WML) all with specific areas of focus. As per the Department's approved organisational structure and staff establishment (2022/23) the Directorate: Waste Management should consist of 58 permanently employed staff in total, excluding Work Integrated Learning and paid interns. (WMP: 21, WML: 18, WPM: 17) Table 23. The current head count of staff in the Directorate is 24. This shows that the Directorate is operating and meeting its deliverables with 41% of its staffing compliment.

Table 23: DEA&DP – Directorate: Waste Management staff complement

DIRECTORATE: WASTE MANAGEMENT	DESIGNATION	OS	UNFUNDED	ACTUAL
Director	Senior Management	1	0	1
Personal Assistant	Administrative Staff	1	0	1
WASTE MANAGEMENT PLANNING				
Environmental Officer Control (OSD)	Technical Staff	5	2	3
Environmental Officer Specialised (OSD)	Technical Staff	12	8	4
Environmental Officer Prod (OSD)	Technical Staff	2	1	1
Administrative Officer	Administrative Staff	1	0	1
Administrative Clerk	Administrative Staff	1	1	0
WASTE MANAGEMENT LICENSING				
Environmental Officer Control (OSD)	Technical Staff	5	2	3

Environmental Officer Specialised (OSD)	Technical Staff	6	2	2
Environmental Officer Prod (OSD)	Technical Staff	5	3	0
Administrative Officer	Administrative Staff	1	0	0
Administrative Clerk	Administrative Staff	1	0	1
WASTE POLICY AND MINIMISATION				
Environmental Officer Control (OSD)	Technical Staff	5	2	2
Environmental Officer Specialised (OSD)	Technical Staff	4	3	1
Environmental Officer Prod (OSD)	Technical Staff	6	4	2
Administrative Officer	Administrative Staff	1	0	1
Administrative Clerk	Administrative Staff	1	0	1
TOTAL		58		24
OS – Organisational Structure (2022/23)				

4.3.14.2 Industry

The roll out of the EPR schemes by the DFFE approved PRO's will contribute to the increase in jobs in the waste sector. DFFE has noted the challenges of low or non-reporting of jobs created by the PRO's. Some of the challenges for reporting by the PRO's include; evidence not being provided on the reporting system, the usage of incorrect templates, clarifications on jobs tracked and a decision on whether to include informal jobs as direct or indirect. Of the 14,934 total jobs recorded during the 2023 analysis of PROs annual reports, 12, 080 (81%) were formal jobs whilst 2, 854 (19%) were informal jobs. The paper and packaging sectors as well as the Electrical and Electronic Equipment (WEEE) accounted for 97% (14, 494) and 3% (422) of the total jobs created during 2023, respectively (DFFE: Mahlwele, ND).

The Province is committed to raising the overall productivity of the Western Cape economy, through horizontal enablement and supporting private-sector-led market stimulation and growth opportunities. The focus on sustainability offers opportunities to enhance productivity, as the circular economy will enable the region to derive greater use from each resource unit and require fewer resource inputs (G4J 2035). The strategy further identifies a picture of success whereby, circular infrastructure is advanced, enabling circular economy activity (e.g., re-use, recycle or recover waste), and minimizing the amount of material used across the infrastructure lifecycle or value chain. The Draft Waste Economy Master Plan (WEMP) has identified the potential of some key streams which can create job opportunities and contribute to the economy (Table 24).

Table 24: Potential of waste streams economic contribution

	DIRECT (RM)			INDIRECT (RM)	TOTAL (RM)
Waste type	**Current economic contribution (recycling)**	**Potential Economic contribution (recycling)**	**Added economic benefit (recycling)**	**Added landfill cost savings**	**Total added economic contribution**
Food	1053	5265	4212	468	4680
Waste water	103	514	411	194	605
Construction & demolition	252	841	589	337	925
E-waste	190	1900	1710	32	1742
Plastic	490	1113	624	62	686
Cans	5812	8072	2260	113	2373
Paper	1300	2100	800	80	880
Glass	121	185	64	174	237
AHP	-	813	813	33	845
Total	**9 321**	**20 802**	**11 482**	**1 492**	**12 973**

Ref:Draft Waste Economy Master Plan (WEMP)

5 An Analysis of the Extent of the Implementation of the WC IWMP 2023-2027

5.1 Overview

The WC IWMP 2023-2027 includes four strategic goals, each of which includes objectives and activities for implementation. This section presents an overview of the Department's performance as measured against its strategic goals, objectives and targets for the 2023-2027 period (Table 25). Include applicable time period. Although the Department has implemented many of the activities indicated, there are some activities that were not undertaken due to resource constraints. Furthermore, additional activities will be undertaken during the 2026/27 financial year i.e. the final year of the IWMP cycle. The additional activities will be updated and included in the final analysis.

Table 25: Implementation of the WC IWMP 2023-2027

WC IWMP 2023-2027 GOALS	OUTPUT INDICATORS ACHIEVED (NO.)	OUTPUT INDICATORS ACHIEVED (%)
Goal 1: Strengthened education, capacity, awareness and advocacy towards Integrated Waste Management.	3/4	75%
Goal 2: Improved integrated waste management planning and implementation for efficient waste services, technologies and infrastructure.	18/21	86%
Goal 3: Effective and efficient utilisation of resources.	15/22	68%
Goal 4: Improved compliance with the environmental regulatory framework.	5/7	71%
Overall IWMP Implementation	**41/54**	**76%**

A list of the achievements and activities undertaken by the Department is provided:

5.2 Goal 1: Strengthened Education, Capacity, and Advocacy Towards Integrated Waste Management.

- Landfill operator training was conducted in 2023/24. Capacity-building workshops in 2023 and 2024 focused on informal settlement waste services, funding mechanisms, and municipal finance. Eight WCRAG knowledge-sharing sessions promoted collaboration on recycling, EPR, and separation-at-source.
- Multiple waste minimisation workshops were held with municipalities and communities (Breede Valley, Elands Bay, Vredendal, Cape Agulhas, Knysna),(Figure 39) as well as support to Oudtshoorn Municipality for its first recycling programme.

