

# Applying the Integrated Waste Management Planning Approach in Reengineering Waste Management in the City of Tshwane (CoT)

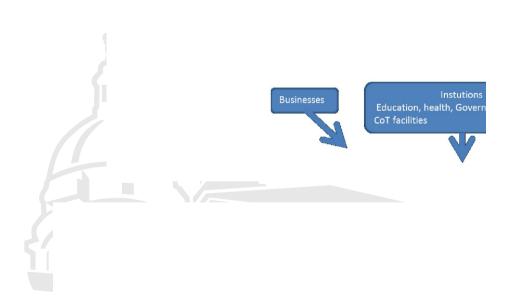
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# Integrated Waste Management Planning Process



- Situational analysis
- Setting the desired end state
- Identifying, evaluating and selecting alternative methods/ approaches of achieving the desired end state
- Implementing the IWMP
- Evaluating and reviewing the plan

# Situational Analysis - Waste Management service in CoT today



Limited recycling not organized, managed and supported by the City's Institutional and Financial framework for Waste Management

CITY OF

**TSHWANE** 

Situational Analysis – Institutional Framework

Collection, transportation and disposal

Private sector service providers contracted by the CoT

60%

- Businesses
- Door-door domestic waste collection in:
  - All townships
  - Some suburbs
  - Recently incorporated municipal areas

City operations using own or leased fleet

30%

- Business & industry
- Door-door domestic in some suburbs

Institutional arrangements developed out of adhoc decisions in response to immediate challenges of service delivery – not a product of a long term institutional strategy that is product of a MSA Section 78 process

Private independent operators

CITY OF

TSHWANE

10%

(Security Complexes and some businesses)

# Situational Analysis – Financial framework

The City collects service charges and covers the costs of the service in the whole value chain that ends with disposal - does not leverage on the latent value of waste (waste as an input resource in other production processes)



Limited recycling not supported by the City's Financial framework - leverages on the latent value of waste

### WHY TSHWANE VISION 2055?



- In 1855, Pretoria was founded and established as the Capital of the Zuid – Afrikaansche Republiek, and in 2055 it will be 200 years old
- The year 2055 marks 100 years of the signing of the Freedom Charter - moral, social, economic, and political compass guiding the attainment of a better South Africa and City of Tshwane
- Most of the Freedom Charter's aspirations and the ideals are captured in the Bill of Rights and South Africa's Constitution.
- The future is unknown and unpredictable, nonetheless, by locating Tshwane vision 2055 on the Freedom Charter sets our imagination free to reflect on the ideals and democratic changes envisioned and to measure ourselves against these

### WHY TSHWANE VISION 2055?



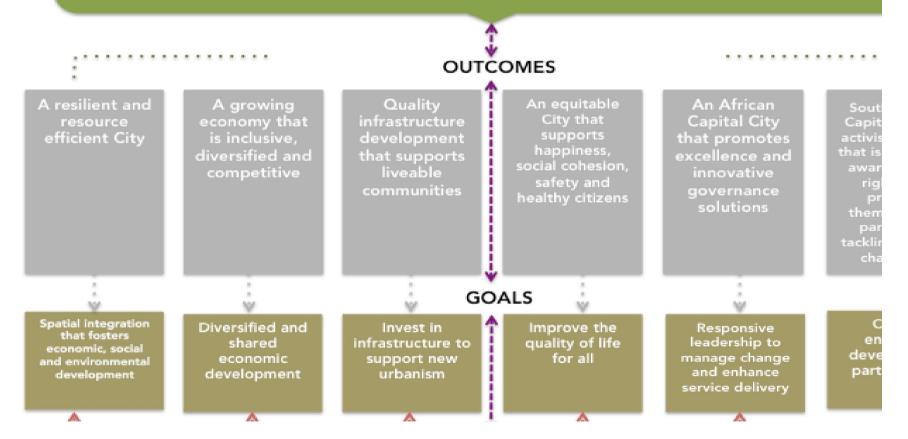
- Tshwane Vision 2055 is a call to action for all stakeholders to contribute in the remaking a true South Africa's Capital City of Excellence
- It is people—driven and places young people at center and platform for young people to accept their responsibility and ownership of the City's problems and to work with all sectors of society in finding solutions
- Tshwane Vision 2055 builds on the foundation laid in the City's CDS, 2004 - Evolving strategy
- The achievement of the vision will set the City on a new development path of a better life for all as well as for its "remaking" as South Africa's Capital City

