



safma

Conference & Exhibition
21-22 August 2018

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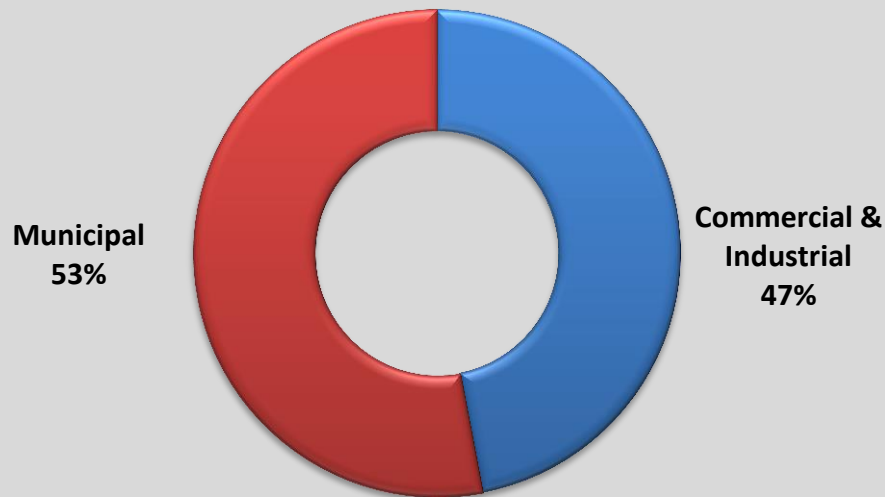
www.wasteplan.co.za

**Legislation and what it
tells us about organic
waste**

QUICK FACTS

- **111 Million** Tons of Waste generated nationally p/a (2016 DEA estimations)
- 97 Million Tons landfilled (**87%**)