- The Department conducted organic waste work in the West Coast District with the aim of collaborating with role players. Organic waste awareness sessions promoted food waste diversion and partnerships.
- The development of the Strategy to Reduce Illegal Dumping (STRID) is underway to guide municipalities on prevention measures. The STRID will be finalised in the 2025/26 financial year.
- Co-design workshops in Breede Valley, Elands Bay, Vredendal, and Knysna fostered community-led recycling and waste management solutions.

Figure 39: Capacity-building at Cape Agulhas Municipality

5.3 Goal 2: Improved Integrated Waste Management Planning and Implementation for Efficient Waste Services, Technologies and Infrastructure

- During the reporting period, five (12) draft IWMPs were reviewed and three (4) — for Cape Agulhas, Swellendam, Stellenbosch and Theewaterskloof — were endorsed. Six (6) WMOFs were hosted (March, August, November 2023) to strengthen municipal coordination and information sharing. Annual reports from five (8) municipalities were monitored, and the waste reporting framework is under review to improve data quality. The IWMP guideline update was not undertaken.
- Three (3) WMOFs were held to support WMO designations, and reminders were issued to municipalities. The Municipal Recognition Programme was implemented, with 2023 and 2024 awards completed. Waste collection data was compiled using the latest IDP and Municipal Annual report for the State of Waste Report, and topographical surveys were completed for seven (7) landfill sites (Phase 1), with Phase 2 planned for 2024.
- Engagement with the hospitality sector has not yet commenced. Within the industry and SMME sector, eight (8) Western Cape Recycling Action Group (WCRAG) sessions were held, focusing on topics such as recycling, Extended Producer Responsibility (EPR), and collaboration with Producer Responsibility Organisations (PROs). The 9th and 10th annual Industry Waste Management Forum was successfully convened, providing a platform for industry stakeholders to share progress and challenges in sustainable waste practices.

- Progress on EPR implementation included a dedicated workshop and a partnership with Polyco, which supported waste collectors through the provision of 50 trolleys and personal protective equipment (PPE) to enhance safe and efficient recyclables collection. EPR implementation is also driven through the Department's various governance platforms.
- Technology-sharing was facilitated through discussions in various governance forums, while regional cooperation with municipalities remains ongoing to strengthen collective waste management efforts. Regional cooperation and regionalisation of waste management services is ongoing. The regionalisation guideline has not yet been initiated, but remains a planned activity. An update to the infrastructure assessment is scheduled for 2024/25 with a budget allocation of R600 000.
- Support for municipalities through the Municipal Infrastructure Grant (MIG) and yellow fleet interventions is ongoing, with twelve (12) municipalities receiving funding assistance.
- Strong progress was achieved in IPWIS verification, with 41 verifications completed, exceeding the annual target of 18 on average. A total of ten (10) IPWIS training sessions were conducted between 2023 and 2025 to strengthen municipal data reporting and system use. System maintenance and Oracle migration fixes are ongoing to enhance IPWIS functionality and data reliability. The 2022 and 2023 State of Waste Report was approved, reflecting a 32% provincial waste diversion rate, demonstrating progress toward waste reduction and circular economy goals.

5.4 Goal 3: Effective and Efficient Utilisation of Resources

- Progress under this objective was limited but foundational, with most interventions being demand-driven or pending implementation. No engagements were undertaken with the private sector for waste beneficiation. Fifteen female youths from crime-ridden areas were taken through a skills training programme to promote the repair and refurbishment sector (Figure 40). Although no WCRAG seminars were implemented during the reporting period, three online knowledge-sharing and one in-person workshop were conducted, which included Extended Producer Responsibility (EPR) initiatives. No formal collaborations with SALGA took place as yet.
- A significant achievement was the online knowledge-sharing workshop on 2 November 2023, which focused on organic waste diversion. The session, attended by both regional and international participants (including KZN Warwick Zero Waste and GIZ – Deutsche Gesellschaft für International Zusammenarbeit GmbH), supported the Province's goal of achieving 100% diversion of organic waste from landfill by 2027. The Department also conducted a presentation on organic waste at the SALGA Provincial Working Group attended by councillors well as an online organic waste workshop focusing on food waste. Assisted Witzenberg Municipality with facilitating a partnership with Lumbri Composting, Tulbagh to take green waste from the area and contribute to organic waste diversion in the municipality.
- Another notable accomplishment was the waste minimisation and co-design workshop hosted in Vredendal (Matzikama Municipality) on 20–21 February 2024. This event, attended by SMMEs, waste pickers, councillors, municipal officials, and PRO Petco, facilitated knowledge-sharing and connected local enterprises with producer responsibility organisations for future support. The Department invested R21,495.03 in this initiative. Hosted a workshop to facilitate the implementation of EPR by municipalities. The aim of the workshop was to determine how to accept the EPR assistance without infringing

the Municipal Financial Management Act by signing a MOU with one and not the other PRO / EPR scheme. Collaborated with Polyco on facilitating the provision of 50 trolleys and PPE to waste pickers at 5 buyback centres.

