

UPDATE ON WASTE MANAGEMENT BUREAU OPERATIONS AND THE IMPLEMENTATION OF THE S29 INDWTMP

IWMSA

05 April 2024



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Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA



3A. OVERVIEW OF THE WASTE BUREAU



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WMB Mandate

The Waste Management Bureau derives its mandate from the Waste Act:

An implementation Bureau dealing with waste management to be known as the “Waste Management Bureau” is hereby established, within the Department, as a juristic person.

13. The following Part is hereby inserted in the principal Act after section 34: 15

“Part 7A

Waste Management Bureau

Establishment of Waste Management Bureau

34A. (1) An implementation Bureau dealing with waste management to be known as the “Waste Management Bureau” is hereby established, within the Department, as a juristic person. 20

(2) The Bureau must comply with the provisions of the Public Finance Management Act, 1999 (Act No. 1 of 1999).

(3) In the event of absence of a functional Bureau or a Chief Executive Officer, the powers and duties of the Bureau revert to the Director-General of the Department contemplated in section 34G(1), who, in such a case, must exercise those powers and perform those duties until the Bureau is functional or a Chief Executive Officer is appointed. 25

Determination of policy

34B. (1) The Minister must, after consultation with the Bureau, determine and publish a policy within which the Bureau must exercise its powers and perform its functions. 30

(2) The Minister may, after consultation with the Bureau, amend, substitute or withdraw the policy determined in terms of subsection (1), and must publish the amended policy. 35

(3) The Minister must, 30 days before the final publication of any policy contemplated in subsections (1) and (2), table the policy in Parliament.

Minister’s supervisory powers

34C. (1) The Bureau must exercise its powers and perform its functions subject to the policy determined in terms of section 34B (1) or (2), the service level standards and norms contemplated in subsection (2)(b) and any directives issued by the Minister in terms of subsection 2(c). 40

(2) The Minister—

- (a) must monitor the exercising of powers and performance of functions of the Bureau in terms of the policy determined in terms of section 34B(1) or (2); 45
- (b) may set service level standards and norms for the Bureau in the execution of its powers and functions; or

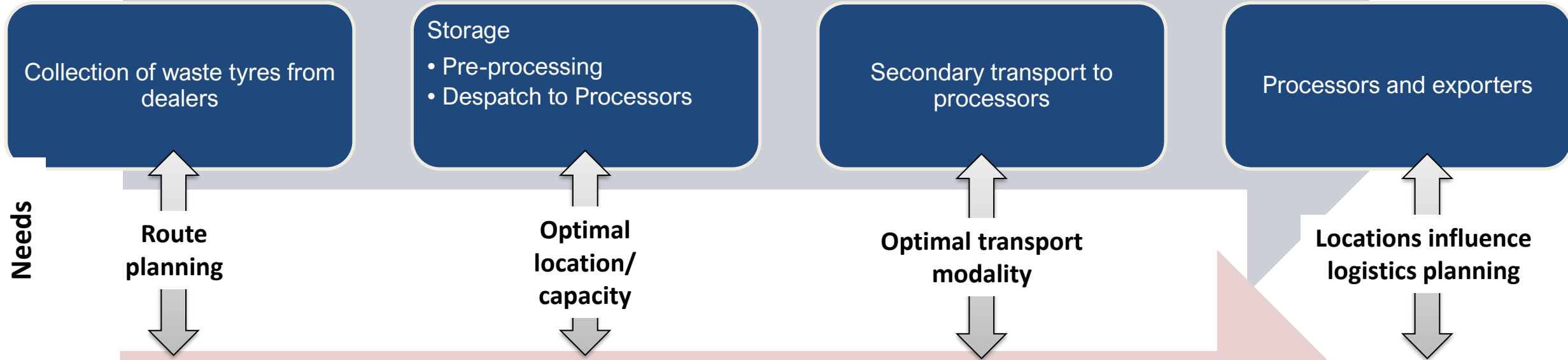
WMB Mandate

- Function as a **specialist implementing agent** within the Department
- **Monitor implementation of industry waste management plans** and the impact of incentives and disincentives
- Progressively **build capacity within the Bureau** to provide specialist support
- Support and advise on the development of waste management plans, tools, N&S's...etc.