National Waste Composition



QUICK FACTS

Total: 7.7m tonnes / year

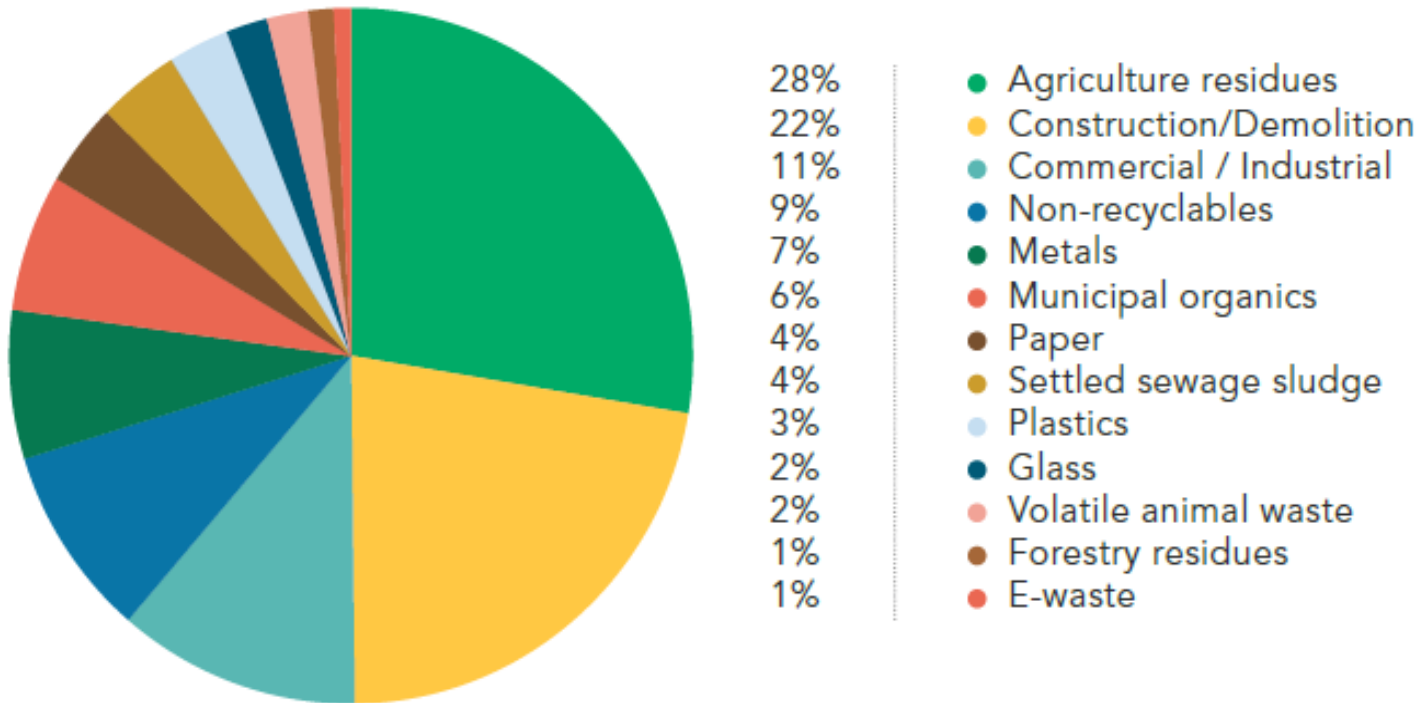


Figure 4: Western Cape total waste characterisation – waste streams and proportions

Source: DEDAT 2016¹⁸

QUICK FACTS

DEA Analyses of Waste Industry - 2017

- R24.3 Bil Total Revenue Generated in 2016
- 36 000 Formal Jobs
- 80 000 Informal Jobs