- The Department continued to support Wastepreneur integration through follow-up engagements with four municipalities to assess project progress and implementation challenges. Significant progress was made with the Material Recovery Park and composting and food garden project, which now employs seven waste pickers. Initiated in 2022/23, the project includes the separation of kitchen waste from about 100 households in the Zwelitsha informal area (approximately 600–800 households total) and supports an adjacent seven-hectare organic vegetable farm, creating a local circular waste-to-resource system.
- A skills training programme was also implemented for 15 young women from vulnerable communities, equipping them with waste management and recycling skills and enabling placement within EPR schemes for further training.
- Procurement strategies were developed for four municipalities. Cape Agulhas Municipality (CAM) implemented a composting and food waste project and began developing its MR Park; Drakenstein achieved partial implementation due to existing waste picker contracts; and Witzenberg's planned forum is still in early stages. Two municipalities have yet to fully implement their strategies.
- The Department made significant progress in advancing organic waste diversion, EPR implementation, and alternative waste treatment technologies. To support the 100% organic waste diversion by 2027 target, the Department hosted two online organic waste workshops—on 2 November 2023 and 20 November 2024—focusing on municipal diversion strategies, food waste reduction, and retail best practices towards zero organic waste. Presentations were also delivered at the SALGA Provincial Working Group, enhancing councillor awareness and intergovernmental collaboration on organic waste management.
- The implementation and monitoring of Extended Producer Responsibility (EPR) were strengthened through the Industry Waste Management Forum, Waste Management Officers' Forum (WMOF), and Waste Recycling Action Group (WRAG). An EPR workshop was held to help municipalities understand how to accept EPR support in line with the Municipal Financial Management Act. The Department also collaborated with Polyco to distribute 50 trolleys and PPE to waste pickers at five buy-back centres, and hosted a WCRAG workshop to promote EPR uptake and track progress.
- Awareness on absorbent hygiene product (AHP) beneficiation was promoted through WRAG, WMOF, and the AHP Task Team, while inputs were provided to the Western Cape Sanitary Dignity Programme, advising on sanitary waste management in schools.
- In driving technological innovation, eight alternative waste treatment facilities were licensed and commissioned, including three Waste-to-Energy (two pyrolysis) plants, one steel foundry, one brick-making facility using plastic waste aggregates, two recycling plants, and one Refuse-Derived Fuel (RDF) facility. These facilities contribute directly to landfill diversion and the transition to resource-efficient waste management technologies.
- Two further milestones were achieved:
    - Development of the Action Plan and Standard Operating Procedure for the Sustainable Management of Schools' Chemicals, in collaboration with the Western

Cape Education Department (WCED), to ensure safer handling, storage, and disposal of laboratory chemicals.

- Preparatory work for the safe management of agrochemicals, scheduled for implementation in the 2025/26 financial year.

- Engagement with the private sector regarding the beneficiation of large waste generators, collaboration with SALGA wrt EPR implementation, conducting a reverse logistical study for the diversion of rural waste, construction waste, Textile waste, green procurement, and cleaner production initiatives were not implemented as yet.

Figure 40: Repair and refurbishment skills training programme attendees

5.5 Goal 4: Improved Compliance with Environmental Regulatory Framework.

- The Department made strong progress in strengthening compliance and enforcement of waste management legislation through audits, site visits, and enforcement actions. A total of 48 waste audits were conducted across various facilities, ensuring continuous monitoring of compliance performance. Promotional compliance visits were carried out at industries in sectors such as textiles, chemicals, personal care, packaging, and engineering to promote regulatory awareness and voluntary compliance.

- In response to identified non-compliances, 42 enforcement actions were taken, including 18 pre-directives, 10 pre-compliance notices, 10 directives, and 4 compliance notices issued to municipalities, ensuring corrective action and improved adherence to environmental laws.

- The Strategy to Reduce Illegal Dumping remains in draft form, with stakeholder engagements and preparatory steps underway for its finalisation and rollout in 2025/26. Overall, these efforts reflect a proactive and structured approach to compliance monitoring and enforcement in the province.

- The Department continued to advance the rehabilitation and closure of WMFs and the management of contaminated land. A total of nine waste disposal facilities were decommissioned, with variation licenses issued to ensure compliance with environmental and legislative requirements.
- Monitoring of contaminated land cases remained ongoing, with remediation orders issued following risk assessments. The Department reviewed monitoring reports to track compliance and initiated enforcement actions where reports were not submitted or remediation was inadequate.
- While the Guideline for the Management of Contaminated Land could not be finalised due to budget constraints, the Department has begun developing an internal Standard Operating Procedure (SOP) for land remediation under Part 8 of NEM:WA, planned for completion in the 2024/25 financial year.

6 Gaps and Needs Analysis

The aim of the gaps and needs analysis is to compile a summary of identified waste management gaps and needs in the province that must be addressed to achieve the desired-end state for waste management.
Sources of gaps include:

- An analysis of the extent of implementation of the WC IWMP 2023-2027.
- Situational Analysis;
- Consultation and engagement with internal and external stakeholders **(currently ongoing).**

6.1 Actions not Completed from 2023-2027 WC IWMP:

The following activities were not implemented in the WC IWMP 2017-2022 due to constrained budgets, limited human resources and some projects being set out for the medium- and long-term. Activities that are still relevant will be included in the WC IWMP 2027-2032 Implementation Plan.

- Hospitality sector engagement has not yet started.
- Textile-waste assessment to be done,
- Green procurement for targeted sectors, and
- Cleaner-production initiatives with targeted sectors
- Reverse-logistics study (rural municipalities)
- Construction waste
- Private-sector engagements on waste beneficiation of large waste generators (IPWIS)

6.2 Gaps identified from the Situational Analysis and Stakeholder Engagement

Table 26 provides a summary of the gaps identified thus far. Additional gaps will be added following the public participation process.