Waste tyre and MSW management have similar functions

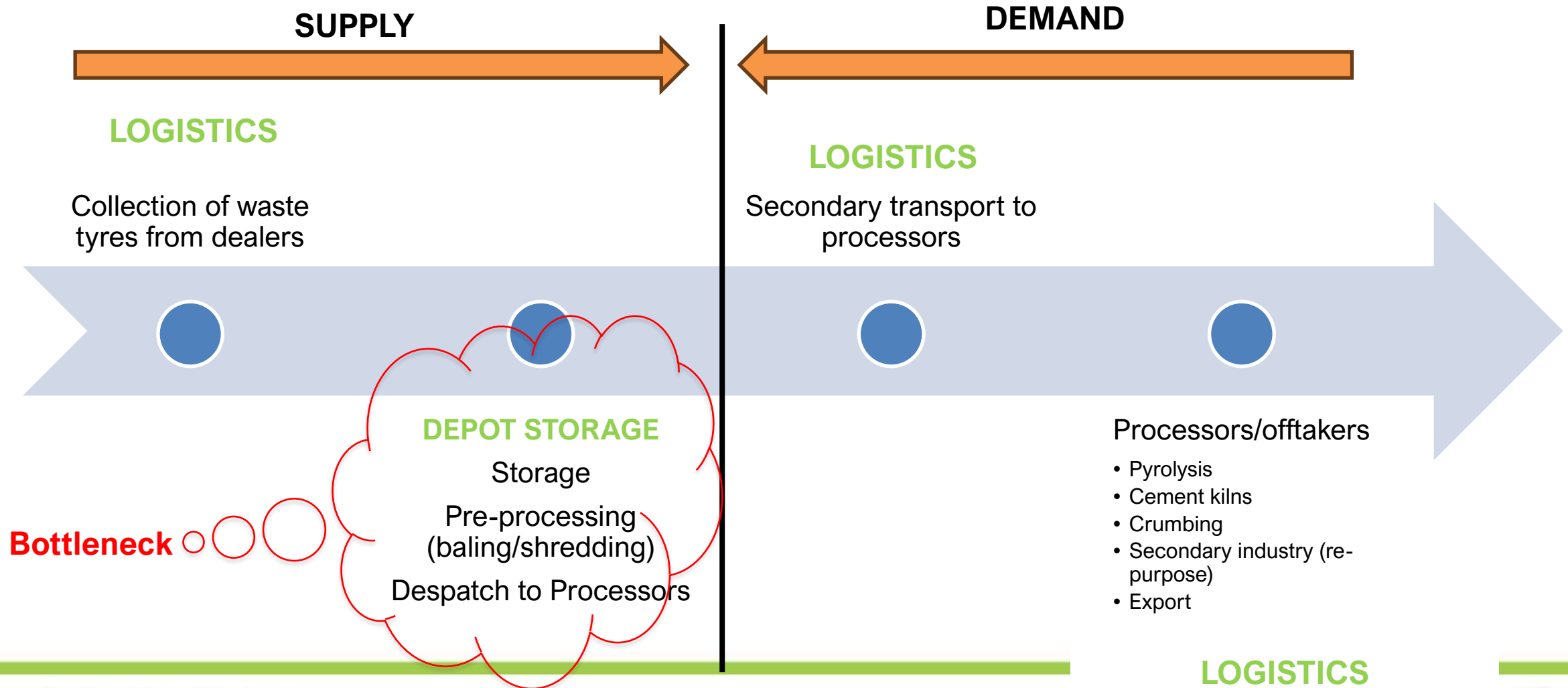
WASTE TYRES



MSW MANAGEMENT



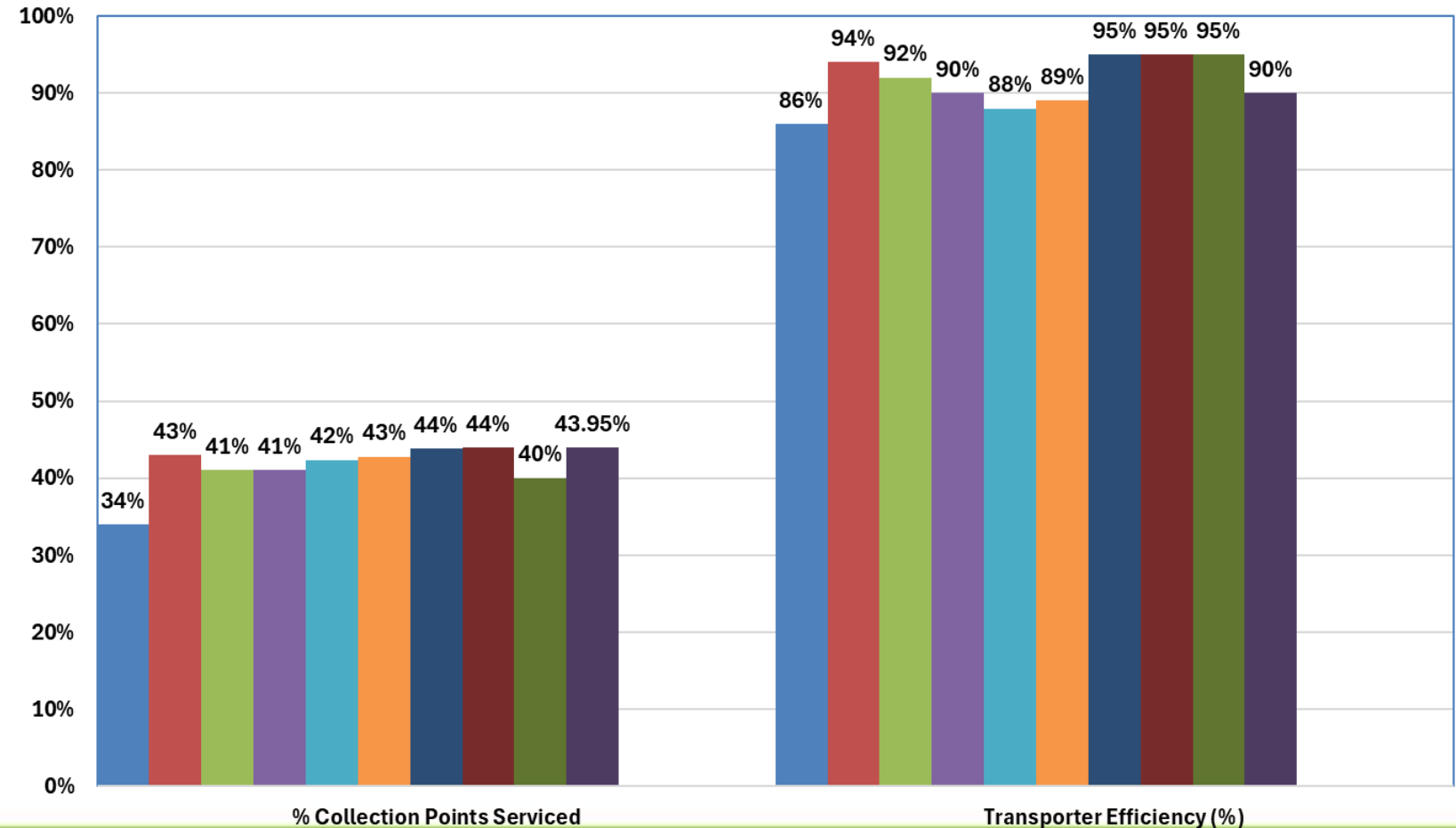
The waste tyre value chain



Performance targets and FY24 performance to date

Analysis of Collections

■ 23-Apr ■ 23-May ■ 23-Jun ■ Jul-23 ■ Aug-23 ■ 23-Sep ■ 23-Oct ■ Nov-23 ■ Dec-23 ■ Jan-24 ■ Feb-24 ■ Mar-24 ■ Apr-24



Performance targets:

Target for FY 23/24 = 50% (of collection points registered)

Percentage Efficiency of Transporter Service Delivery: Target 23/24 = 95% (service rendered to collection points when requested)

Logistics inefficiencies (mirror those in Munic. SWM)

- Primary collection routes/catchments not systematically planned
- Data management through value chain is manual and retrospective
- Pre-processing performance at depots is generally poor. This results in processors not always being serviced from closest depots
- R&M performance on equipment is weak leading to long periods of downtime (specifically balers)
- No mechanism for reverse logistics on long haul trips
- Location and number of storage depots not optimal