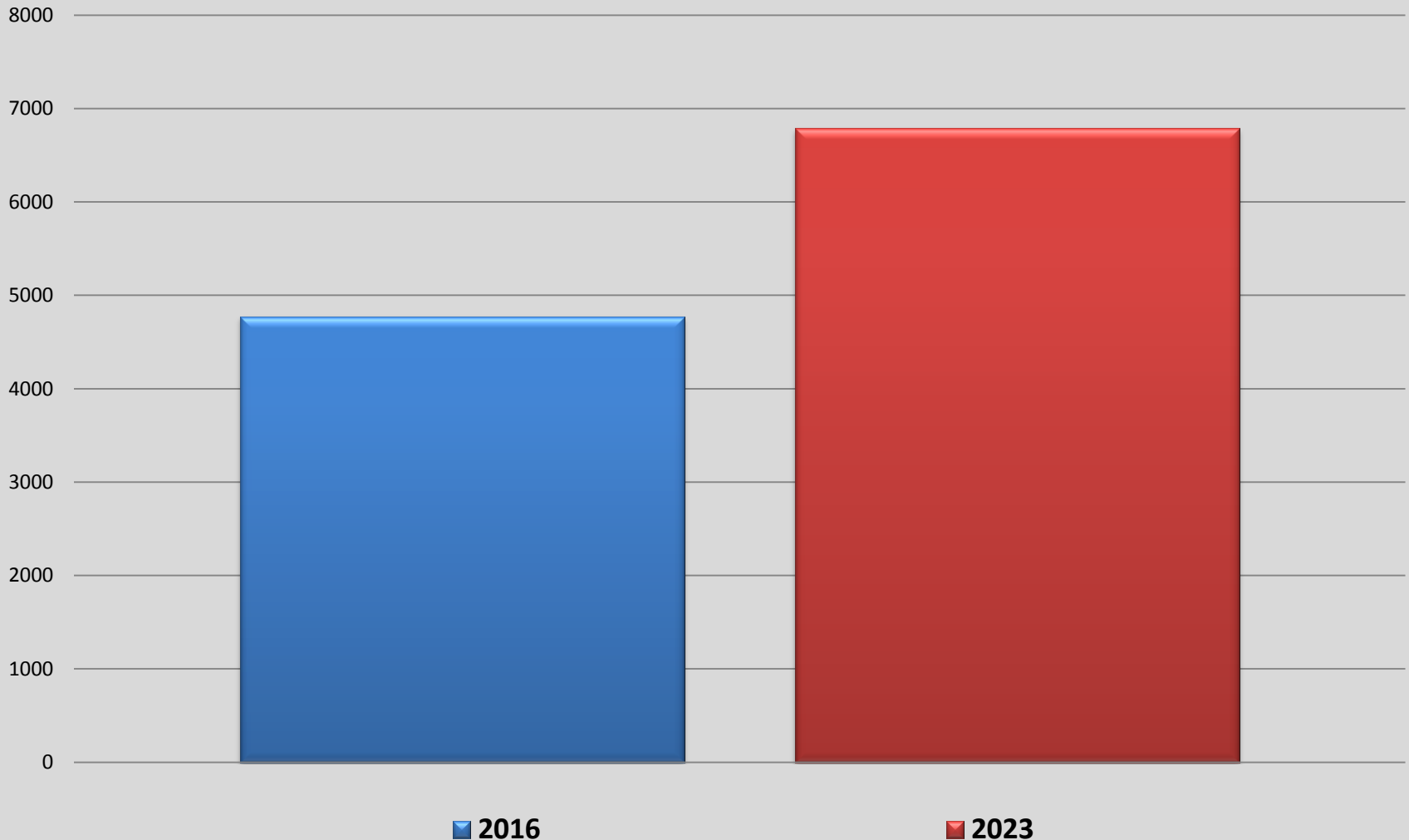
- **116 000 Total Jobs**

DEA Goals for 2023

- R35.8 Bil Total Revenue Generated (47% increase)
- 81 000 Formal Jobs (125% increase)
- 162 000 Informal Jobs (103% increase)

- **243 000 Total Jobs (110% increase)**

DEA Jobs per R1B GDP Goals



QUICK FACTS

DEA Analyses of Waste Industry - 2016

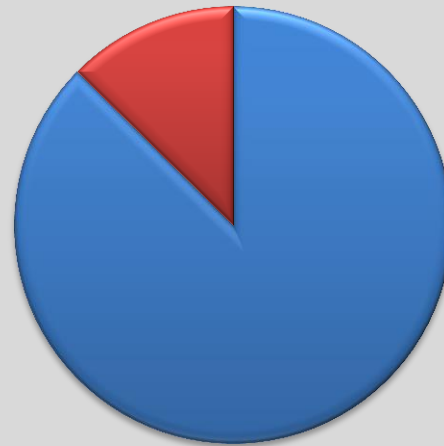
- 111 Mil tons generated p/a
- 97 Mil tons landfilled (87%)
- **14 Mil tons diverted (13%)**

DEA Goals for 2023

- 111 Mil tons generated (assumed)
- 82 Mil ton landfilled (74%)
- **29 Mil tons diverted (26%)**

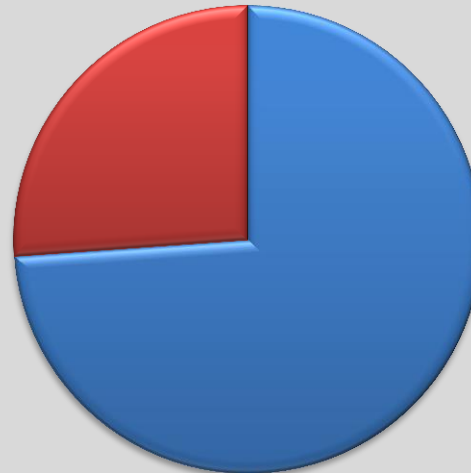
DEA Waste Diversion Goals

From this
(2016)



■ Landfilled 87%
■ Diverted 13%

To this
(2023)



■ Landfilled 74%
■ Diverted 26%

WHAT ARE THEIR PRIMARY GOALS ?

- 1) **Job** Creation (to meet political targets)
- 2) **Revenue** generation (to attract more taxes)
- 3) **Diversion** to landfill (to meet GHG targets)

HOW WILL THEY ACHIEVE THESE GOALS ?



WHAT IS WASTE ?

- According to an extract on the definition of “waste” by NEMWA, waste is –
- “**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 re-used, recycled or recovered.**”

PREVAILING LEGISLATION

- National Environment Act No 107 of 1998 (NEMA)
 - To secure an environment that is not harmful to the health and wellbeing of the people of SA.
- The National Environment Management: Waste Act (NEMWA)
 - Implement the **principles of the waste hierarchy** through development of a National Waste Management Strategy (NWMS), to promote the waste management hierarchy and ensure effective service delivery.

