



**Western Cape  
Government**

Environmental Affairs and  
Development Planning

**BETTER TOGETHER.**

## **“CURRENT CHALLENGES - LIQUID WASTE, BAN ON ORGANIC WASTE TO LANDFILL AND TYRE REGULATIONS”**

Eddie Hanekom

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

# Waste Tyre Management in SA

*Integrated Industry Waste Tyre Management Plan (IIWTMP) published in 2012*

- **Tyre Plan to fulfill producers' responsibilities EPR responsibility**

- July 2013 - Recycling and Economic Development Initiative of South Africa (REDISA), (PRO) formally started out.

- Polluter pays principle implemented to fund Plan
    - levy of R2.30 on each kilogramme of tyre sold;
  - R500-million a year levy generated; and
  - REDISA built 22 tyre collection centres and employed more than 3 000 people.
- Implementation plagued by concerns from government, labour and civil society over the past five years.



# Waste Tyre Management in SA

*Integrated Industry Waste Tyre Management Plan (IIWTMP) published in 2012*

- 2017 government gazetted legislation that shifted the EPR “fee”, previously collected by the PRO, to an EPR “tax”:
  - which is now paid by producers directly to government (National Revenue Fund (Section 213(1)) of the Constitution).
  - Minister of Environmental Affairs liquidated REDISA.
  - Plan was withdrawn in Sept 2017.



# Waste Tyre Management in SA

*Integrated Industry Waste Tyre Management Plan (IIWTMP) published in 2012*

- Des 2017 due date for plan submission.
- Sept. 2018 plans published for comments.
- Two plans submitted and both turned down by Minister.
- Jan 2019 Supreme Court of Appeal (SCA) overturned a liquidation order against REDISA which was granted in 2017??





# Waste Tyre Management in SA

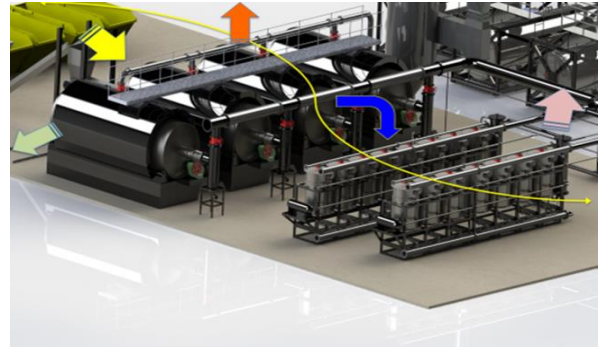
## *Waste Bureau*



- Contact Waste Bureau:
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  - 012- 399 8796
  - [Amvinjela@environment.gov.za](mailto:Amvinjela@environment.gov.za)

# Waste Tyre Management WC

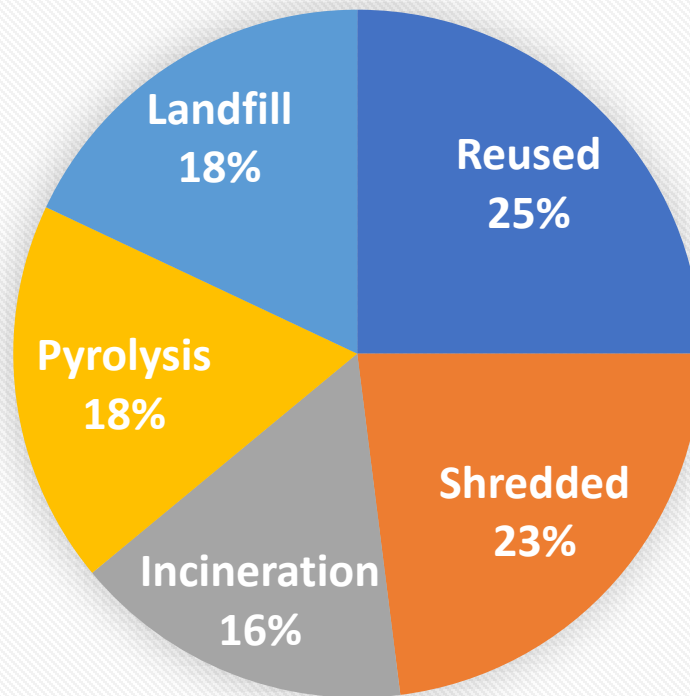
## *End of life management of tyres*



Mar 7, 2019 - In SA, it is estimated that 11-million **waste** tyres are lying in dumps, ... A new **Waste Management Bureau** has been set up in its place.

# Waste Tyre Management in SA

End of life management of tyres in SA - 2016 (Hartley & Daniels)





# Waste Disposal Restrictions

## *National Norms & Standards for Disposal of Waste to Landfill – Notice No 636 of 23 August 2013*

Waste Prohibited or Restricted in terms of Disposal	Compliance Timeframe
(k) Re-usable, recoverable or recyclable used or spent solvents.	Five (5) years
(l) PCB containing wastes (>50 mg/kg or 50 ppm).	Five (5) years
(m) Hazardous Waste Electric and Electronic Equipment (WEEE) – Lamps.	Three (3) years
(n) Hazardous Waste Electric and Electronic Equipment (WEEE) – Other.	Eight (8) years
(o) Waste tyres: Whole.	Immediate
(p) Waste tyres: Quartered.	Five (5) years
(q) Liquid waste– (i) Waste which has an angle of repose of less than 5 degrees, or becomes free-flowing at or below 60 °C or when it is transported, or is not generally capable of being picked up by a spade or shovel; or (ii) Waste with a moisture content of >40% or that liberates moisture under pressure in landfill conditions, and which has not been stabilised by treatment.	Six (6) years

