EMPOWERMENT OF WASTE PICKERS IN THE CITY OF JOHANNESBURG: CREATING AN ENABLING ENVIRONMENT FOR THE INFORMAL WASTE SECTOR TO PARTICIPATE IN THE PROVISION OF WASTE MANAGEMENT SERVICES



A case study in the City of Johannesburg: Creating an enabling environment for the informal waste sector

PRESENTATION BY CITY OF JOHANNESBURG WASTE PICKERS

### **Presentation Outline**





### Background

- International research reveals that around 15 million people in developing countries work as a Waste Picker (Mark Carras, 2012).
- In the study done by Department of Environmental Affairs (DEA), it is estimated that about 67 000 people make a living through waste picking in South Africa while other studies estimate 85 000 people and,
- Research by the Institute of Waste Management of Southern Africa reveals that the average earnings of a Waste Picker in South Africa is R120/day and between R2 400 – R3 360/month.



### Background – cont.



recycling industry worth over R15 billion

- □ South Africa generates over **59** million tonnes of general waste (Waste Information Baseline Report, DEA 2012)
- An estimated 5.9 million tonnes of general waste was recycled - 10%
- □ The remaining 53.5 million tonnes of general waste being landfilled (Waste Information Baseline Report, DEA 2012)
- □ The South African waste recycling industry worth over R15 billion a year. (Dr Henry Roman, 2012)
- South Africa loses over R17 billion worth of resources through disposal of waste every year. (Dr Linda Godfrey, 2012)
- □ Waste Picker are estimated to have saved municipalities between R30 R700 million in landfill space. (CSIR, 2016)