PREVAILING LEGISLATION

Waste generators and handlers triggering the thresholds stipulated in Annex 1 of the National Waste Information Regulations (59 of 2008) **must register** with **and report** waste figures to the **national DEA** via the South African Waste Information System **(SAWIS)**.

INDUSTRY WASTE MANAGEMENT PLANS

- The NEMWA, 2008 (Act No 59 of 2008) Section 28 Notice to the **Paper and packaging**, **Electrical and Electronics**, and **Lighting** Industries has been published on 6 December 2017.
- These Industries are either required to prepare and **submit an Industry Waste Management Plan** (IndWMP) to the Minister for approval by **6 September 2018** or be part of a non-profit PRO which will develop and implement an IndWMP.

CLIMATE CHANGE BILL (Draft)

JUNE 2018

- Bill – Purpose:
- To build the Republic's effective climate change response and the long term, just transition to a climate resilient and **lower carbon economy** and society in the context of an environmentally sustainable development framework; and to provide for matters connected therewith.
- The Republic has committed, internationally, to communicate and implement an effective nationally determined climate change response, including **mitigation and adaptation actions**

CLIMATE CHANGE BILL (Draft)

JUNE 2018

- Within 1 year of promulgation Needs and Response Assessments shall be completed by Province and Municipalities;
- **Within 2 years** the local MEC's shall implement and complete "Climate change response implementation plans".
- Activities with similar activities which emit GHG's will be grouped in "Sectors".
- **"Sectoral Emissions Targets"** (SET) will be established.
- **"Sectoral Emission Response Plans"** (SERP) will be implemented.
- "Carbon Budgets" will be allocated to persons based on GHG emission thresholds that will be set.

CLIMATE CHANGE BILL (Draft)

JUNE 2018

- GHG mitigation plans shall be submitted by persons to whom carbon budgets have been allocated, mitigation actions that will be taken to comply with the allocated carbon budget.
- **Incentives and disincentives** to encourage a **change in behaviour** towards the generation of GHG's will be applied amongst **all sectors of society**.

NATIONAL PRICING STRATEGY FOR WASTE MANAGEMENT

- The Strategy is "a **legislative requirement** of the NEM Waste Amendment Act (Act No. 26 of 2014) and gives effect to the National Waste Management Strategy (NWMS).
- The Waste Act, as amended in section 13B, calls for an Act of Parliament to give effect to the pricing strategy, including details on 13B(b) determination of **waste management charges** and the review of these waste management charges from time to time.
- Section 13B(c) includes procedures for collection of charges through the national fiscal system.

NATIONAL PRICING STRATEGY FOR WASTE MANAGEMENT

- In line with the requirements of the Waste Amendment Act, this strategy contains guiding methodologies for the **setting of waste management charges**, aimed at **funding the re -use, recycling or recovery of waste**; implementation of industry waste management plans (IndWMP) for those activities that generate specific waste streams."

