# Social awareness programmes in waste management and recycling

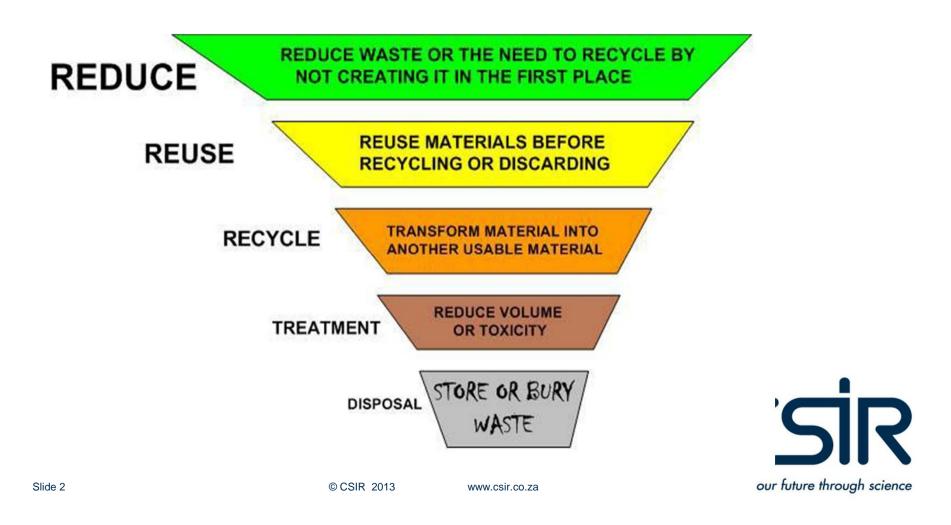
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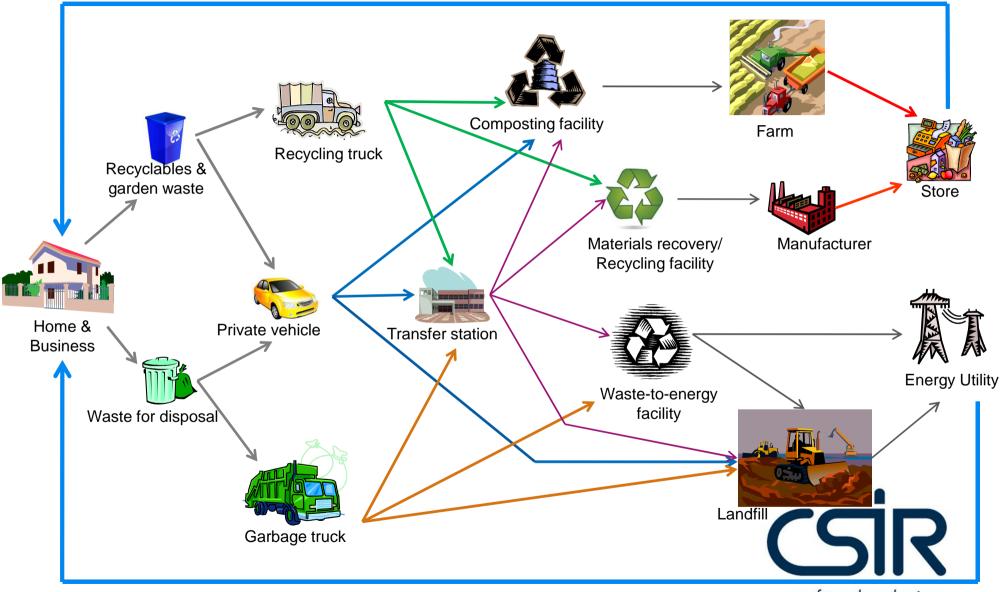


### Background

Waste Act, 2008 adopted the waste management hierarchy



## Implementing the waste hierarchy



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# Source separation of domestic waste



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Picture by Wilma Strydom

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## **NWMS Targets for 2016**

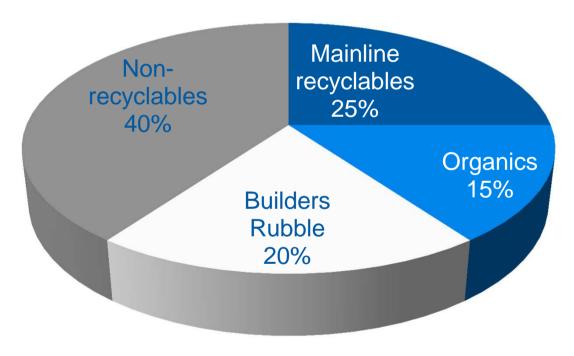
- 25% of recyclables diverted from landfill
- Waste separation at source in all Metro's and secondary cities
- 69 000 new jobs created in waste sector
- 2 600 additional SMEs and cooperatives participating in waste service delivery and recycling
- 80% of municipalities running local awareness campaigns
- 80% of schools implementing waste awareness programmes



