

Western Cape Government

Environmental Affairs and Development Planning

BETTER TOGETHER.

STATE OF WASTE MANAGEMENT IN WESTERN CAPE IWMSA BREAKFAST SEMINAR

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WCG Covid waste management response





- Coordination of WCG Covid waste management response:
 - Established Waste Workstream Platform regular meetings
 - WhatsApp group

• Guidance in the form of waste management guidelines and protocols:

- Households
- Businesses
- Health care facilities
- Vaccination waste

Technical support

- Waste worker survey;
- Compliance monitoring of health care facilities and treatment facilities and capacity
- Facilitating waste picker support.



Monitoring of HCRW treatment capacity





'Waste is just a resource that's in the wrong place.'

WC 2nd generation Integrated Waste Management Plan (2017)

Guide waste management in the WC

Vision

•Building a resource-efficient society that ensures a clean environment.



Western Cape Integrated Waste Management Plan

2017 - 2022

March 2017



Three effective functioning waste governance platforms









Designation of Waste Management Officers

Status of designated Waste Management Officers (ito Sect 10 of NEMWA)





WC Waste Management Facilities Compliance Status

Compliance status of waste disposal facilities in the Western Cape 2020





State of waste management in WC





State of municipal waste management by-laws in WC



Status of municipal waste by-laws in the WC (alignment with NEMWA)



WC State of waste

WC Availability of landfill airspace





WCG response to landfill airspace challenges

Integrated approach

- •WCG Policy to promote regional cooperation approach
- Systems approach
- Aggressive waste diversion, recover, reuse, repurposing, recycling and beneficiation of waste material
- Stimulate waste economy (secondary resource economy) & job creation
- Focus on separation at source
- Promote uptake from alternative waste treatment and beneficiation technology







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Waste-by-rail

Waste diversion in the WC 2020



Status of organic waste diversion plans



Organic waste diversion status WC 2020



State of waste management in WC

Alternative waste treatment







INSECO Feeding the Future











Municipalities with S@S





Regional cooperation approach in waste management

Regional cooperation

- Where different parties/municipalities/districts work together;
 - on all the aspects (services, resources, facilities and governance) of integrated waste management service delivery.
- Governments around the globe considered regional cooperation in waste management as a solutions to their waste management problems eg.:
 - USA;
 - India;
 - Japan; and
 - Eastern and Southern Europe.







Regional

Forms of regional cooperation

Different scales?

Between areas in a town

Between different towns in local municipality

Between local municipalities

Between districts

Between districts/metro/local municipality

Between provinces





Regional cooperation in waste management

Benefits of regional approach

•Greater economies of scale by joining forces - able to implement projects that would otherwise be difficult to implement individually.

•Leverage on cost-effectiveness in waste management efforts.

Cooperative purchasing agreements amongst several jurisdictions could make purchasing of goods and services more cost effective.

Increased financial support.

Increased flexibility, because of the greater resources available and the improved economies of scale for new waste management possibilities; and

Environmental improvement, regional cooperation may offer state of the art technologies which results in enhanced environmental protection.



Barriers to a regional approach

Potential partners could have different MSW management goals.

Municipalities can have conflicting waste management bylaws.

Potential inequalities can exist among neighbouring communities.

 Hauling waste across jurisdiction can cause conflict; regionalisation requires waste to be transported across boundaries <u>over long distances.</u>

Regionalisation could lead to loss of control over the decision-making process.



Waste-by-rail

WC projects

SA's first waste-by-rail station opens

- 1999
 - -South Africa's first containerized waste-by-rail transfer and transport station has been officially opened in Knysna on the Southern Cape.
- 2002



Athlone Refuse Transfer Station ARTS, including MRF and rail transfer



WC Status Quo Report - 2020

Waste collections and transport account for 80% of their waste management budgets.

- Municipalities are providing waste collection services with an ageing vehicle fleet.
 - Average age of waste collection vehicles in the province is 10.5 years.
 - Leading to increased fuel consumption and maintenance costs.

Most municipalities do not use route optimization – effective collection but not efficient collection.







Waste-by-rail benefits & challenges

Benefits:

- Allows for the use of disposal options at greater distances from the point of generation;
- Reduces the number of trucks on the road (40 car train will remove 140 trucks from the road);
- Generally easier to site rail transfer options that road transport transfer stations.

Challenges:

- Limit disposal options to rail sided disposal facilities;
- Require capital intensive dedicated inter modal rail cars;
- Logistics require daily attention & coordination with rail service provider and stable service provider.





Widely used in USA - a case for waste-by-rail

Limited available landfill airspace

•High cost of landfill tipping fees - competing

Use of waste as secondary resources – increasing value of recyclables

Increasing transport cost as well as high-cost municipal input cost (transport and labour)

Negative impact of trucks on the roads (traffic/damaging/emissions/Climate Change)







Strategic Plan 2019 - 2024

Impact: Resilient waste management

Outcome: Improved integrated waste management service that supports a waste economy

3rd generation WC IWMP



Gender mainstreaming

Thank you

Contact Us

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