### Waste Services in Johannesburg: Quick Facts

An Joburg population is over 4.4m people

Over 1m households receive WM services, including informal settlements

Disposes about 1.6 million tones/ annum

4 landfills

Less than 5 years of disposal landfill space

Disposing 80% of waste by landfills

Recycling about 20%

Over 3 000 Waste Pickers on the street and landfills

42 drop off sites/ buyback centres

11 operational depots



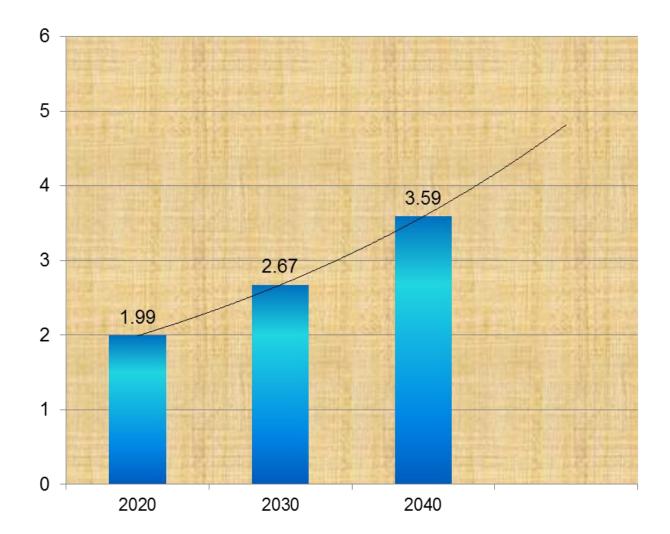


### **Projected waste disposal volumes**

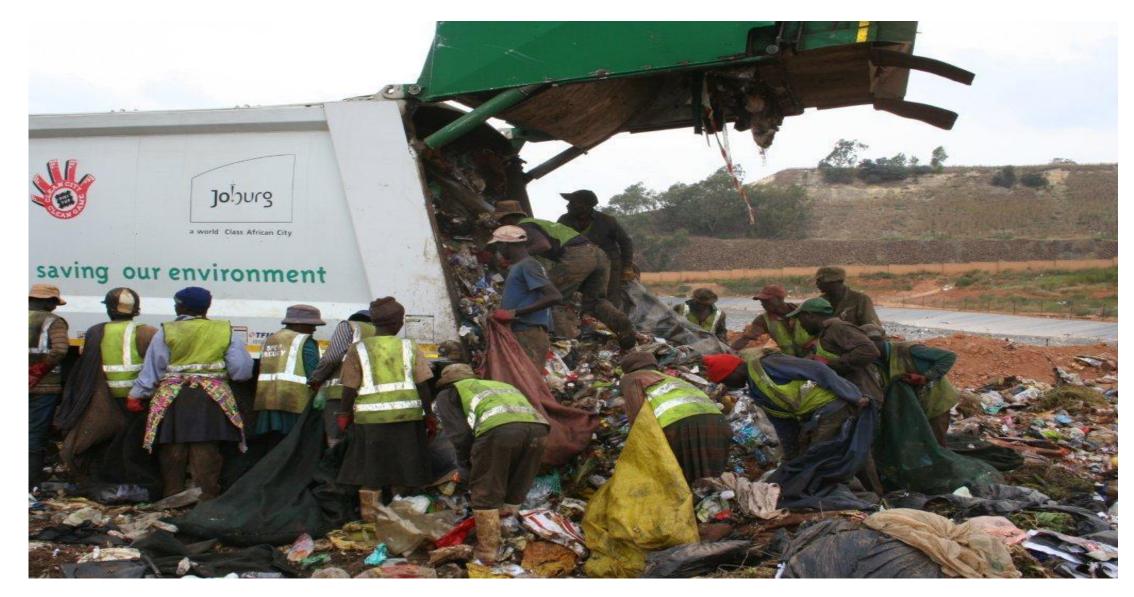
### Waste disposed: 1.6 million tonnes/ year

- Projected annual waste disposal growth rate:
  3.6%
- Forecast waste disposal by 2020 1.9 million tons/year
- Forecast waste disposal by 2030: 2.7 million tons/year
- Forecast waste disposal by 2040 3.6 million tons/year
- □ If no intervention less 5 years landfill airspace available

### **Projected Waste Disposal (Million Tons)**



### **Current recovery practices**



### **Current recovery practices**



## **Current mode of transport**





# **Current recycling facility**



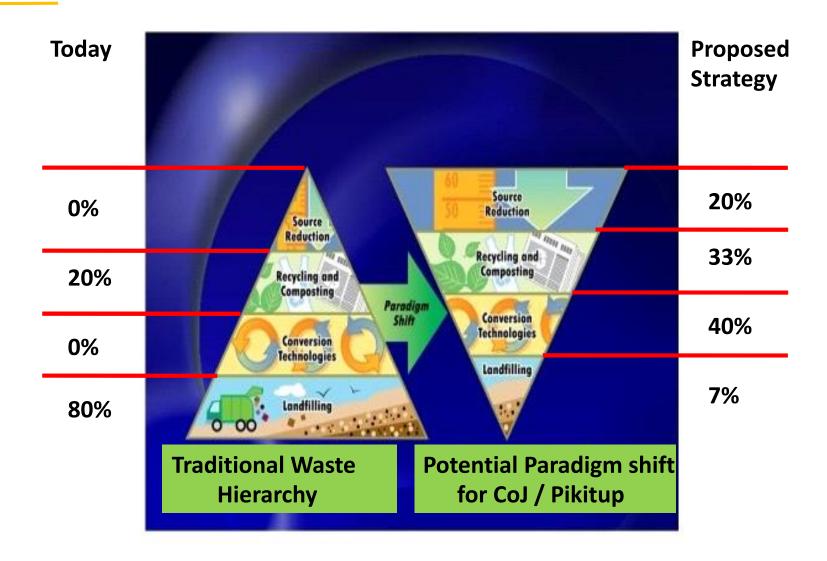
# **Current recycling facility**



### **Policy drivers**

Ensure integrated and sustainable waste management through the hierarchical management of waste

(Reduce, Reuse, Recycle and Dispose)



compliance and enforcement of legislation
 proper research, planning and execution
 credible data and information

### Policy & Strategy 2011

#### Waste Act & National Waste Management Strategy

- National Waste Act
- National Waste Management Strategy
- National & Provincial norms & standards

#### City's 2040 GDS

- Sustainable, reliable infrastructure supportive of low carbon economy
- Decoupling of economic growth from resource use

#### City's Waste Policy & Plan

- Policy & strategic direction on waste management 2011
- Sets targets for reduction of waste to landfill