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### Municipal waste composition by mass

# Gauteng



Source: Gauteng Waste Minimisation Plan: Status Quo, 2008\_

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## Potential waste recovery targets - Gauteng

Time horison	horison available	Glass	Plastics	Paper	Tins	Tyres	Greens	Builders Rubble
	Material (t/annum)	Percentage of potentially available material						
2006	3380417	25	33	57	67	50	20	5
2010	3517675	50	40	65	70	80	40	25
2015	3697112	60	45	70	70	80	70	50
2020	3885702	65	50	70	70	80	90	70

Source: General waste minimisation plan for Gauteng, 2009



#### Awareness creation

- Slogans and Billboards
- Exhibitions
- Flyers
- Booklets
- Personal visits
- Campaigns
- Competitions







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# How will social awareness impact on city waste management?

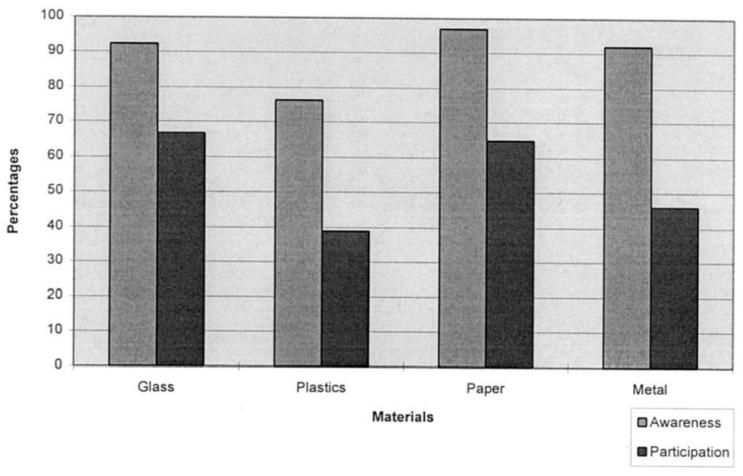
# Awareness of recycling does not necessarily translate into practicing recycling

(Omran et al 2008)



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## Awareness vs Participation



Source: McDonald and Ball 1998)



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# What are the drivers for social change?





## What are the drivers for social change?

#### 1. Motivation

People must have a reason to change behaviour

#### 2. Ability

People must have the skills, confidence and knowledge required to change

#### 3. Opportunity

People must have resources, relationships and environmental conditions needed to change

All three conditions must be met for people to change behaviour



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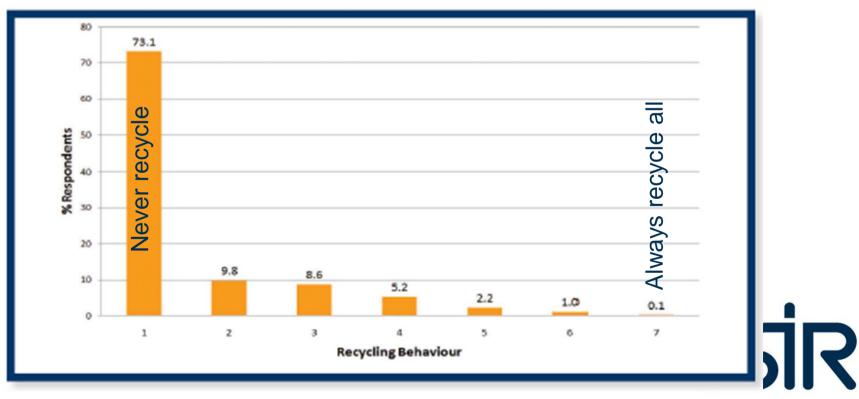
# Examples

Motivation	Ability	Opportunity	How to change behaviour
Cell phone owner knows not to throw old cell phone in trash	Cell phone owner does not know where and how to recycle	The local cell phone outlet has a collection bin for old cell phones	<ul> <li>Education/awareness</li> <li>Where and when they can drop off old devices</li> </ul>
Person knows he can earn money through recycling	The person knows what to recycle and how to set up a business	The person does not have a truck to collect and transport recyclables	Resources • Financing scheme
A household is not inspired to recycle	People in the household knows what is recyclable and have a recycling service	There is a local recycling initiative in the area of the household	<ul> <li>Feedback and Public recognition</li> <li>How much waste is recycled</li> <li>How it benefitted the environment</li> </ul>