NATIONAL PRICING STRATEGY FOR WASTE MANAGEMENT

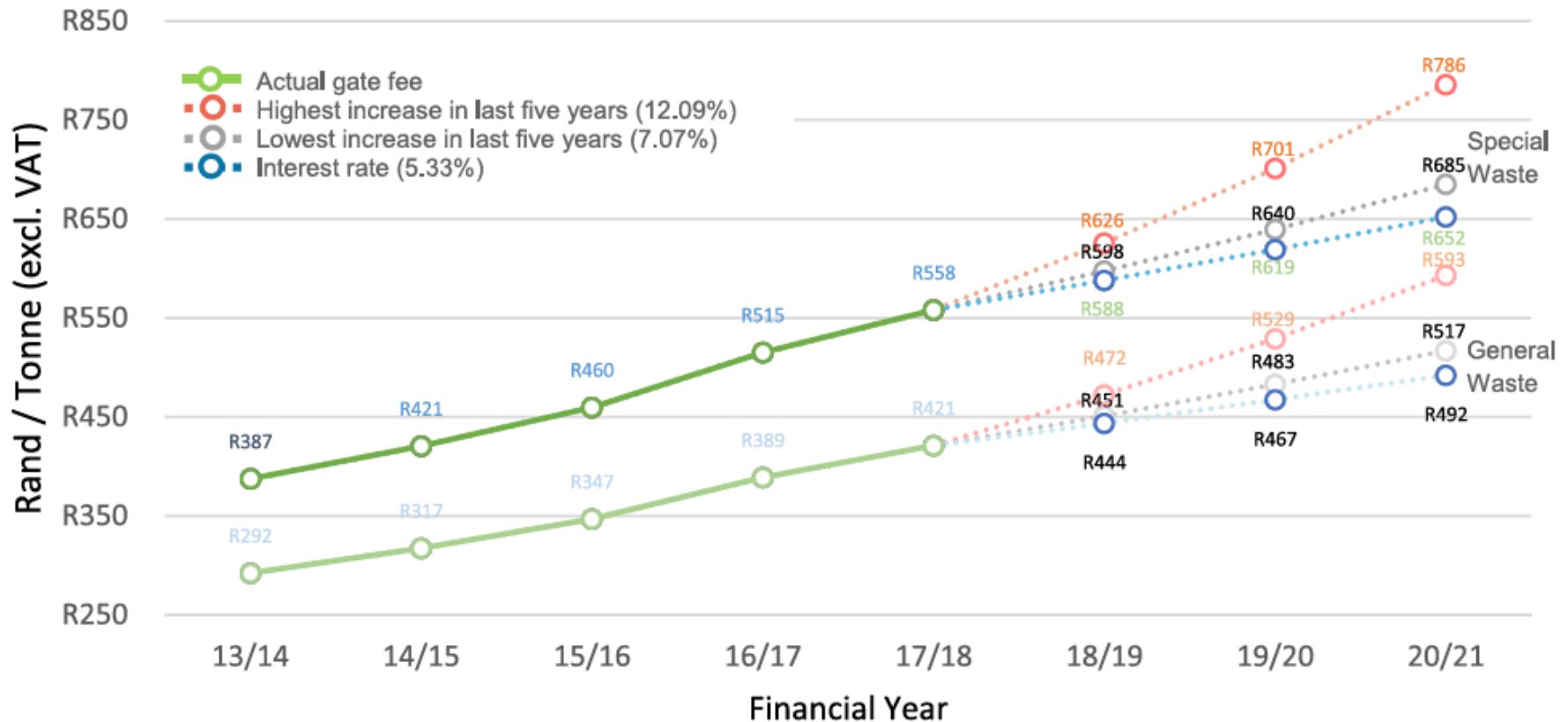


Figure 5: General and hazardous waste gate fees for the City of Cape Town (2007-2021)