Table 26: Summary of waste management gaps

THEME	GAPS	NEEDS
Waste Information	• Inconsistent municipal reporting on IPWIS/SAWIS; • Incomplete data causing inaccuracies.	• Increased Human Resources for Waste Information Management at municipalities • Regular training for municipal staff on data capturing, reporting procedures • Enforcing SAWIS/IPWIS registration requirements and monitor compliance. • Routine verification audits • Facilities must ensure quality control
Waste Education and Awareness	• Low consumer awareness and understanding of separation at source	• Clear, consistent public messaging on separation at source
		• Behaviour-change-focused education materials tailored to different household types and literacy levels
		• Visual and multilingual information tools to improve understanding and compliance
	• Limited municipal capacity to design and implement education and awareness campaigns	• Dedicated funding and resources for ongoing waste education and awareness initiatives
		• Training and capacity-building for municipal officials on community engagement and behaviour change
		• Partnerships with NGOs, community-based organisations, and the private sector to extend outreach and delivery capacity

	• Fragmented or ineffective communication methods limiting public reach	• Use of multiple communication channels, including community outreach, schools, social media, local radio, and print media
	• Separation-at-source messaging not sufficiently embedded in local institutions and programmes	• Integration of separation-at-source messaging into schools, community organisations, and local programmes
	• Low public participation and sustained behaviour change	• Incentive-based approaches to encourage participation, such as recognition, rewards, or feedback mechanisms
Waste Collection and Transportation	• Widespread illegal dumping.	• Increased enforcement capacity • Consistent community education and anti-dumping awareness campaigns • Provision of adequate disposal alternatives
	• Decline in provincial collection rates • Access challenges in informal/rural areas; • Aging fleets; • WC average coverage 89% vs national targets (95% urban / 75% rural). • Inadequate refuse removal in rural/informal areas; CKDM dropped to 81%.	• Dedicated funding for maintenance and replacement of equipment. • Monitoring and support systems from the province for underperforming municipalities. • Tailored waste-service delivery models co-designed with communities. • Partnerships with local waste pickers, cooperatives, or small contractors • Fleet replacement programmes with multi-year budget commitments • Increased allocation for fleet maintenance and repair workshops • Backup/fill-in vehicles to prevent service disruptions • Targeted interventions in low-coverage municipalities to close the gap to national standards]

		• Strengthening of local waste-management budgets and revenue stream
Waste Circular Economy	• EPR schemes in place but free riders remain.	• Register of producers including compliant vs non-compliant producers • Stricter enforcement actions are needed to deter non-compliance • Partnerships with PROs to support repair networks
	• In relation to EPR, the constraint posed by the Municipal Finance Management Act (MFMA) and municipal supply chain processes, which complicate formal processes.	• Clear, legally compliant procurement pathways and operational guidelines that allow municipalities to collaborate with EPR stakeholders while adhering to MFMA and municipal supply chain requirements
	• Repair & refurbishment sector underdeveloped outside CoCT.	• Skills development and training programmes
	• WtE projects stalled due to cost, licensing, and social acceptance.	• National WtE standards and best-practice guidance • Community engagement on WtE and social acceptance strategies
Waste Management Infrastructure	• Insufficient landfill airspace; • Delays in regional landfill projects. • Limited waste treatment facilities with reliance on landfilling. • Limited landfill airspace (<15 years);	• Development of new permitted landfill cells or expansion of existing sites. • Acceleration of alternative waste-treatment technologies to reduce reliance on landfilling • Improved waste diversion programmes (recycling, composting, reuse). • Long-term airspace planning and modelling across districts. • Strengthened compliance with compaction, covering, and operational best practices to slow airspace depletion.

		• Improved coordination between municipalities involved in regional initiatives • Securing sustainable funding and procurement mechanisms. • Investment in waste-treatment infrastructure (MRFs, composting, WtE) • Public-private partnerships to drive technology deployment • Integration of informal-sector recyclers into formal treatment value chains. •
	• Lack of priority given to compliance at Waste Management Facilities (WMFs)	• Improved compliance with waste management legislation and license conditions.
	• Poor conditions at Waste Management Facilities e.g. broken fences; lack of stormwater channels; methane >5% detected; no gas recovery systems.	• Increased budget allocation for facility upkeep and compliance. • Staff training on landfill operational standards • Installation of landfill gas monitoring and recovery systems. • Infrastructure and security upgrades
Governance and Institutional Arrangements	• Inconsistent IWMP updates; seven municipalities have invalid IWMPs.	• Monitoring and tracking of IWMP development and validity status
	• Weak alignment between municipal IWMPs, IDPs, budgets and provincial waste targets	• Update and implement IWMPs aligned to Integrated Development Plans (IDPs), Service Delivery Budget Implementation Plans (SDBIPs) and Medium-Term Revenue and Expenditure Frameworks (MTREFs).
	• Lack of standardisation in municipal IWMP annual reporting	• Standardised templates and guidance for IWMP annual reporting

	• Not all municipalities have designated Waste Management Officers (WMOs)	• Municipalities to ensure WMO designation and clarify roles and responsibilities
	• Shortage of skilled municipal waste management staff and heavy reliance on consultants	• Targeted capacity-building and accredited waste management training
	• Municipal waste by-laws not fully aligned with the National Environmental Management: Waste Act (NEM:WA)	• Municipal engagement to review, update, and align waste by-laws with NEM:WA
Waste Generation and Diversion	• Total waste: 3.6M tonnes (2023); 8% increase since 2018. • Diversion rate: 30% (2023) vs 40% target; organic waste diversion only 30%. • Diversion improved (26% → 33%) but below 40% target; • Organic diversion dropped to 25%; • Limited implementation of Organic Waste Diversion Plans.	• Stronger waste prevention and minimisation programmes • Behaviour-change and public awareness campaigns • Incentives for waste-reducing product design and packaging • Expansion of recycling infrastructure and accessible drop-off facilities • Support for informal waste pickers through integration programmes • Market development for recyclables • Scaled-up organic waste treatment infrastructure • More separation at source programmes • Capacity building within municipalities • Public–private partnerships (PPPs)
	• Hazardous waste decreased by ~50%, but still poorly managed.	• Improved hazardous waste tracking and compliance systems.
Waste Management Finances	• Declining municipal operational budgets, combined with population growth and rising service demand	• Improved budgetary and planning tools that integrate population growth, urban expansion, and waste generation trends