### **End state: Tshwane vision 2055**



### **TSHWANE 2055 VISION**

In 2055, the City of Tshwane is liveable, resilient and inclusive whose citizens enjoy a high quality of life, have access to social, economic and enhanced political freedoms and who citizens are partners in the development of the African Capital City of excellence.



### **END STATE: TSHWANE VISION 2055**

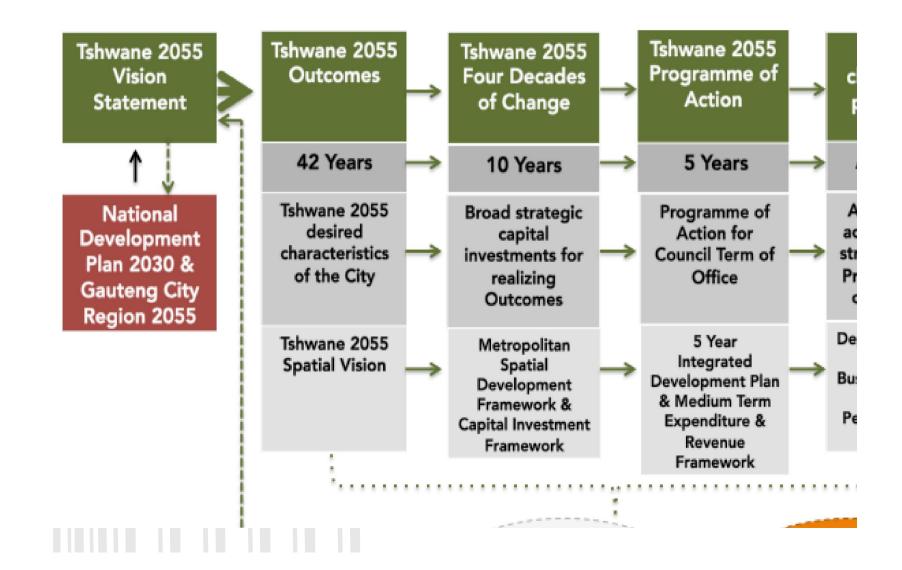
• In terms of realizing Tshwane Vision 2055, the following phases will be followed over the next four decades of change.

By 2020	By 2030	By 2040	By 2050 and beyond
<ul> <li>Getting the basics right</li> <li>Consolidating the gains of democracy</li> <li>Tackling triple challenges of unemployment, poverty and inequality</li> </ul>	Managing sustainable urban growth and development	Transition towards sustainable urban form and economy	Attainment of Tshwane Vision 2055 : better life for all and prosperity



# TSHWANE VISION 2055: A BROAD LOGIC TO GUIDE CITY'S GROWTH AND





# Identifying, evaluating and selecting alternative methods/ approaches



- It is about completely reengineering the City's approach to waste management
- The waste management service will be predominantly about managing waste through reuse and recycling with landfilling being the add-on component (opposite of current approach)
- It is not about scaling up reuse an recycling in a context of landfilling
- It will require a fundamental shift in the institutional arrangements, policies, funding, incentives and disincentives

# WHY THE REENGINEERING OF WASTEN MANAGEMENT SERVICE?

- City not optimising benefits out the latent value of waste
   private sector sees this value
- Decrease in need for landfill sites investment and operational cost as waste is diverted
- Alternative sources of revenue as waste to energy project are identified and implemented
- Providing support to the Cooperatives movement as more of them are engaged in waste management operations
- Complementing the existing capacity at no direct cost to the City