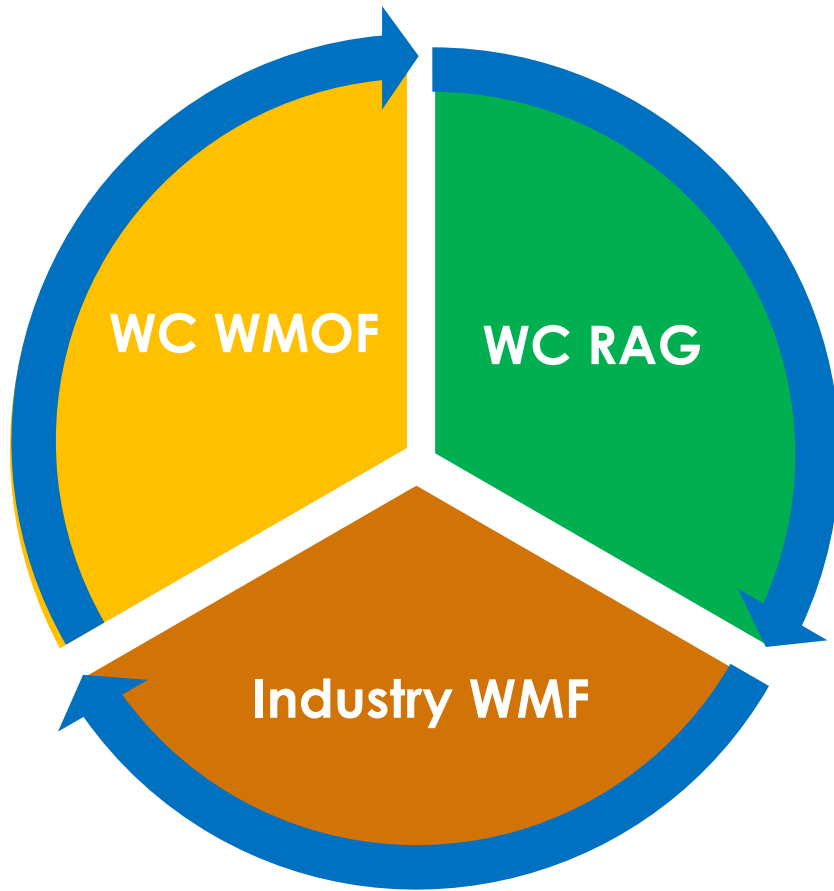
# Waste Disposal Restrictions

## *National Norms & Standards for Disposal of Waste to Landfill – Notice No 636 of 23 August 2013*

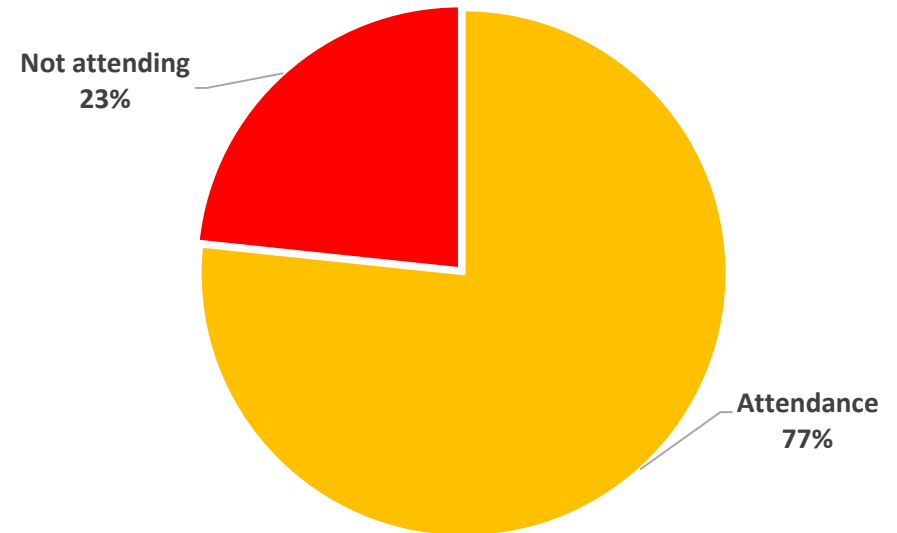
- **Liquid waste** can be defined as such fluids as wastewater, fats, oils or grease (FOG), used oil, and hazardous household **liquids**.
- Main sources are residential, commercial, and industrial areas.
  - Stormwater is also a source of **liquid waste**.
  - **Liquid waste** from domestic sources can be classified as blackwater, which contains excreta, and greywater.
  - The characteristics of industrial wastewaters depend on the **type** of industry.
- Liquid waste can be subdivided into other waste types based on the nature of the liquid waste and the risks it poses.
- Non-infectious & infectious abattoir waste?
- Certain food waste?
- Effective from August this year – affect both hazardous and general waste disposal facilities.