	● Limited access to capital funding for waste management infrastructure	● Access to alternative capital financing mechanisms, including blended finance, grants, and public–private partnerships (PPPs)
	● Tariffs not reflecting the true cost of waste management services	● Technical support to improve financial planning, tariff setting, and cost recovery mechanisms within municipalities
	● Waste management budgets not ring-fenced, resulting in under-investment	● Ring-fenced waste management budgets at municipal level
	● Provincial Waste Management Directorate underfunded, with staff capacity at approximately 41%	● Additional funding to strengthen institutional capacity at provincial level
	● Reliance on limited human resources for financial management and reporting	● Digital systems and automation to reduce reliance on constrained human resources
	● Poor data quality and unreliable Waste Information System (WIS) data limiting investment readiness	● Improved data quality, verification, and reporting to support funding applications and investment readiness
	● Insufficient municipal capacity to collect, manage, and submit accurate financial and waste data	● Capacity-building and system support for municipalities to ensure accurate and timely data submission
	● Fragmented service delivery increasing per-unit service costs	● Shared services, regionalisation, and economies of scale to lower per-unit waste management costs
Human Rights and Inclusivity	● Gender mainstreaming remains weak in the waste sector (e.g. only 17% of WMOs are women)	● Targeted recruitment, mentorship, and leadership development for women in technical and management roles
		● Collection and use of sex-disaggregated data to inform planning and monitoring

	• Women-led enterprises face barriers to growth and market access	• Targeted support for women-led recycling enterprises
	• Women in informal waste work experience greater income insecurity, social vulnerability, harassment, and exposure to violence	• Gender-responsive waste policies and facilities
		• Safe, well-lit, and secure work environments
	• Waste pickers face unsafe working conditions, health risks, income insecurity, slow integration, and exclusion from municipal decision-making	• Formal recognition of waste pickers as economic actors and their inclusion in municipal recycling and EPR systems
		• Improved occupational health and safety measures, including access to protective equipment and safer working environments
		• Capacity-building and organisational support for waste picker cooperatives or associations
		• Better coordination between municipalities, community structures, and informal workers
	• Lack of access to basic services at waste work sites (water, sanitation, shelter), particularly affecting informal workers	• Access to basic services at work sites, including water, sanitation, and shelter
	• Young people from low-income communities enter the informal recycling sector due to limited education and employment opportunities	• Skills development and accredited training pathways for youth linked to formal waste management and circular economy jobs
		• Entry-level employment, internships, and apprenticeship programmes targeting youth from low-income communities
		• Support for innovation, small enterprises, and green jobs within the waste sector

	People with disabilities are excluded from formal waste management opportunities due to physical barriers and discriminatory practices	Partnerships with disability organisations to design inclusive programmes and employment pathways
		Disability awareness and anti-discrimination training within waste institutions and service providers
	Low-income and marginalised communities experience disproportionate pollution and environmental health impacts	Prioritisation of pollution reduction and environmental risk mitigation in vulnerable communities
	Informal settlements experience inconsistent waste collection, leading residents to rely on informal recycling or waste picking for survival	Improved and regularised waste collection services in informal settlements
		Community-based waste management approaches that combine service provision with local job creation

6.3 Prioritisation of Needs Based on The Gap Analysis

Once all the waste management gaps have been identified, a list of prioritised needs will be compiled.

7 References

Alam, F., Salam, M., Bo, D., Vambol, V., Ullah, W. & Riaz, D. (2025) *Assessing municipal solid waste generation, management practices, and health impacts: towards sustainable waste management and environmental protection*. *Environment, Development and Sustainability*. https://doi.org/10.1007/s10668-025-06077-8

COGTA (2023) *Profile and Analysis: District Development Model – Garden Route District Municipality*. Available at: https://www.cogta.gov.za/wp-content/uploads/2023/11/DistrictProfile_GARDENROUTE19072020-1.pdf (Accessed: 23 October 2023).

DEA&DP (2025–2030) *Provincial Strategic Plan 2025–2030*.

Department of Environmental Affairs and Development Planning (DEA&DP) (2019) *State of Waste Management Report*. Cape Town: DEA&DP.

Department of Environmental Affairs and Development Planning (DEA&DP) (2020) *State of Waste Management Report*. Cape Town: DEA&DP.

Department of Environmental Affairs and Development Planning (DEA&DP) (2021) *State of Waste Management Report*. Cape Town: DEA&DP.

Department of Environmental Affairs and Development Planning (DEA&DP) (2022) *State of Waste Management Report*. Cape Town: DEA&DP.

Department of Environmental Affairs and Development Planning (DEA&DP) (2023) *State of Waste Management Report*. Cape Town: DEA&DP.

DEA&DP (2024) *State of Environmental Outlook Report 2024* (Waste, Summary and Outlook Chapters).

DEA&DP (2024) *Waste Collection Services*.

Department for International Development (DFID) (2015) *Growth: Building Jobs and Prosperity in Developing Countries*. London: DFID.

Department of Water and Sanitation (no date) *Water Services Knowledge System*. Available at: https://ws.dws.gov.za/wsks/DefaultList.aspx?SDDPLD=1%3b1%3b1%3b0%3b10%3b1 (Accessed: 26 August 2025).