#### Waste Minimisation Plan

• Sets out implementation plans i.t.o. waste minimisation and diversion from landfills





### Policy & Strategy 2011– cont.

Goal: To implement sustainable waste minimisation through various interventions (composting; recycling; separation-at-source & alternative waste treatment & disposal)

#### Targets:

• 20% reduction in waste going to landfill

Roll-out separation-at-source to

- 30% of households by 2015
- 60% of households by 2020
- 100% of households by 2025

#### **Activities:**

- Develop a plan for source separation to ensure the attainment of the set objectives by June 2012
- Initiate separation-at-source in other areas other than the pilot by July 2012

### Policy & Strategy – cont.

Goal: To implement sustainable waste minimisation through various interventions (composting; recycling; separation-at-source & alternative waste treatment & disposal)

#### Targets:

4 000 job opportunities created (0.1% of the population in city) through waste minimisation, recycling & reuse

#### Activities:

Initiate community based programmes that will provide at least 0.1% of the population of Johannesburg. These can include nay of the following:

- Composting facilities
- MRFs and buyback centres
- Community based collection systems (including recyclables)
- Re-use of recyclables to produce other marketable products – e.g. mats, jewellery, etc.
- Beyond 2016, continually improve on this target by a percentage increase to be determined based on the outcomes of the waste survey to be undertaken

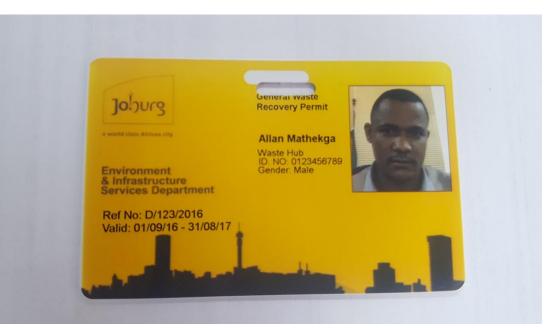
### **Current initiative to support/ integrate waste pickers**



- City initiated Waste Picker empowerment program
  in 2010
- Program was aimed at understanding the Waste
  Pickers activities
- □ Understanding their needs, challenges
- □ Initiate training and skills development
- Develop waste Picker to Entrepreneur
- Educate and raise awareness on the Pickers contribution to waste recovery and recycling.

### **Current initiative to support/ integrate waste pickers**

- Create a Database
- □ Registration and permitting
- Consultation with all relevant stakeholders i.e.
  individual meetings.
- Undertake need analysis, training and capacity building
- □ Media profiling of Trolley Brigades (Video)





### **Current initiative to support/ integrate waste pickers**

- Development of Waste Pickers operational guideline
- **G** Foster partnerships & funding with private sector
- Designated of sorting and storage areas (MRFs at landfill sites)
- □ Incorporation of Waste Pickers to mainstream waste management especially separation at source

### **EPWP FUNDING**

□ Financial year 2013/2014 R 3 000 000 – 224 Waste pickers empowered

□ Financial year 2016/2017 R 2 500 000 – 220 Waste Pickers targeted

- The purpose of the projects:
- Register all the Waste Picker into a database, formalized, provide with permit cards and PPE.
- Waste Pickers receive training on the following disciplines:
  - Waste management
  - Health and Safety
  - Cooperatives
  - Business management
  - Finance management
- □ Formalization of Waste Pickers- CO-OPS OR SMEs