# State of waste management in WC

## Effective functioning waste governance platforms

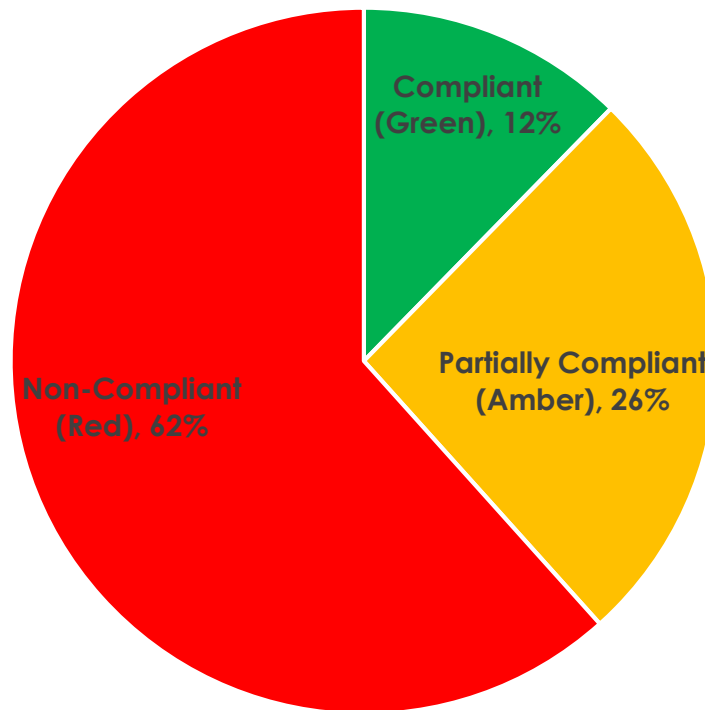


### Municipal attendance WC WMOF



# State of waste management in WC

2018 Compliance Status of Waste Management Facilities Audited (72 authorities audits)



■ Compliant (Green)    ■ Partially Compliant (Amber)    ■ Non-Compliant (Red)

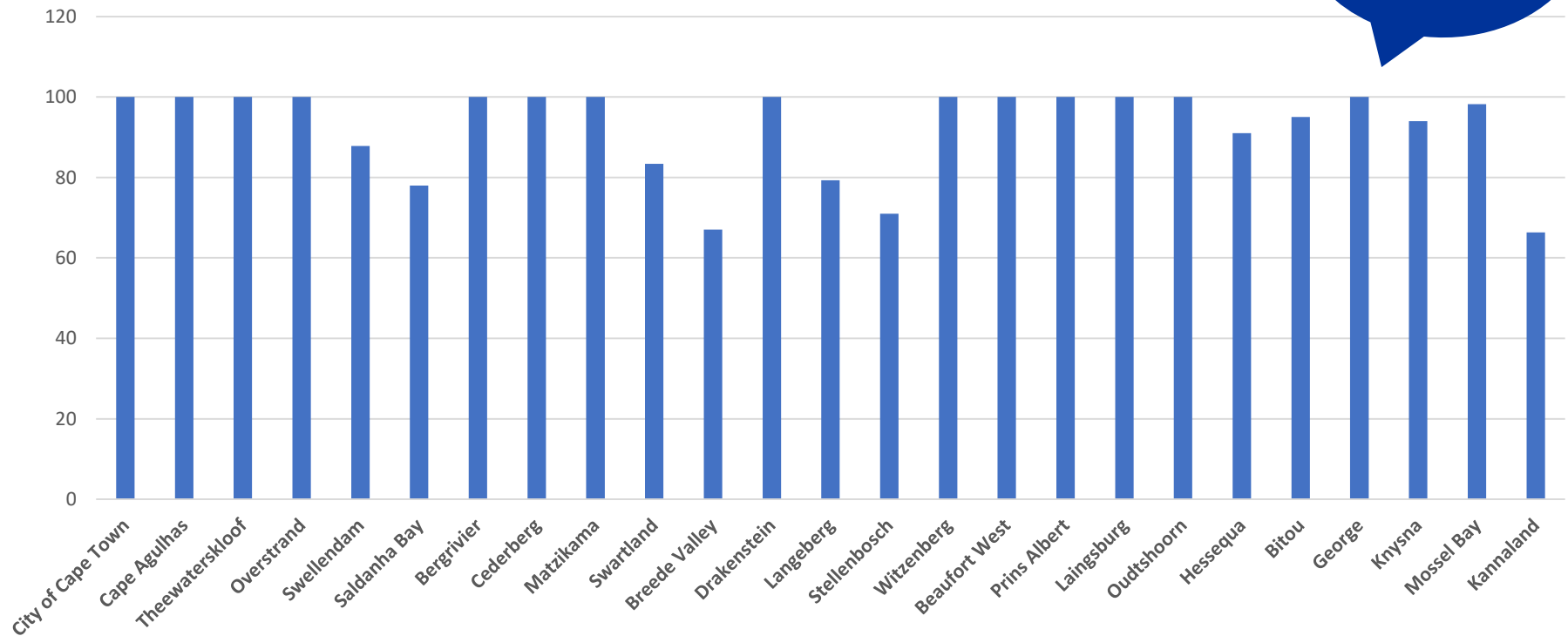
# WC Waste Management Facilities

Waste Management Facilities	City of Cape Town	Overberg	Cape Winelands	West Coast	Central Karoo	Edenburg	Total
Operational Waste Disposal Facilities	4	9	14	7	6	15	55
Operational Waste Disposal Facilities (Unlicensed)	0	0	0	0	1	0	1
Decommissioned Waste Disposal Facilities	23	20	16	34	1	15	109
Operational Drop off facilities	19	8	5	12	0	4	48
Operational Transfer stations	1	4	4	2	0	5	16
Operational Materials recovery facilities	27	3	3	5	1	3	42
Alternative Waste Treatment Technologies	14	1	5	4	0		24
Operational Compost Facilities	3	1	2	0	0	2	8
<b>Decommissioned and Operational Waste Management Facilities</b>	<b>91</b>	<b>46</b>	<b>49</b>	<b>64</b>	<b>9</b>	<b>44</b>	<b>303</b>