Ellen MacArthur Foundation (2016) *Towards a Circular Economy: Business Rationale for an Accelerated Transition*. Cowes, UK: Ellen MacArthur Foundation.

Everett, E. (2022) 'Combining the Circular Economy, Doughnut Economy, and Permaculture to Create a Holistic Economic Model for Future Generations', *Environmental Sciences Proceedings*, 15, p.19. https://doi.org/10.3390/environsciproc2022015019

GAIA (2021) *Zero Waste Systems Create More and Better Jobs than Landfilling and Incineration*. Available at: https://www.no-burn.org/wp-content/uploads/2021/11/ZeroWasteJobs-Infographic-1.pdf

Godfrey, L., Strydom, W., Muswema, A., Oelofse, S., Roman, H. & Mange, M. (2014) *Understanding the South African Waste Sector: The Economic and Employment Opportunities it Provides*. Proceedings of the 20th WasteCon Conference, 6–10 October 2014, Somerset West, Cape Town. Available at: https://iwmsa.co.za/sites/default/files/downloads/Godfrey%2C%20L.%20et%20al%2020.pdf

Grewan, K. & Trois, C. (2023) *Review of Waste to Energy Policies in South Africa and International Comparisons*. Paris: IEA Bioenergy.

Group of Twenty (G20) (2025) *G20 South Africa Summit: Leaders' Final Declaration, 22–23 November 2025*. Available at: https://g20.org/wp-content/uploads/2025/11/V2-22-November-Final-G20-South-Africa-Summit-22-23-November-.pdf (Accessed: 28 November 2025).

ILSR (2002) *Recycling Means Business*. Available at: https://ilsr.org/articles/recycling-means-business/

Kaur, R., Kaur, K. & Kaur, R. (2018) 'Menstrual hygiene, management, and waste disposal: practices and challenges faced by girls/women of developing countries', *Journal of Environmental and Public Health*, pp. 1–9. https://doi.org/10.1155/2018/1730964

Li, Y., Zhang, S. & Liu, C. (2022) 'Research on greenhouse gas emission characteristics and emission mitigation potential of municipal solid waste treatment in Beijing', *Sustainability*, 14(14), p. 8398. https://doi.org/10.3390/su14148398

Matenda, F.R., Raihan, A., Zhou, H. & Sibanda, M. (2024) 'The influence of economic growth, fossil and renewable energy, technological innovation, and globalisation on carbon dioxide emissions in South Africa', *Carbon Research*, 3, p.69. https://doi.org/10.1007/s44246-024-00155-8

Okorondu, J.N., Agidi, V.A., Nwaogu, C., Diagi, B.E., Ajiere, S.I. & Alabi, B. (2024) *Solid Waste Management Practices in Sub-Saharan Africa and Its Impact on Climate Change and Planetary Health*.

One Planet Network (no date) *Our Future: Sustainable Consumption and Production*. Available at: https://www.oneplanetnetwork.org/SDG-12/sustainable-consumption-and-production (Accessed: 4 July 2025).

One Planet Network (2023) *Rethinking, Extending, Re-using: Harnessing Digital Technologies for the Circular Economy*. Available at: https://www.oneplanetnetwork.org/SDG-12/sustainable-consumption-and-production (Accessed: 4 July 2025).

Osabohien, R., Zogbassé, S., Jaaffar, A.H., Idowu, O.O. & Al-Faryan, M.A.S. (2025) 'Renewable energy, carbon footprints, natural resources depletion and economic growth in Africa', *International Journal of Energy Sector Management*, 19(3), pp. 667–690. https://doi.org/10.1108/IJESM-07-2024-0030

Prata, J.C., da Costa, J.P., Lopes, I., Andrady, A.L., Duarte, A.C. & Rocha-Santos, T. (2021) 'A One Health perspective of the impacts of microplastics on animal, human and environmental health', *Science of the Total Environment*, 777, 146094. https://doi.org/10.1016/j.scitotenv.2021.146094

Provincial Treasury (2024) *Provincial Economic Review and Outlook 2024*. Cape Town: Western Cape Government.

Raphela, T., Manqele, N. & Erasmus, M. (2024) 'The impact of improper waste disposal on human health and the environment: a case of Umgungundlovu District in KwaZulu-Natal Province, South Africa', *Frontiers in Sustainability*, 5:1386047. https://doi.org/10.3389/frsus.2024.1386047

Republic of South Africa (2012) *National Development Plan*. Pretoria: Government of South Africa.

Saha, S.K. & Saha, J. (2024) 'The transition in economic theory from linear to circular for sustainability: a case study', *International Journal for Multidisciplinary Research (IJFMR)*, 6(4).

Statistics South Africa (2024) *Sustainable Development Goals: Country Report 2023*. Pretoria: Statistics South Africa.

Statistics South Africa (2024) *Mid-year Population Estimates*. Statistical Release P0302. Pretoria: Statistics South Africa.

Statistics South Africa (2025) *Mid-year Population Estimates*. Statistical Release P0302. Pretoria: Statistics South Africa.

Statistics South Africa (2024) *Migration Profile Report for South Africa: A Country Profile 2023*. Report No. 03-09-17. Pretoria: Statistics South Africa.

Statistics South Africa (2025) *General Household Survey 2024*. Statistical Release P0318. Pretoria: Statistics South Africa.

South African Local Government Association (SALGA) (no date) *Municipal Waste-to-Energy Projects: Innovative Approaches to Convert Waste into Renewable Energy Sources*. Pretoria: SALGA.

United Nations Economic Commission for Africa (no date) *Africa Review Report on Sustainable Consumption and Production*.