Aerial view of a depot



Tyres being baled

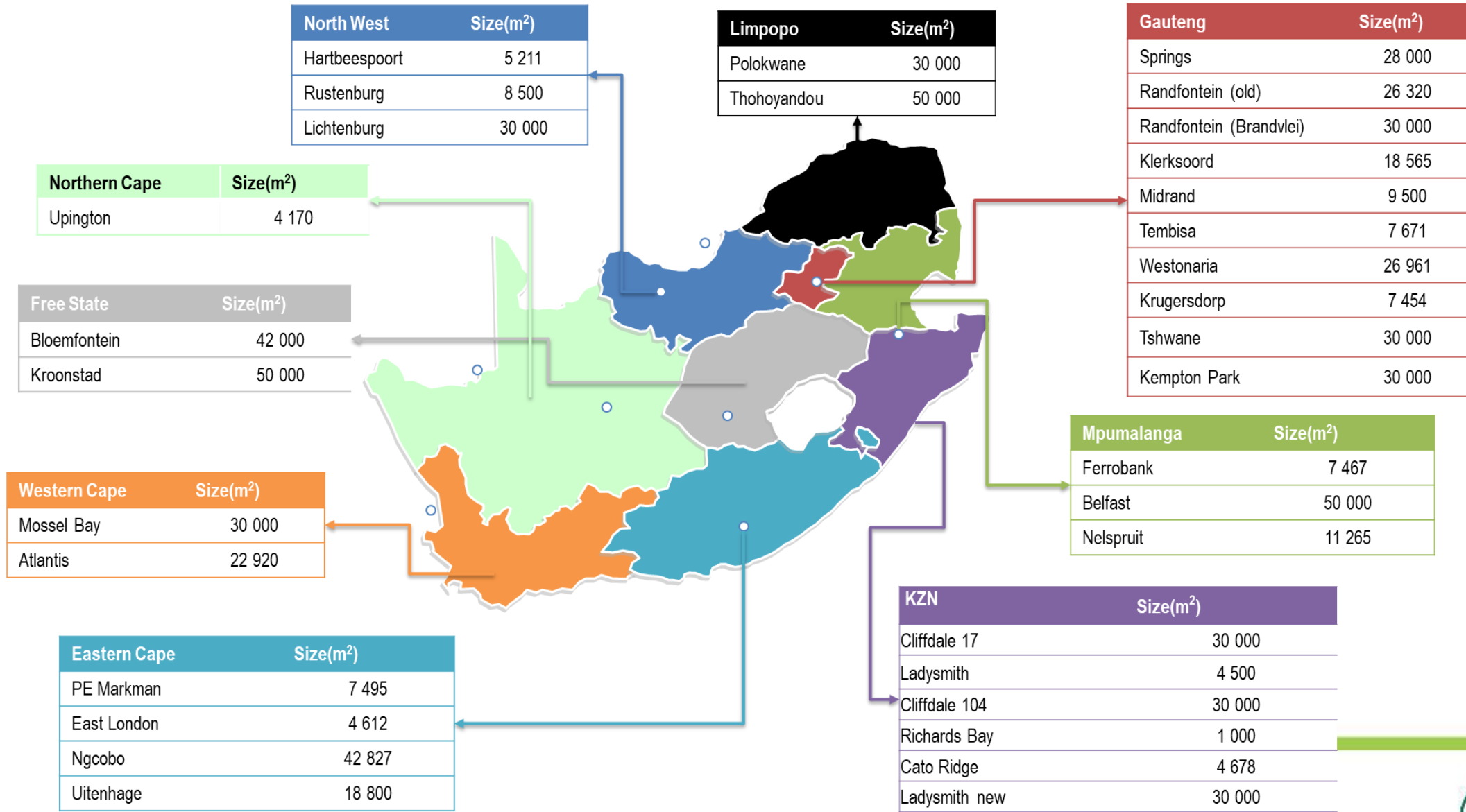


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Current location of depots

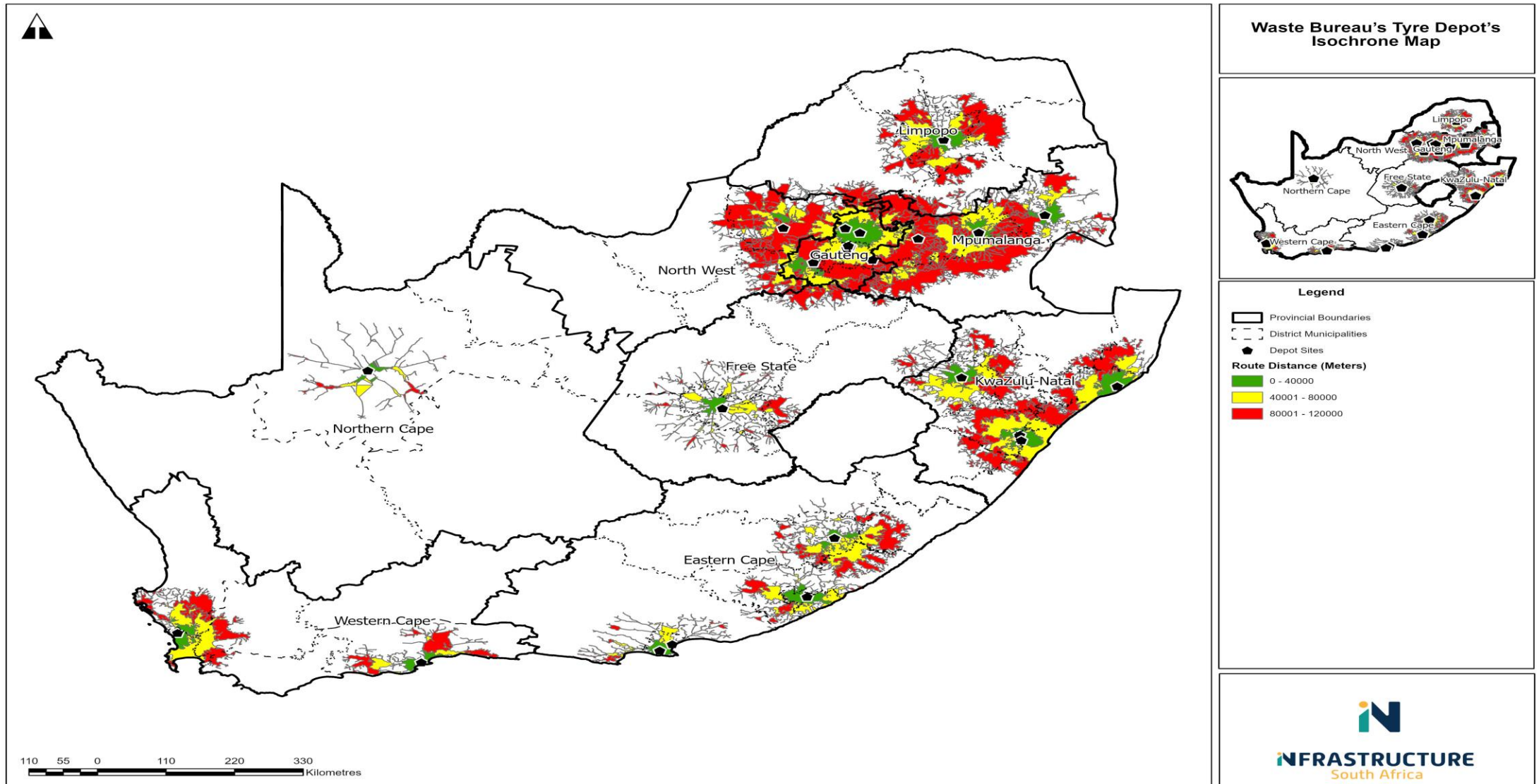


Interventions

- The transition of depots from landfills to transfer stations
- Revised contract conditions and targets to be region specific and linked to processor demand/specifications
- Geographic location of depots to be informed by logistics efficiencies (modelling of origin-destination pairs)
- Longer lease tenures to allow landowners to invest in fit for purpose infrastructure