Source: GreenCape, based on CoCT gatefees since 2013

LEGISLATION REGARDING ORGANIC WASTE

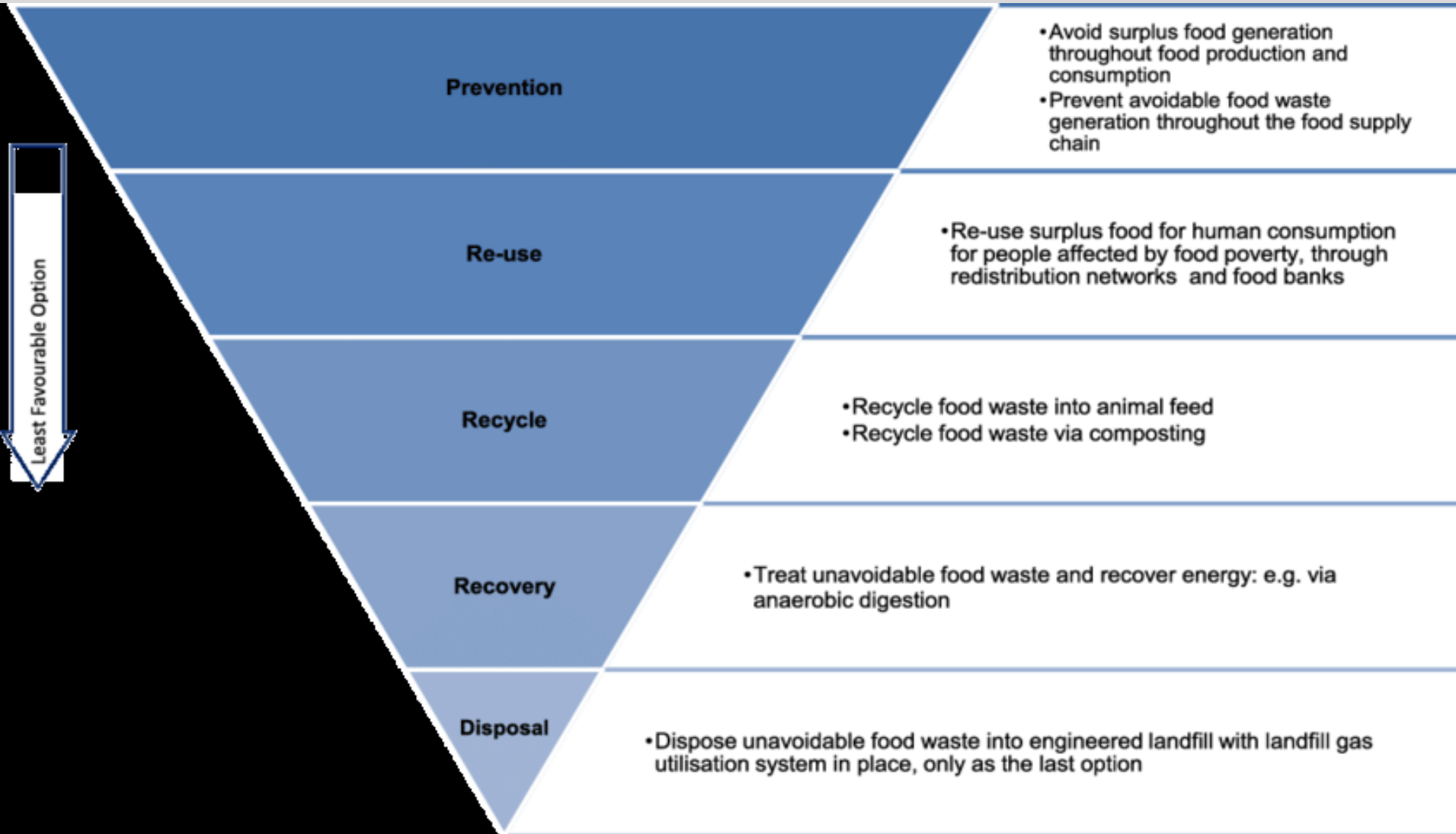
In addition to legislation, other regulations are in place;

- R.123/2008 that defines the scope of the Profession of Environmental Health in relation to the **standards of the premises**, licencing, and the requirement that waste handling disposal is carried out in an acceptable manner.
- R.918/1999 defining the general hygiene requirements for Food premises and the transport of food.
- Note should also be given to "The South African Pork Quality Assurance and Traceability Standard 4.5 which states "**Under no circumstances** is kitchen, ship, hospital , canteen, restaurant or any other swill to be **fed to pigs**".

S.A. STATUS QUO (DEAD&DP REPORT)

1. Diversion of **ALL** organic waste from landfill in 10 years, as from 2017.
2. Organic waste totalling 20,763,600 tons was generated in 2011 and comprises **40%** of all waste generated.
3. In the WC alone, it is estimated that 2,99 MT p.a. of organic waste is generated.
4. **Landfill ban of 50%** of organic waste is to be achieved by **2022** in WC.
5. **Landfill ban of 100%** of organic waste is to be achieved by **2027** in WC.

ORGANIC WASTE HIERARCHY



ZERO WASTE TO LANDFILL

Measure

Accurate measurement is the 1st stage to achieve robust waste management.

Identify

Identify and **characterise** all waste streams and how they are being disposed.

Reduce & Manage

Implement reduce, re-use and recycle options, followed by energy recovery.

Collaborate

Work closely with your **specialist** waste management company to develop optimal solutions.

Engage

High level of engagement needed to bring about **behaviour change**.