United Nations Environment Programme (2010) *Waste and Climate Change: Global Trends and Strategy Framework*. Available at: https://wedocs.unep.org/bitstream/handle/20.500.11822/8648/Waste&ClimateChange.pdf?sequence=3

Wahlund, M. & Hansen, T. (2022) 'Exploring alternative economic pathways: a comparison of foundational economy and Doughnut economics', *Sustainability: Science, Practice and Policy*, 18(1), pp. 171–186. https://doi.org/10.1080/15487733.2022.2030280

WCG (2024) *Municipal Economic Review & Outlook 2024–25: Cape Metro*.

WESGRO (2024a) *Cape Winelands District Factsheet*. Available at: https://www.wesgro.co.za/uploads/files/Wesgro-Research_Cape-Winelands-District-Factsheet_2024.10.pdf (Accessed: 23 October 2025).

WESGRO (2024b) *Central Karoo District Factsheet*. Available at: https://www.wesgro.co.za/uploads/files/Wesgro-Research_Central-Karoo-District-Factsheet_2024.09.pdf (Accessed: 23 October 2025).

WESGRO (2024c) *Garden Route District Factsheet*. Available at: Wesgro-Research_Garden-Route-District-Factsheet-2024_2024.08.pdf (Accessed: 23 October 2025).

WESGRO (2024d) *Overberg District Factsheet*. Available at: Wesgro-Research_Overberg-District-Factsheet_2024.08.pdf (Accessed: 23 October 2025).

WESGRO (2024e) *West Coast District Factsheet*. Available at: https://www.wesgro.co.za/uploads/files/Wesgro-Research_West-Coast-District-Factsheet_2024.09.pdf (Accessed: 23 October 2025).

Western Cape Government (2023) *Growth for Jobs Strategy 2035*.

WHO (2014) *Self-management of Waste from Health Care Activities*. 2nd edn. Available at: https://iris.who.int/bitstream/handle/10665/85349/9789241548564_eng.pdf?sequence=1

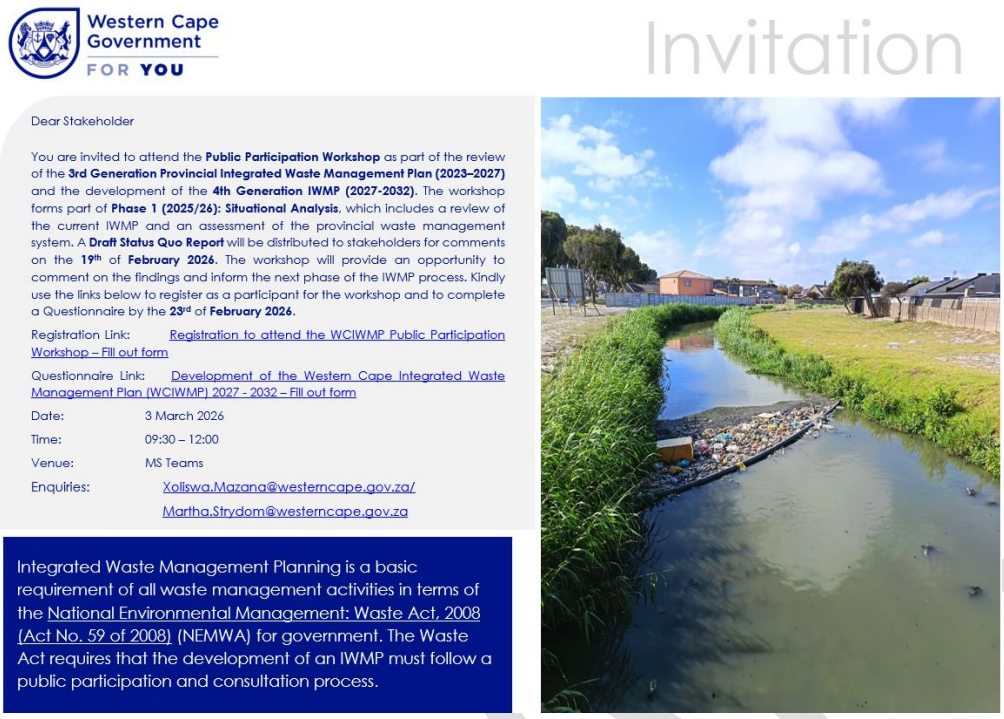
World Bank (2018) *South Africa Poverty and Inequality Assessment*. Washington, DC: World Bank. Available at: https://documents1.worldbank.org/curated/en/530481521735906534/pdf/124521-REV-OUO-South-Africa-Poverty-and-Inequality-Assessment-Report-2018-FINAL-WEB.pdf (Accessed: 18 July 2025).

Zengi, A.C. & Çakir, M. (2024) 'Promoting sustainable consumption and production patterns in developing countries: challenges, opportunities and strategies', in *Artificial Intelligence and Sustainability*. Paradigma Yayinevi, pp. 249–262.

Zwane, S. (2024) *Draft Waste Economy Master Plan (WEMP)*. Presentation at the 10th Annual Western Cape Industry Waste Management Forum, August 2024.

Appendix A: Public Participation Report

A 1: Workshop invitation distributed to stakeholders on the stakeholder database



Western Cape Government
FOR YOU

Invitation

Dear Stakeholder

You are invited to attend the **Public Participation Workshop** as part of the review of the **3rd Generation Provincial Integrated Waste Management Plan (2023–2027)** and the development of the **4th Generation IWMP (2027-2032)**. The workshop forms part of **Phase 1 (2025/26): Situational Analysis**, which includes a review of the current IWMP and an assessment of the provincial waste management system. A **Draft Status Quo Report** will be distributed to stakeholders for comments on the **19th** of **February 2026**. The workshop will provide an opportunity to comment on the findings and inform the next phase of the IWMP process. Kindly use the links below to register as a participant for the workshop and to complete a Questionnaire by the **23rd** of **February 2026**.