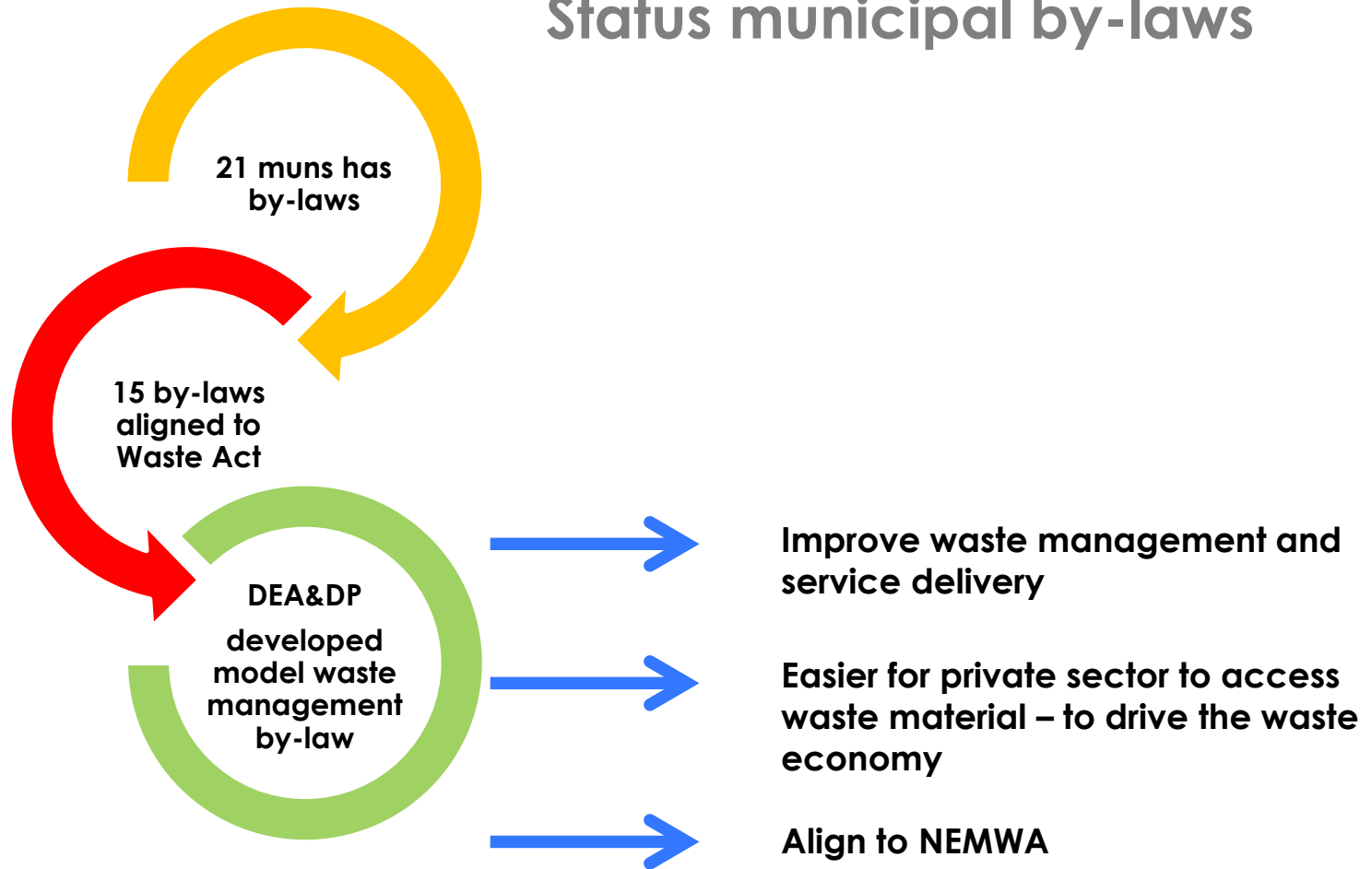
# State of waste management in WC

Western Cape Level of Basic Refuse removal (%)



