

# **Sustainable Waste Management Stakeholder Workshop**

**Wednesday February 25<sup>th</sup>, 2015, Savoy Resort & Spa**



## **Presentation of S4S Waste Survey Results**



**SGP** The GEF  
Small Grants  
Programme



# 4 surveys conducted



- 1) Household electronic waste survey (2012)
- 2) Public awareness survey on waste and the 3Rs (2013)
- 3) Status of waste survey with waste companies (2013)
- 4) Survey of waste production by large businesses in Seychelles (2013)

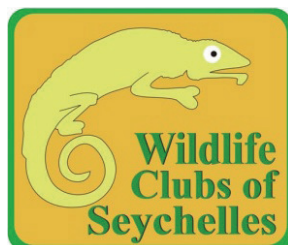


# 1) E-waste survey

# Seychelles e-waste profile

## results from 2012 survey

Presentation prepared by Elke Talma and Hrishikesh Ballal  
(May 2013)







# Introduction

## What is e-waste?

Like most countries around the world, Seychelles is producing more and more waste which eventually ends up in the landfill, taking up valuable space that could be used for other purposes like housing, recreational facilities, businesses or natural areas.

As we become more “developed” we buy and use more electronic goods which also end up in the landfill once they break, go out of style or become obsolete. This kind of electronic waste is called “**e-waste**” and it includes everything that runs on electricity, batteries or another energy form.



# Introduction

## Why is e-waste bad for the environment?

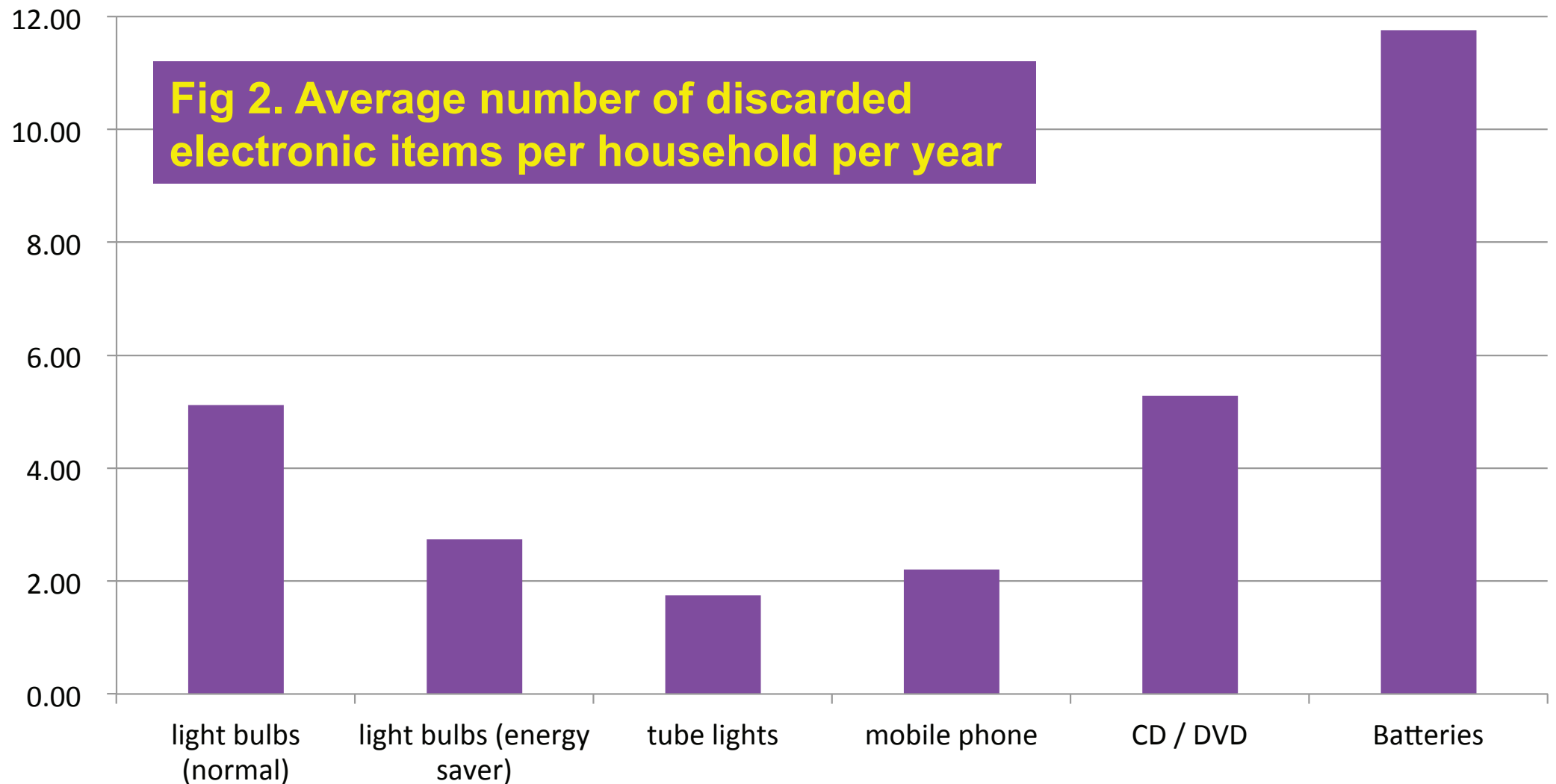
- ✓ All electronic scrap components may contain contaminants such as lead, cadmium, beryllium or brominated flame retardants which can leach into the soil and pollute the not only the soil but also the water supply.
- ✓ Burning of e-waste also results in air pollution
- ✓ These pollutants (air, soil, water) can lead to health risks e.g. cancer, disorders to the central nervous system & development.
- ✓ Incorrect processing of e-waste, particularly in 3<sup>rd</sup> world countries, is also problematic