### New model recycling facilities

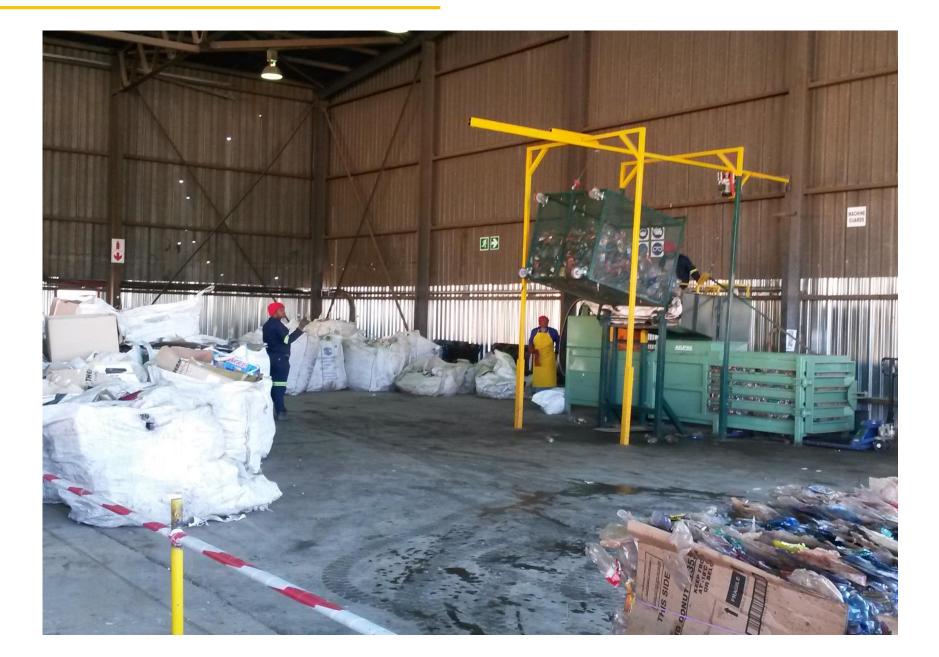


## New model recycling facilities





### New model recycling facilities



## New recycling truck



### Achievements to date

- 42 Cooperatives Waste Pickers co-ops participating at S@S and Jozi@Work
- **9** Co-ops have dedicated sorting facilities.
- □ Training of over 1000 co-op members
- □ Trolley donated to 50 by PETCO
- **PPE= 600**
- Picker Forum has been formed









Co-ops doing door to door education and awareness

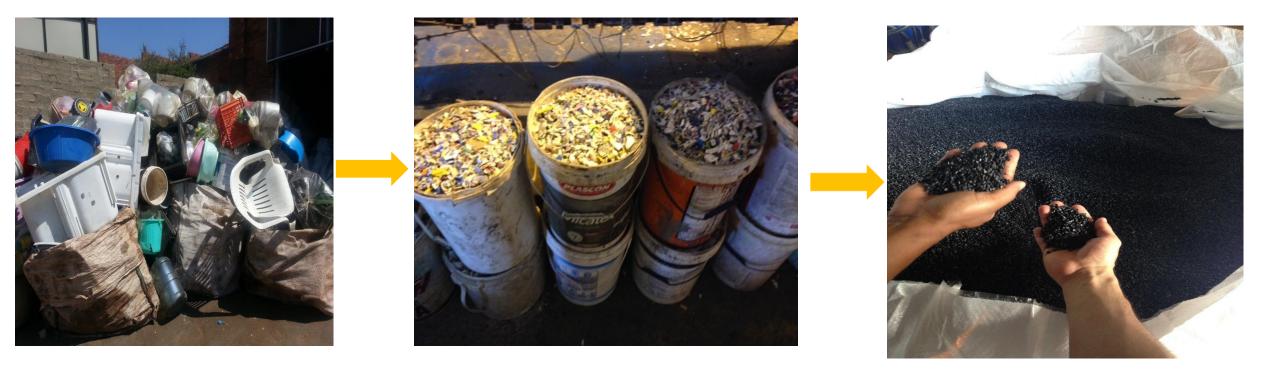
Co-ops doing street sweeping and litter picking

### Achievements to date

- Mini plastic processing waste buyback centre
- Building about 10 sorting facilities with one developing to a mini processing plant for plastic
- □ Implementing separation at source at household (over 450 000 households)
- **Q** 22% of the households participate in separation at source
- □ Procurement of fleet to be used for collection of recyclables
- □ Registering cooperatives participate in other waste services like street sweeping and litter picking.
- **G** Establishing cooperatives from Waste Pickers

#### Achieving 20% waste diversion from landfill to recycling initiatives

# **Recycled plastic process**



### Challenges

- Government procurement policies.
- Material beneficiation
- □ Sorting facilities
- Foreign Nationality
- **G** Funding
- Seasonal working nature of Waste Pickers
- □ Sustainability of coops
- Driven by socio-economic status of Pickers
- Littering





### **THANK YOU FOR YOUR ATTENTION**

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