New storage locations to optimise logistics

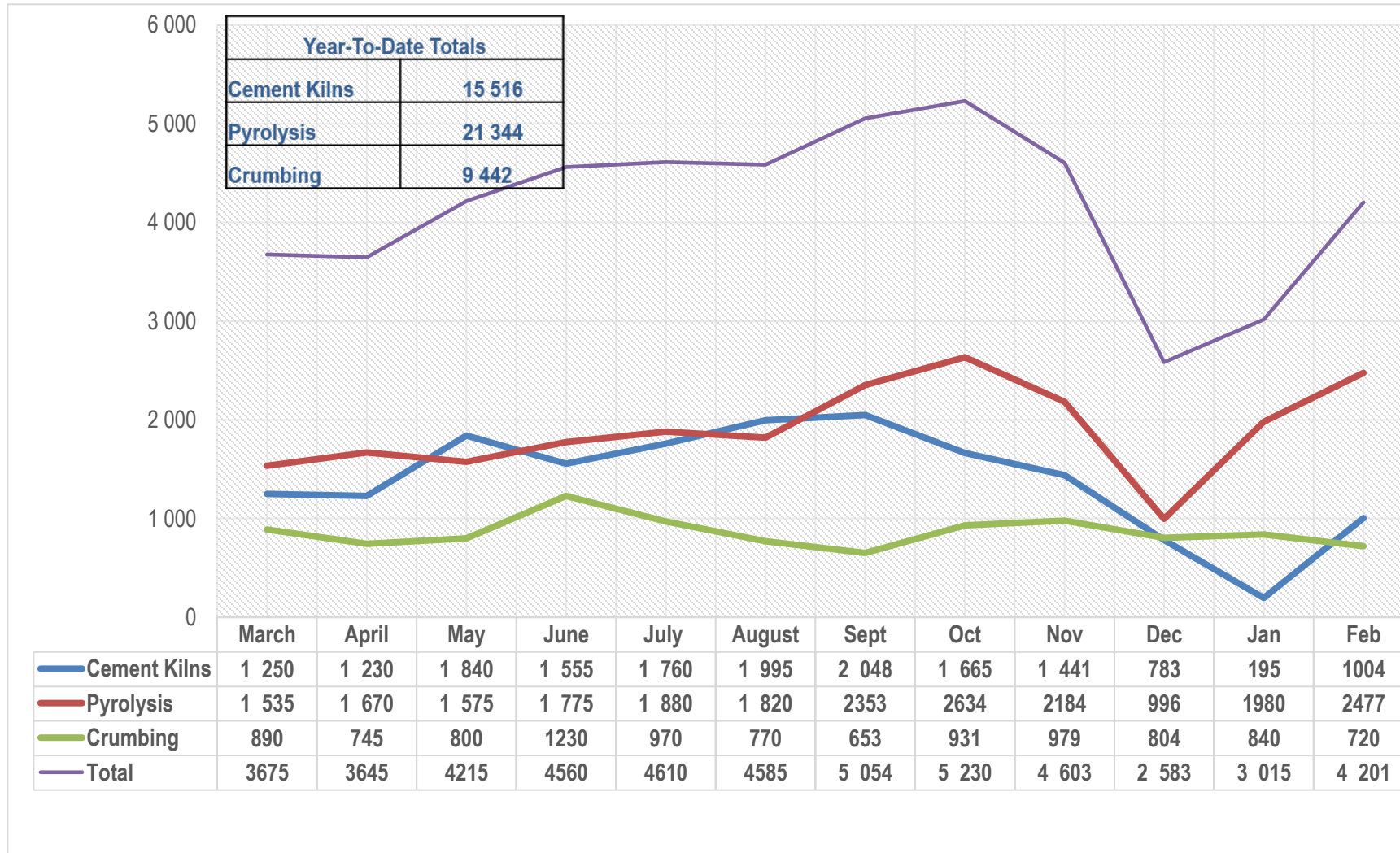


Waste tyre processing

Technology type	Description	Products and uses
Tyre derived fuel (TDF)	Whole, cut or shredded tyres used mainly in cement kilns but also brick making and power generation industries	Tyres have a high calorific value (32 MJ/kg) comparable to coal and are suitable as a coal substitute (with retrofitting)
Pyrolysis	Decomposition of rubber elastomers at 400 – 700 deg. Cel. in absence of oxygen	Produces chemical compounds in solid, liquid and gaseous form which can be used in petrochemical, energy, iron and steel industries