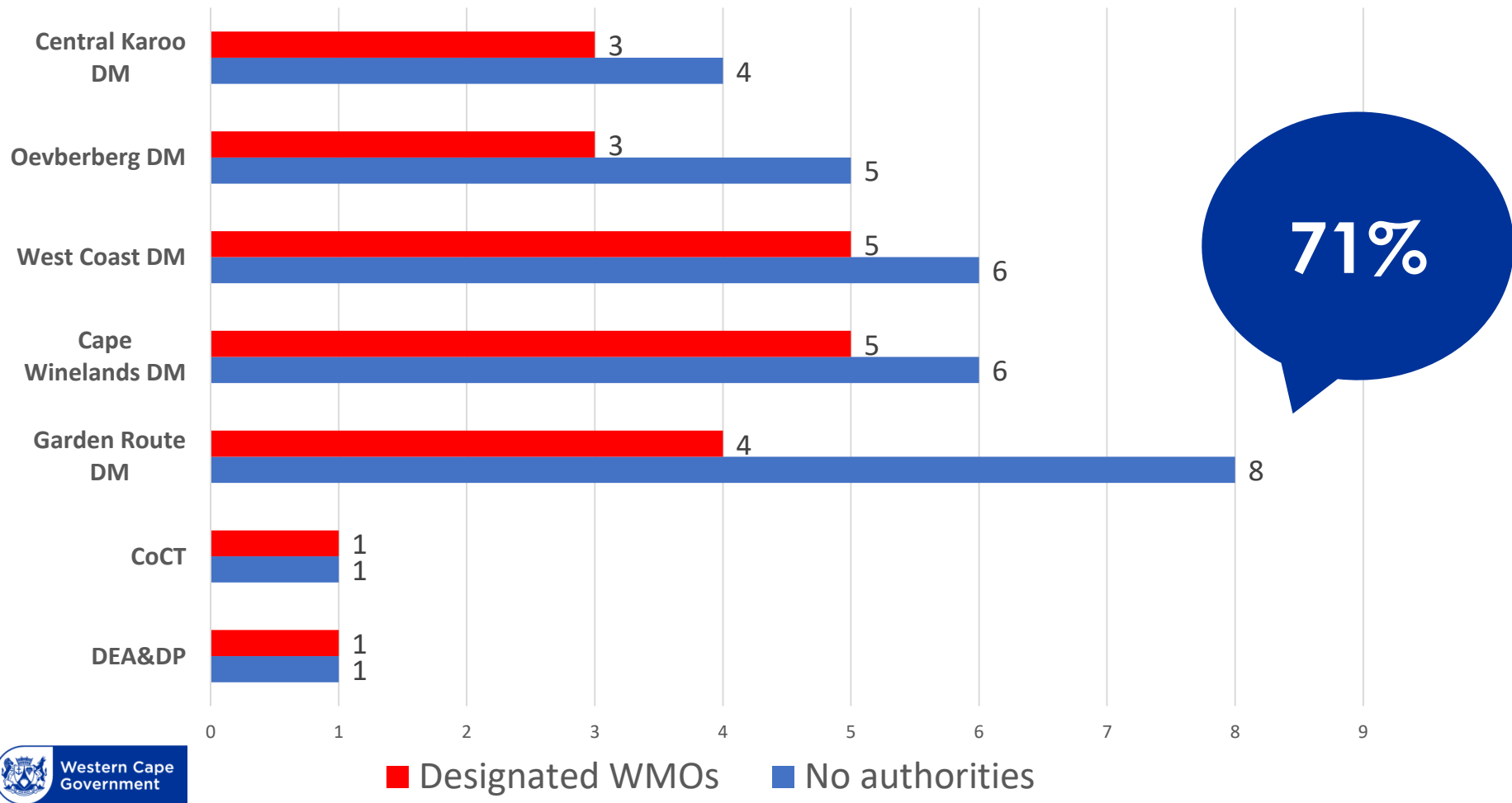
# State of waste management in WC

## Status municipal by-laws



# State of waste management in WC

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



# Municipal Integrated Waste Management Plans assessment analysis

All 30 muns have 1<sup>st</sup> & 2<sup>nd</sup> generation Plans

14 of 30 municipalities developed 3<sup>rd</sup> generation Plans

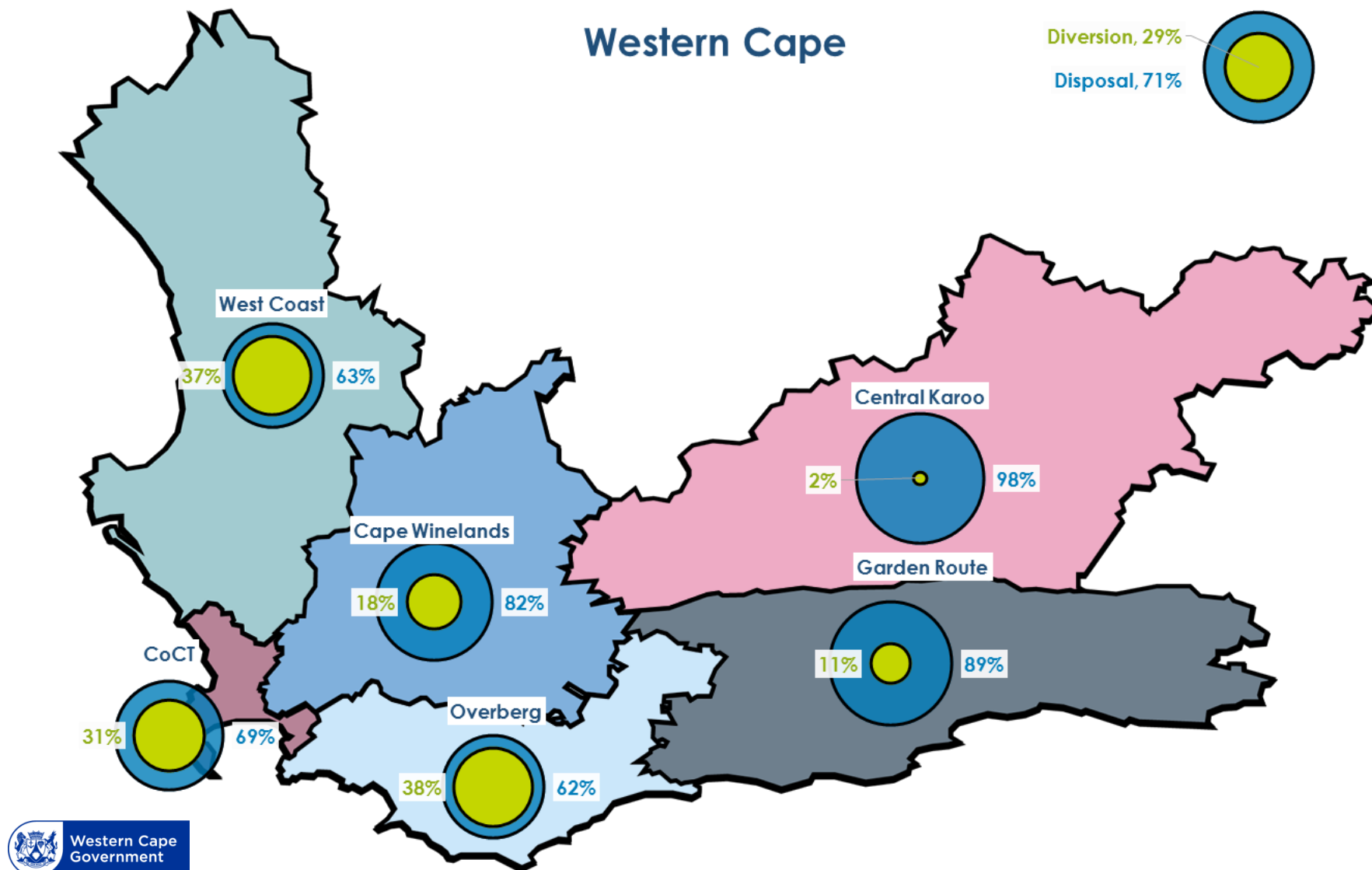
Improvement in quality of municipal Plans