ALTERNATIVE TREATMENT SOLUTIONS

1. Animal feed (subject to restrictions)
2. Converted into protein (Agriprotein model)
3. Composting
4. Anaerobic Digestion

ANIMAL FEED



PROTEIN (Agriprotein)



COMPOSTING (commercial)



COMPOSTING (on-site)



ANAEROBIC DIGESTION



HOW TO CHOOSE THE RIGHT SERVICE PROVIDER



ON-SITE

Waste Management
Company

Business model that
rewards clients for
reducing their waste

HOW TO CHOOSE THE RIGHT SERVICE PROVIDER



ON-SITE
waste reduction

separation, sorting,
weighing, reporting

HOW TO CHOOSE THE RIGHT SERVICE PROVIDER



ASSIST
clients in establishing a

**RECYCLING
CULTURE**



HOW TO CHOOSE THE RIGHT SERVICE PROVIDER



DESIGN

A waste area that facilitates

LOWEST
COST OF
PROCESSING
WASTE

HOW TO CHOOSE THE RIGHT SERVICE PROVIDER

**ACCURATE
REPORTING**

That gives you quick
access to data on

MOBILE



HOW TO CHOOSE THE RIGHT SERVICE PROVIDER

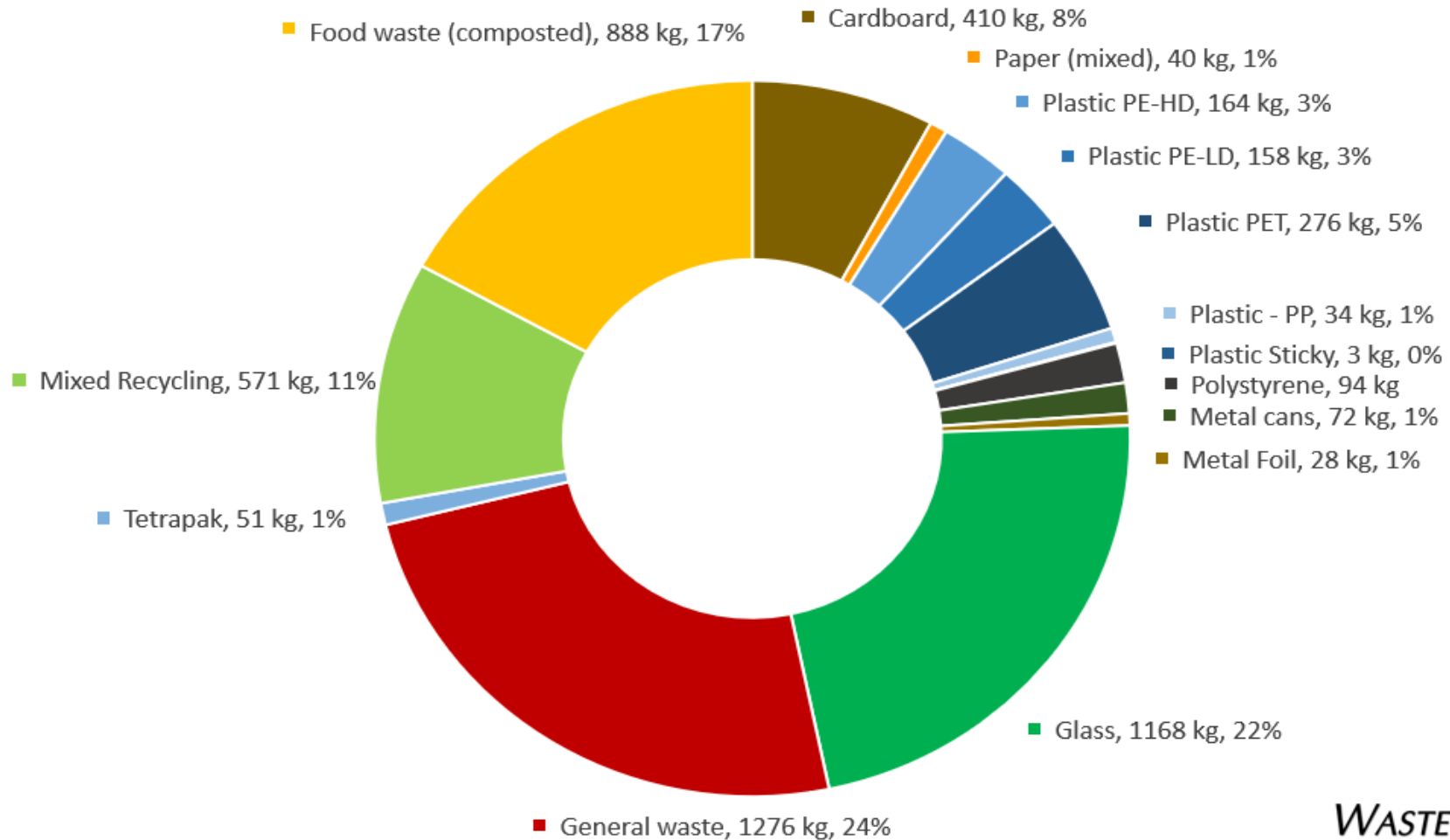


**ACCURATE
REPORTING**

That gives you quick
access to data on

DESKTOP

WHAT DATA YOU WOULD NEED



WHAT DATA YOU WOULD NEED

Avanti Building

Number of months to s...

Calendar mon...

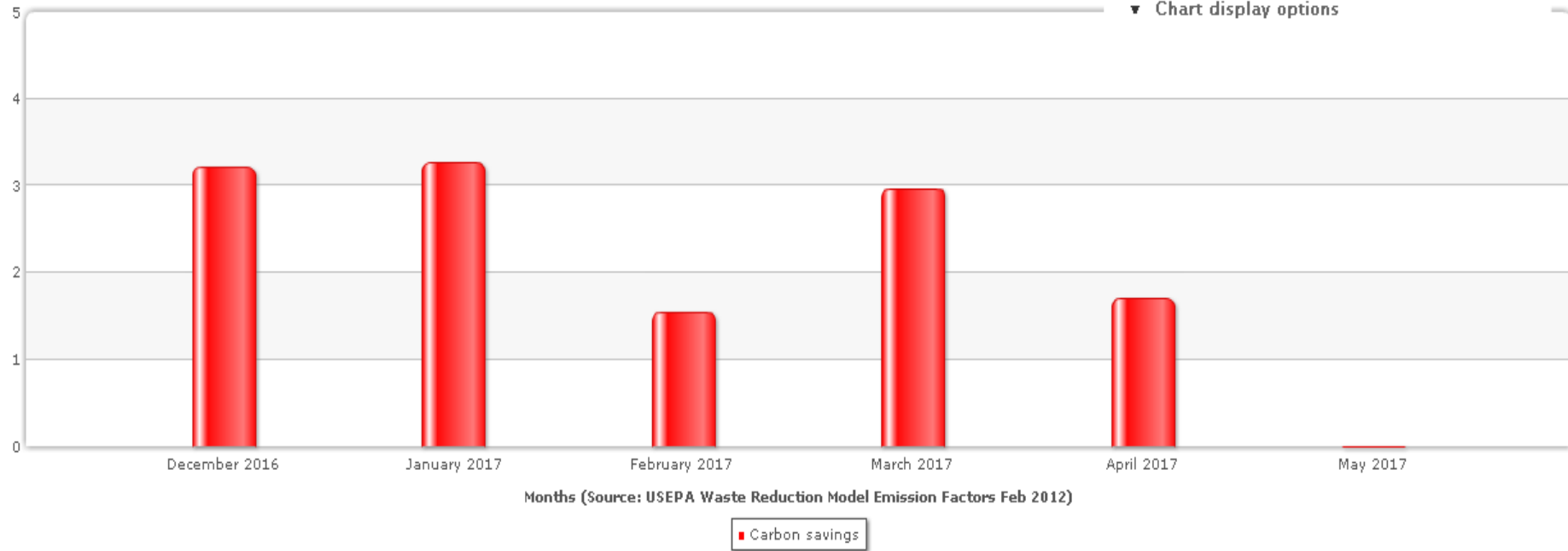
Calculated on: calendar month

Client: Avanti Building

Carbon savings (Mega Tonnes Carbon Dioxide Equivalents per Metric T

Carbon savings per month

Chart display options



THANK YOU

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