Material recycling (crumbing and devulcanization)	Recovery of rubber, steel belts and textile overlays mainly through mechanical grinding to different particle sizes	Rubber crumb is used in various industries, for example astro-turf fields, automotive parts, rubber modified asphalts (road construction).
	Devulcanization converts vulcanised rubber 'waste' into new virgin rubber	Regenerated rubber is used in the rubber industry
Waste tyre reuse	Complete or partial reuse of waste tyres in their original form	Various uses, for example construction industry, protective barriers, insulation. Also use in playgrounds and parks



Processor tonnages: 12-month view



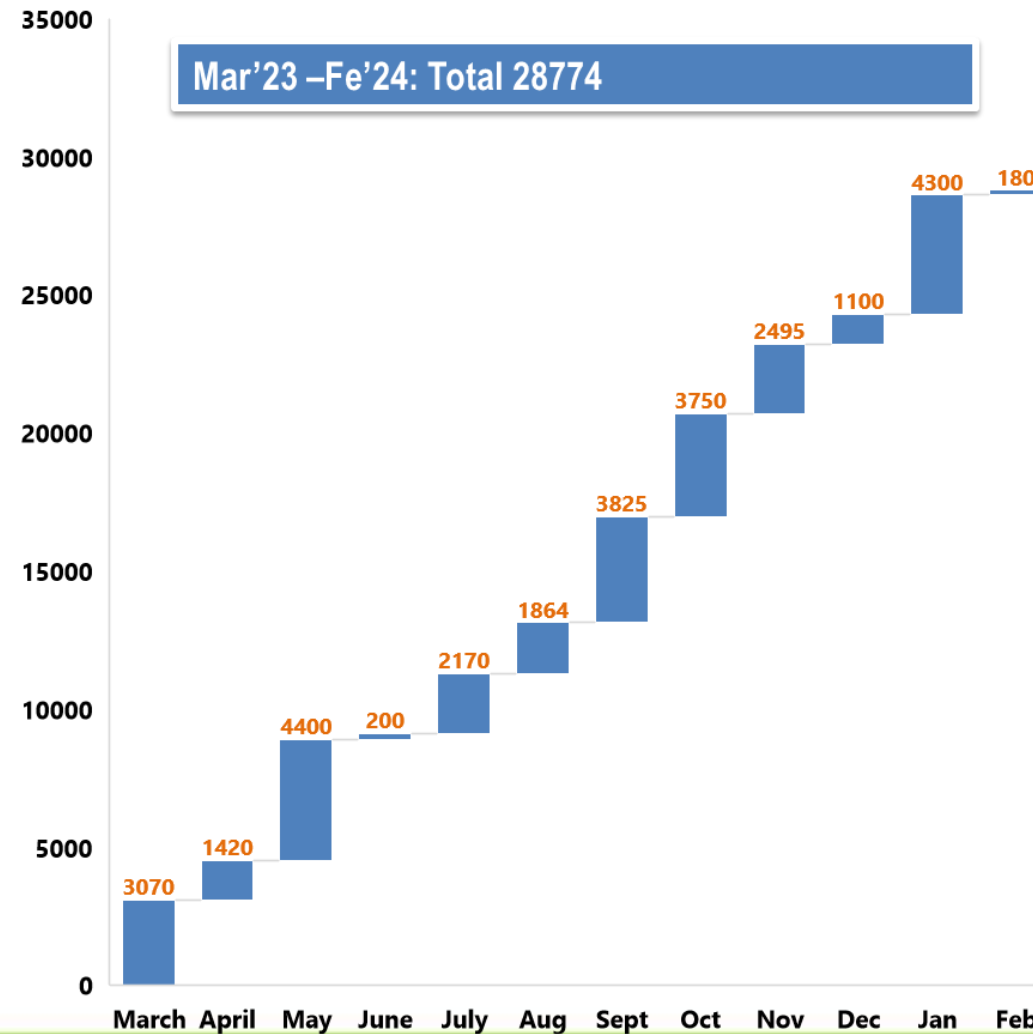
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Export tonnages: 12-month view