Ave assessment score of 3<sup>rd</sup> Gen. Plans - 77%

Lowest assessment score of 3<sup>rd</sup> Gen. Plans - 30 %

Highest assessment score of 3<sup>rd</sup> Gen. Plans - 98%

# Waste diversion in the WC

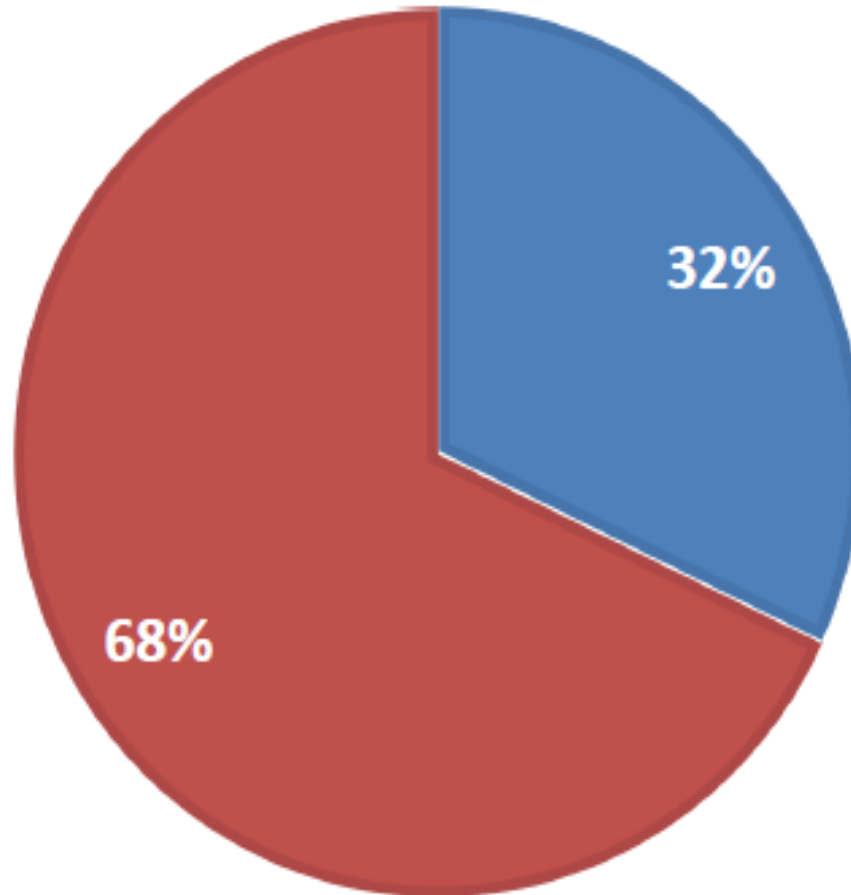




# Municipalities with S@S

## SEPARATION AT SOURCE

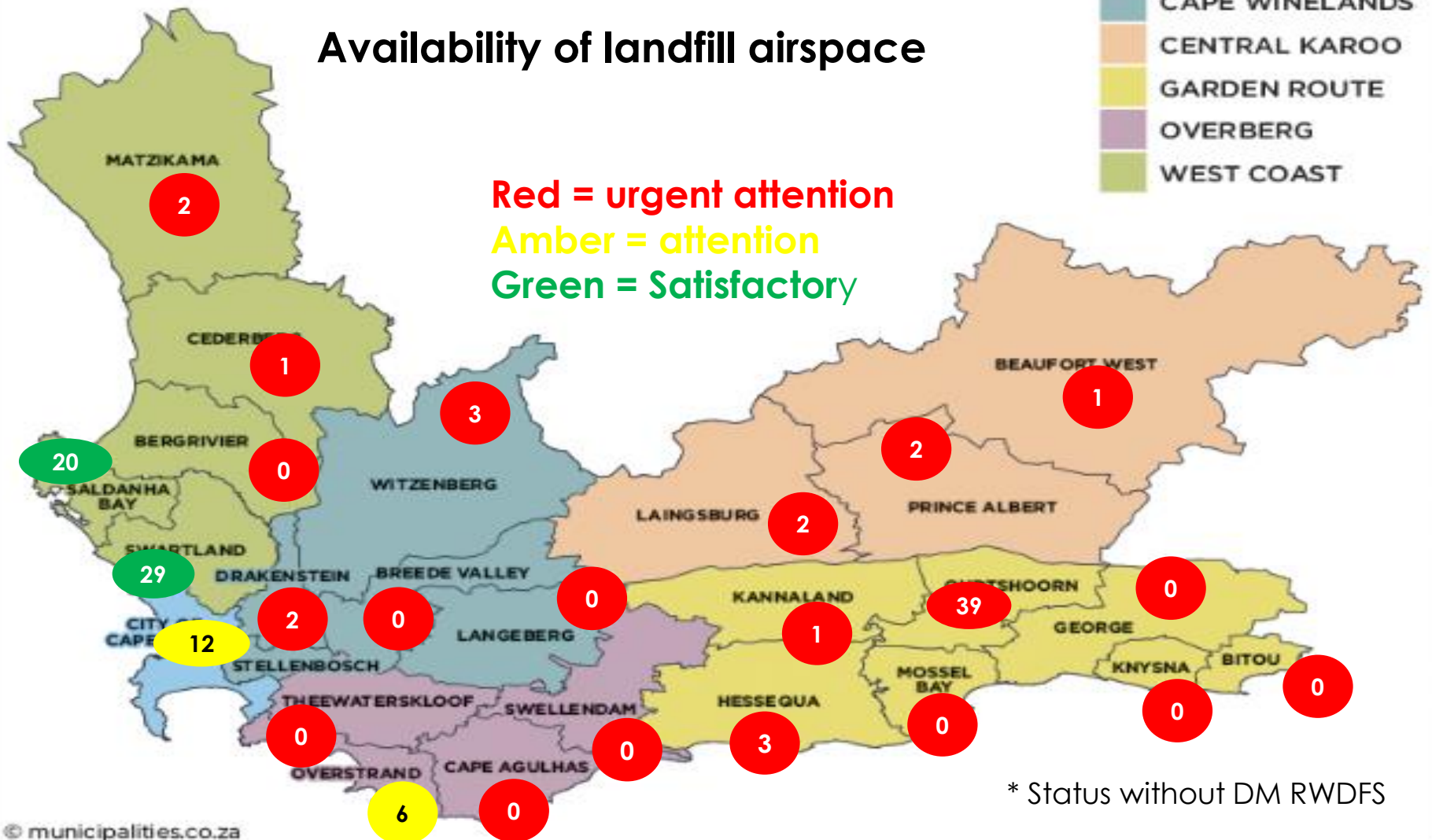
■ No ■ Yes



# State of waste management in WC

## Availability of landfill airspace

Red = urgent attention  
Amber = attention  
Green = Satisfactory



\* Status without DM RWDFS

# WCG Response to landfill airspace challenges

## ● WCG Policy to promote regionalisation waste management services

- Authorize only new regional waste disposal facilities in the future – due high operational cost and reduce environmental impacts of non-complaint smaller WDFs – inline with **National Development Plan** – post 2030.
- Regionalisation for waste management services should not solely focus on regional WDFs but preferably on the whole waste service.



# WCG Response to landfill airspace challenges

## ● Aggressive waste diversion, recovery and beneficiation of waste material:

- Focus initially on interventions on waste streams such as organic waste and construction & demolition waste :