### Cont.



- Creating sustainable jobs without increasing the City's cost of labour
- Developing new waste management systems which will strengthen the City's ability to provide its citizen and clients with a clean, safe, and healthy environment
- Conversion of existing waste disposal sites into multi purpose facilities which accept recyclables and which are closer to the people

# Identifying, evaluating and selecting alternative methods/ approaches



- Likely challenges
  - Big investments by the City and private sector in waste collections trucks (stranded assets) may lead to resistance
  - Comfort zones of practitioners (know best to manage collection)
  - Reporting requirements provincial and national government

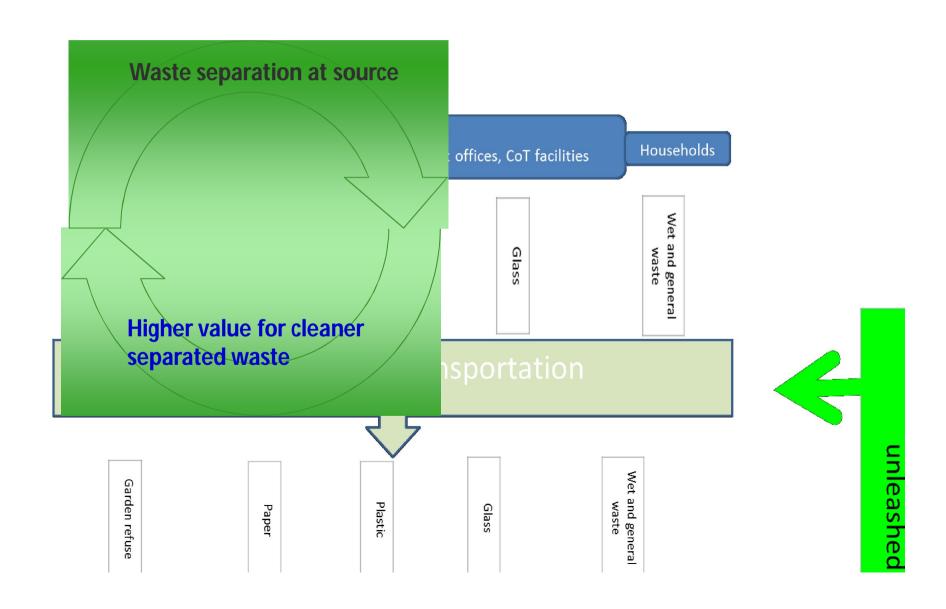
# Identifying, evaluating and selecting alternative methods/ approaches



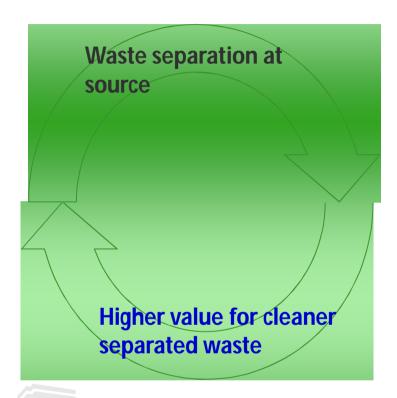
- Will apply the process outlined in Section 78 of the Municipal Systems Act to:
  - Assess the suitability of the existing institutional and financial framework to support the new vision
  - Decide on the best institutional and financial model/ mechanism to support the new approach
  - Guide implementation and change management

# Implementation: The Virtuous Cycle





# Starting a virtuous cycle





- Divert some of the money spent on financing collection and transportation to buying back waste from Coops and Companies that will be collecting and transporting separated waste to waste buyback / transfer centers.
- Compact/ package and forward sell to different users
- Establish partnerships to harvest gas from closed and operating landfills
- Improve regulatory capacity

## Conclusion



- The City is ware that this is a massive undertaking
- Very aware of the likely challenges
- Will appreciate support and collaboration with DEA, GDARD and SALGA in this



# Thank you