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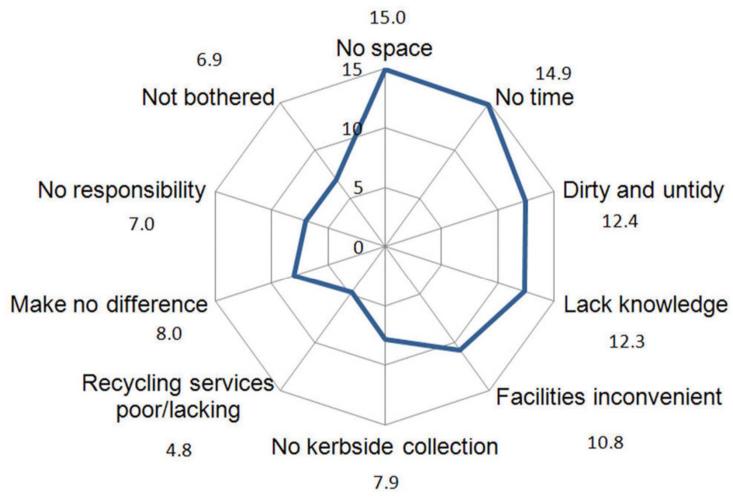
## Recycling behaviour in South Africa - 2010

- 73.1% of South African city dwellers do not care about recycling
- Only 3.3% of our urban population recycle on a regular basis



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## Reasons why South Africans don't recycle



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Reasons why people do not recycle					
	They lack space to keep the recyclables				
Situational factors (household level)	They do not have the time				
(Hooseriola level)	Keeping the materials until it is recycled is dirty and untidy				
Knowledge	They do not know what can and what cannot be recycled				
	Recycling facilities are inconvenient				
Situational factors (recycling facilities)	They do not have a kerbside collection service for recyclables				
(recycling ruellines)	Recycling services are poor or does not exist				
	They think it will not make a difference whether they recycle or not				
Psychological factors	They are not responsible for recycling in their households				
	They cannot be bothered				



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#### **Motivation**

- Establish credibility
  - people need to believe that the cause is important and that the municipality has the authority to tackle it
- Raise awareness of the need to change
  - Expert opinion and media coverage may be convincing
- Appeal to emotion
  - If people feel guilty if they don't recycle, they are likely to start recycling
- Create simple "Prompts"
  - Sticky notes on garbage bins to remind people to recycle
- Use social pressure
  - Share peer behaviour
- Incentives
  - Make behaviour public Display good behaviour for others to see
  - Provide feedback

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## **Ability**

- Education and awareness raising on
  - What can be recycled
    - Types of waste
  - Where can it be recycled
    - Drop-off facilities
    - Collection services for recyclables
  - When can it be recycled
    - Operating times of drop-off facilities
    - On what day is the collection service
  - How should it be recycled
    - Type of receptacle to use
    - Sorting requirements



## **Opportunity**

- Provide infrastructure to support recycling
  - Drop-off facilities
  - Buy-back centres
  - Collection services for source separated recyclables



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## Driving social change

- Identify the target audience fro social awareness
- Do a gap analysis
  - Motivation/ability/opportunity
- Taylor the social awareness programme to focus on specific gaps
- Do a similar analysis for the programme
  - Ensure that the team is motivated
  - Has the ability to execute the programme
  - Create the opportunity for roll-out of the programme



### Lessons learnt with awareness campaigns

- Clean-up campaigns do not succeed in changing human behaviour
- Main message must be "do not litter" and "Reduce, re-use and recycle"
- Incentives associated with clean-up campaigns often reward bad behaviour
- Payment for clean-ups must be decoupled from waste volumes
- Awareness creation must be on-going to remind people
- Start of recycling initiatives before creating awareness



## What is driving social awareness internationally

- The majority of respondents became aware of recycling initiatives by seeing recycling banks (about 80%)
- Publicity campaigns (about 10%)
- Leaflet campaigns were also successful



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#### Conclusions

- Increased awareness increase recycling
- Increased service provision resulted in a bigger increase
- Awareness creation is important to increase ability but motivation and opportunity are required to change human behaviour



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## **Thank You**

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