  - Set diversion targets for organic waste - 50% diversion of organic waste from landfill by 2022; and
  - Landfill ban of organic waste to landfill by 2027.
- Assistance to municipalities
  - Separation at source - guideline.
  - Develop generic organic waste diversion plan template.
- Promote waste economy & job creation:
  - Waste preneurs project.
- Promote alternative waste treatment
  - assistance to municipalities.



# ORGANIC WASTE INTERVENTIONS

*Significant negative environmental, social and economic impacts*

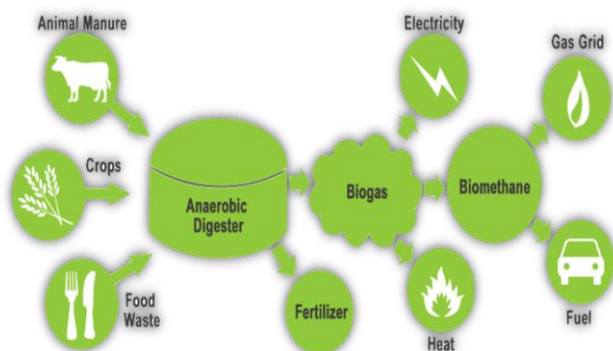
- **Developed status quo reports on Abattoir and Green waste to understand waste stream.**
- **Developed guidelines for Abattoir and Green waste management.**
- **Influenced national policy (Dept. Environmental Affairs and Dept. of Agriculture)**
  - Norms & standards.
- **Facilitated various engagements between the organic beneficiation technology owners and generators of problematic organic waste types such as abattoir and green waste.**
- **Promoted formalizing of organic waste sector – establishment of Organics Recycling Association of South Africa (ORASA).**