- Deliveries currently taking place in PE, Cape Town and Durban
- January exports close to all-time high
- Feb numbers reflective of least-cost model adopted



3B. IMPLICATION OF THE SECTION 29 INDUSTRY WASTE TYRE MANAGEMENT PLAN



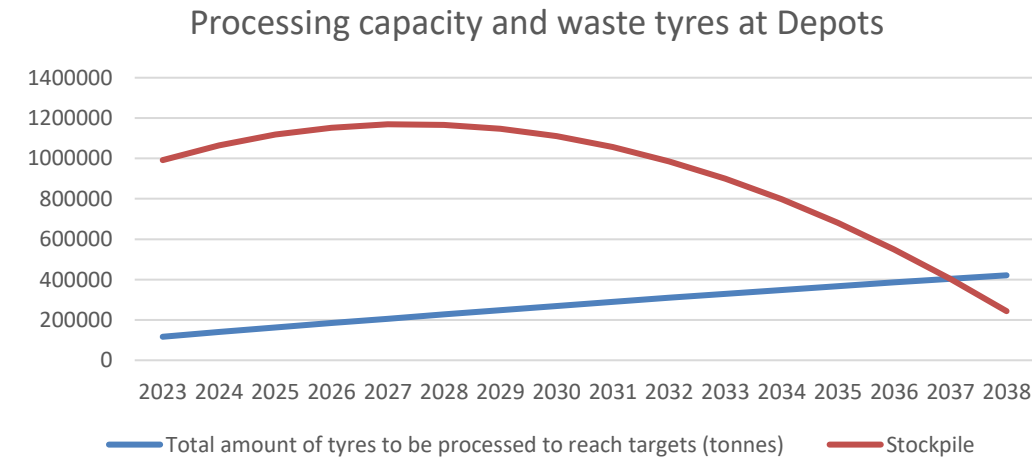
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Projected national targets for increased processing and reduction of accumulated waste tyre backlogs

Year	Indicative annual inflow of new waste tyres (tonnes) ^b	Processing target for the annual inflow of waste tyres	Indicative Tonnes of new inflows to be processed	Tonnes of new inflows that will still accumulate	1.1.1.1.1 Indicative tonnes of waste tyres that will accumulate if the Accumulated waste tyre backlogs are not reduced	Indicative Tonnes of the Accumulated waste tyre backlogs to be processed to reach targets ^c	Indicative total tonnes of waste tyres to be processed to reach targets	1.1.1.1.2 Remaining tonnes of waste tyres accumulated if everything goes according to plan
2023	229613 ^a	20%	45923	183691	1083691	77450	123372	1006241
2024	233057	25%	58264	174793	1258484	89942	148206	1091093
2025	236553	30%	70966	165587	1424071	101776	172742	1154904
2026	240102	35%	84036	156066	1580137	112930	196965	1198040
2027	243703	40%	97481	146222	1726359	123380	220861	1220882
2028	247359	45%	111311	136047	1862406	133103	244414	1223827