Registration Link: Registration to attend the WCIWMP Public Participation Workshop – Fill out form

Questionnaire Link: Development of the Western Cape Integrated Waste Management Plan (WCIWMP) 2027 - 2032 – Fill out form

Date: 3 March 2026

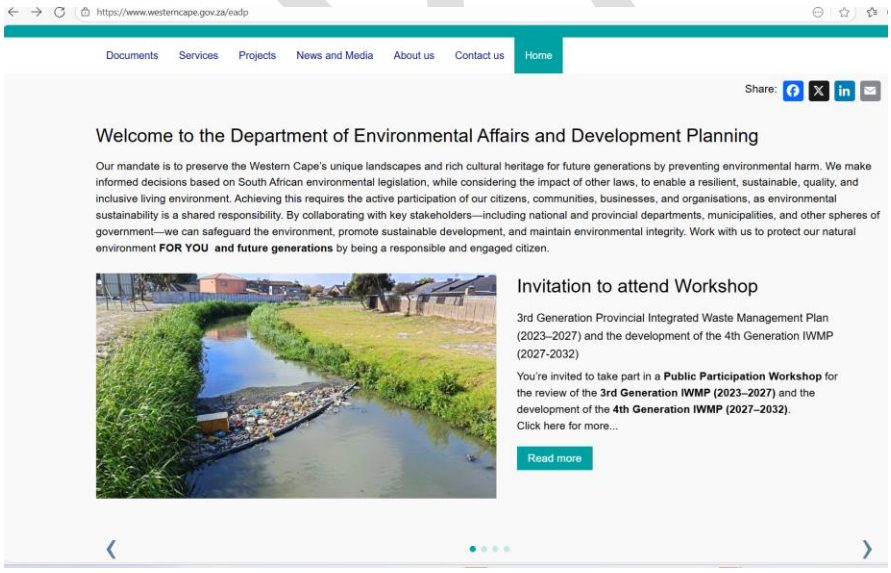
Time: 09:30 – 12:00

Venue: MS Teams

Enquiries: Xoliswa.Mazana@westerncape.gov.za/ Martha.Strydom@westerncape.gov.za

Integrated Waste Management Planning is a basic requirement of all waste management activities in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEMWA) for government. The Waste Act requires that the development of an IWMP must follow a public participation and consultation process.

A 2: Workshop invitation placed on the departmental website



https://www.westerncape.gov.za/eadp

Documents | Services | Projects | News and Media | About us | Contact us | Home

Share:

Welcome to the Department of Environmental Affairs and Development Planning

Our mandate is to preserve the Western Cape's unique landscapes and rich cultural heritage for future generations by preventing environmental harm. We make informed decisions based on South African environmental legislation, while considering the impact of other laws, to enable a resilient, sustainable, quality, and inclusive living environment. Achieving this requires the active participation of our citizens, communities, businesses, and organisations, as environmental sustainability is a shared responsibility. By collaborating with key stakeholders—including national and provincial departments, municipalities, and other spheres of government—we can safeguard the environment, promote sustainable development, and maintain environmental integrity. Work with us to protect our natural environment **FOR YOU and future generations** by being a responsible and engaged citizen.

Invitation to attend Workshop

3rd Generation Provincial Integrated Waste Management Plan (2023–2027) and the development of the 4th Generation IWMP (2027-2032)

You're invited to take part in a **Public Participation Workshop** for the review of the **3rd Generation IWMP (2023–2027)** and the development of the **4th Generation IWMP (2027–2032)**.
Click here for more...

Read more

Appendix B: List of Waste Management Officers

Area/Municipality		Designated in terms of the Waste Act	Name
Province	Western Cape (DEA&DP)	Y	Saliem Haider
Cape Winelands District Municipality	Cape Winelands District	Y	Christo Swart
	Drakenstein	Y	Thys Serfontein
	Stellenbosch	Y	Clayton Hendricks
	Langeberg	Y	Glenn Slingers
	Breede Valley	N	Saskia Langner / Bunung
	Witzenberg	Y	Patricia Claasen
Central Karoo District Municipality	Central Karoo District	Y	Leon Crafford
	Laingsburg	Y	Johan Mouton
	Prince Albert	Y	Ashley America
	Beaufort West	Y	Vuyokasi Ruiters
Garden Route District Municipality	Garden Route District	Y	Johan Gie
	Kannaland	Y	Hendrik Barnard
	Oudtshoorn	N	Rodwell Witbooi
	George	Y	Sivuyile Mtila
	Knysna	N	Ezzard McKenzie
	Bitou	Y	Randall Bower
	Hessequa	Y	Ruschan Manho
	Mossel Bay	Y	Warren Manual
	Overberg District	Y	Francois Kotze

Overberg District Municipality	Overstrand	Y	Craig Mitchell
	Swellendam	Y	Johan van Niekerk
	Theewaterskloof	N	Jeremy Prins
	Cape Agulhas	Y	Walter Linnert
West Coast District Municipality	West Coast District	N	Chris Koch
	Swartland	Y	Peter Marais
	Saldanha	Y	David Wright
	Bergriver	Y	Jamie-lee van Zyl
	Cederberg	N	Elton Claasen
	Matzikama	N	Immaneul Smith
Metropolitan Municipality	City of Cape Town	Y	Rustim Keraan

Email: **August.Hoon@westerncape.gov.za**

Tel: +27 21 483 2712

Department of Environmental Affairs and Development Planning

Chief Directorate: Environmental Quality

Directorate: Waste Management

www.westerncape.gov.za

Department of Environmental Affairs and Development Planning: General Enquiries

Email: **enquiries.eadp@westerncape.gov.za**

Tel: +27 21 483 4091 **Fax:** +27 21 483 3016

Western Cape Government