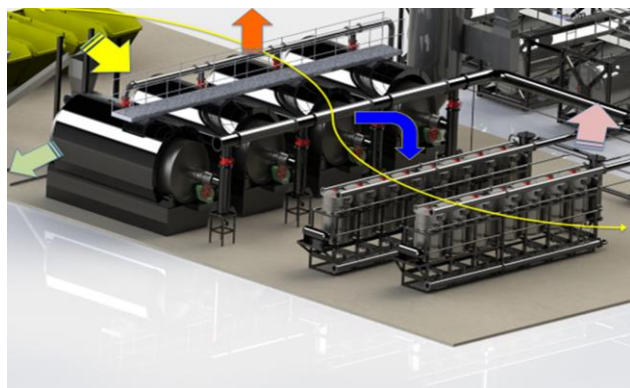
# State of waste management in WC

## Alternative waste treatment

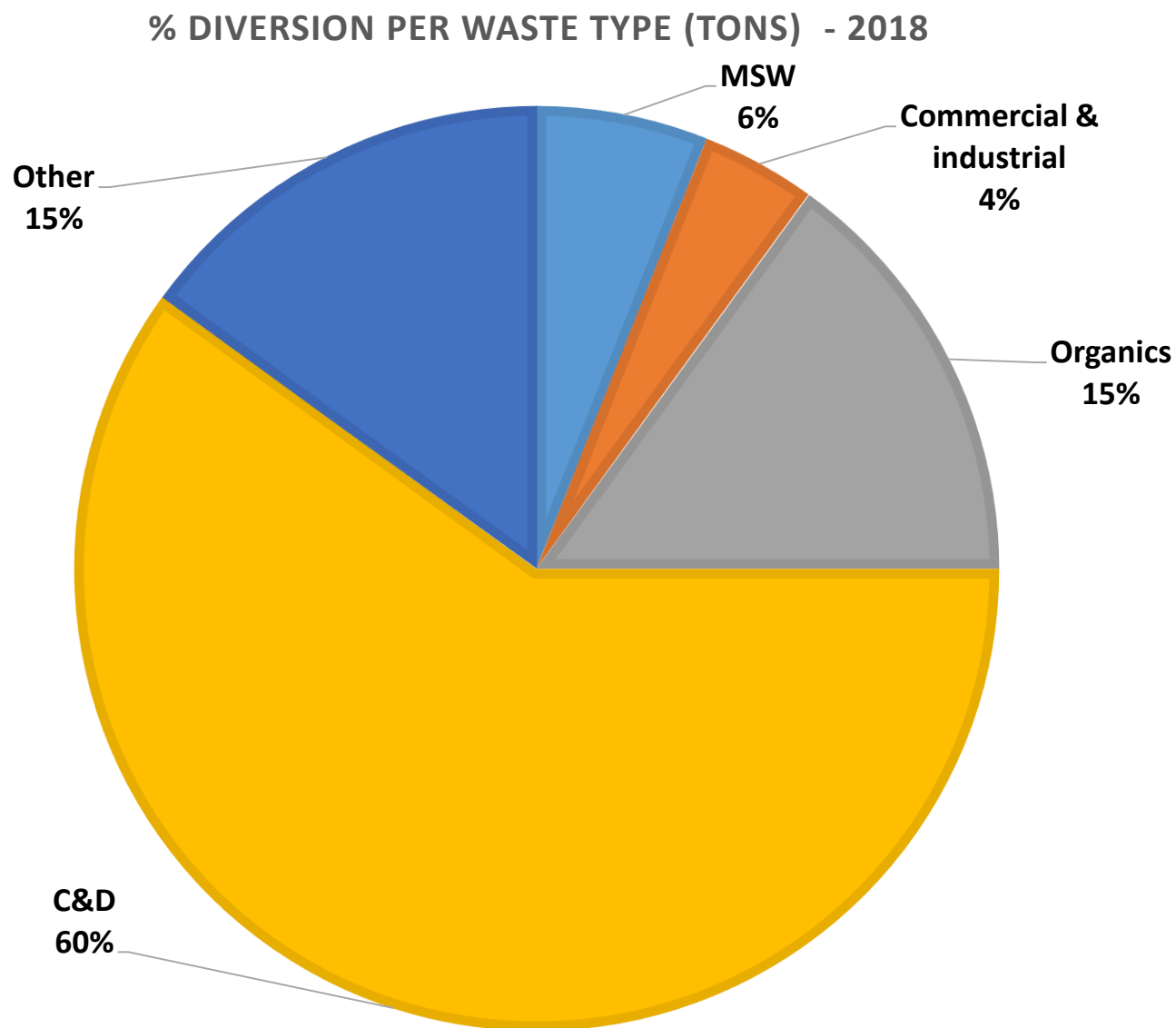


INSECO  
Feeding the Future

**AgriProtein**  
technologies



# Waste diversion in the WC



# ORGANIC WASTE COLLECTION STRATEGY

## Evolution



1997

### Commercial activities

#### All canteens, restaurants, and bars

- 120 l bins door to door system
- Collection every day Mon-Sun at night

2012

### Households

#### All households throughout the city

- 120 l bins, 10 l kitchen bin and compostable bags
- Collection twice a week
- Transparent bag for residual waste

2017

### Open markets

#### 94 weekly markets

- Special compostable bags and holder
- Collection after market

# ORGANIC WASTE COLLECTION STRATEGY

## Results



- **Food waste management is a key factor** in the city's **food policy** for sustainability
- Milan food waste management is considered a **best practice** across all major European cities

100 kg

### Quantity per capita

**100 kg/inh./year** is the quantity per capita of food waste that we collect.

This result is the highest across all major European cities

30 %

### Commercial waste

About **30%** comes from commercial activities and schools while the majority is residential

150,000 t

### Overall quantity

About **150,000 t/year** of food waste are now being collected separately and sent to AD for organic recycling saving **10,000 t** of CO<sub>2</sub>/year\*\*

95%

### Average quality

Brown bin shows good quality with **Non Compostable Material (NCM%)** at **5%** on average

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Thank you

# Contact Us



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Government

BETTER TOGETHER.

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