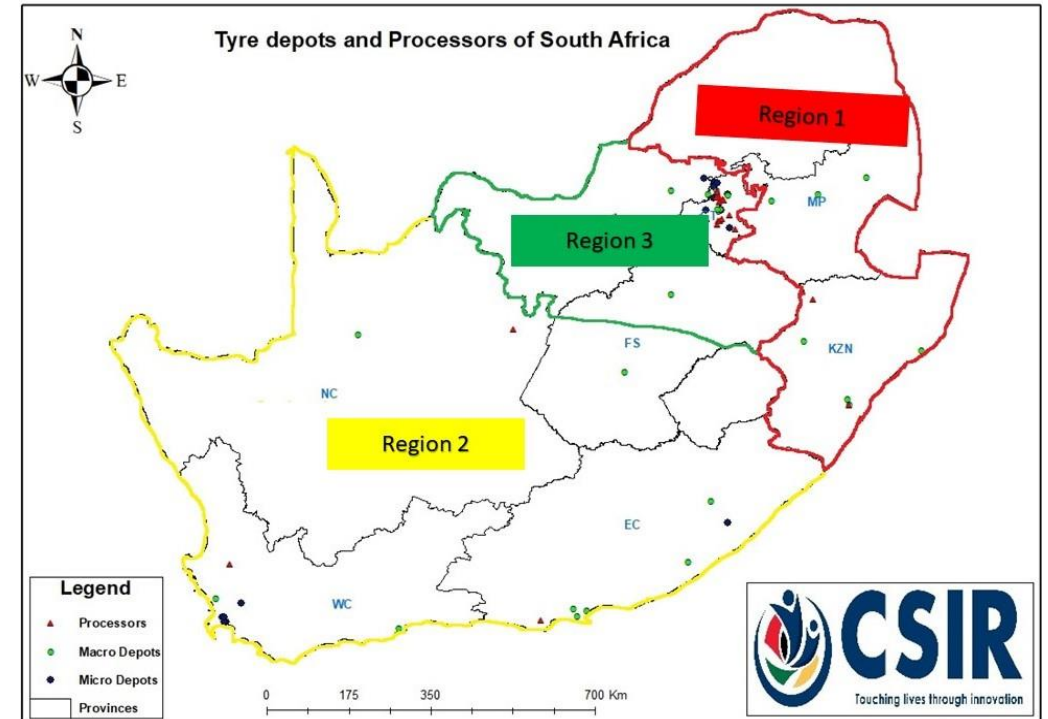
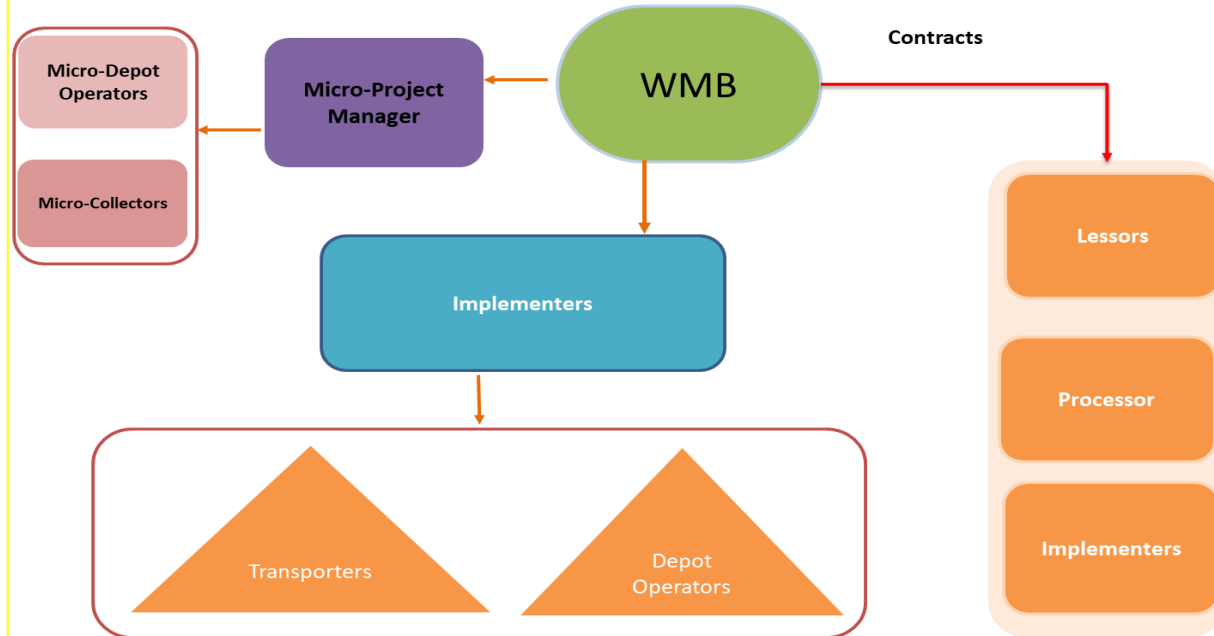
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Implementation model of the S29 Plan

CONTRACTING



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THANK YOU!

Masopha Moshoeshoe
Waste Management Bureau
Department of Forestry, Fisheries and the Environment
Tel: | 012 399 8567
Website: <http://www.environment.gov.za>
Address: The Environment House, 473 Steve Biko Road, Arcadia, Pretoria, 0083

Thank You



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