# Results

(discarded e-waste)

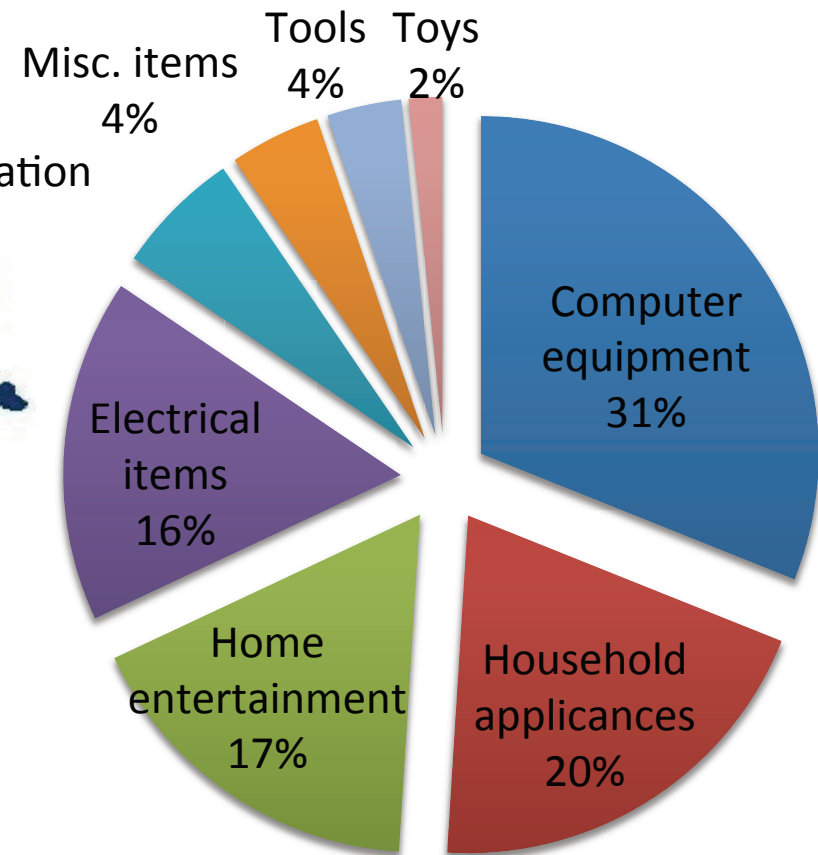
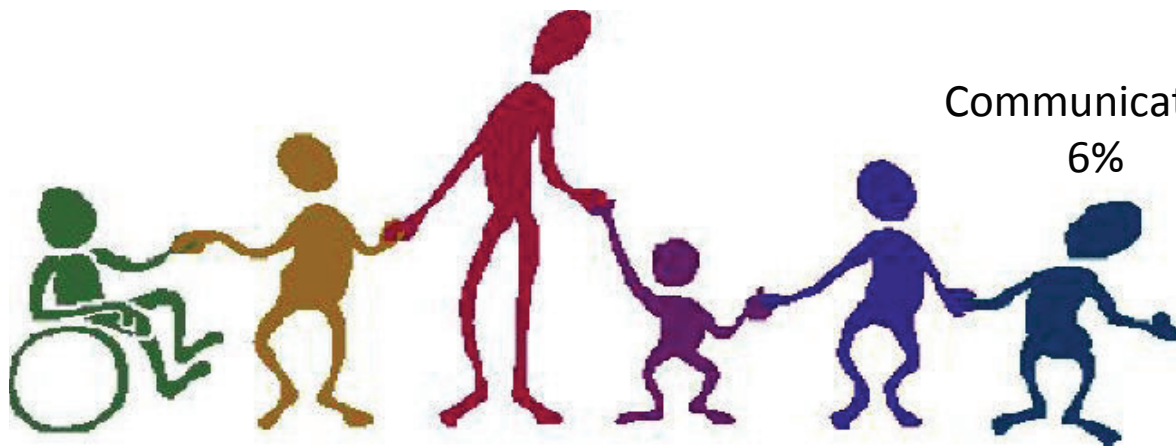
What do you throw in the bin each year?





# Inference

According to the 2010 census, there are 24,142 households in Seychelles. If we extrapolate the data gathered in this e-waste survey based on total households and average weights of some of the e-waste items....



NB: average weight estimates based on values from

<http://ewasteguide.info/node/4065> &  
<http://google.com>





# Conclusion

- There is a significant amount of e-waste being generated in Seychelles:
  - ✓ 15,180 to 22,237.20 metric tons of unusable devices
  - ✓ 23,530 to 72,817 metric tons of usable devices
- The results of the survey suggest that a lot of this waste is being hoarded by households, most likely because:
  - ✓ they can be used for spare parts
  - ✓ there is no proper (free) place to discard them or
  - ✓ they are too heavy to bring to the roadside/collection points
- When these items are discarded, they are most likely going directly to the landfill...yet there is scope for recycling/exportation if a proper collection/sorting system can be put in place.





# Recommendations

1. Set up a e-waste management system
2. Develop a National e-waste awareness campaign
3. Seek sustainable sources of funding



## **2) Public Awareness of the 3 R's**



# sustainable waste management:

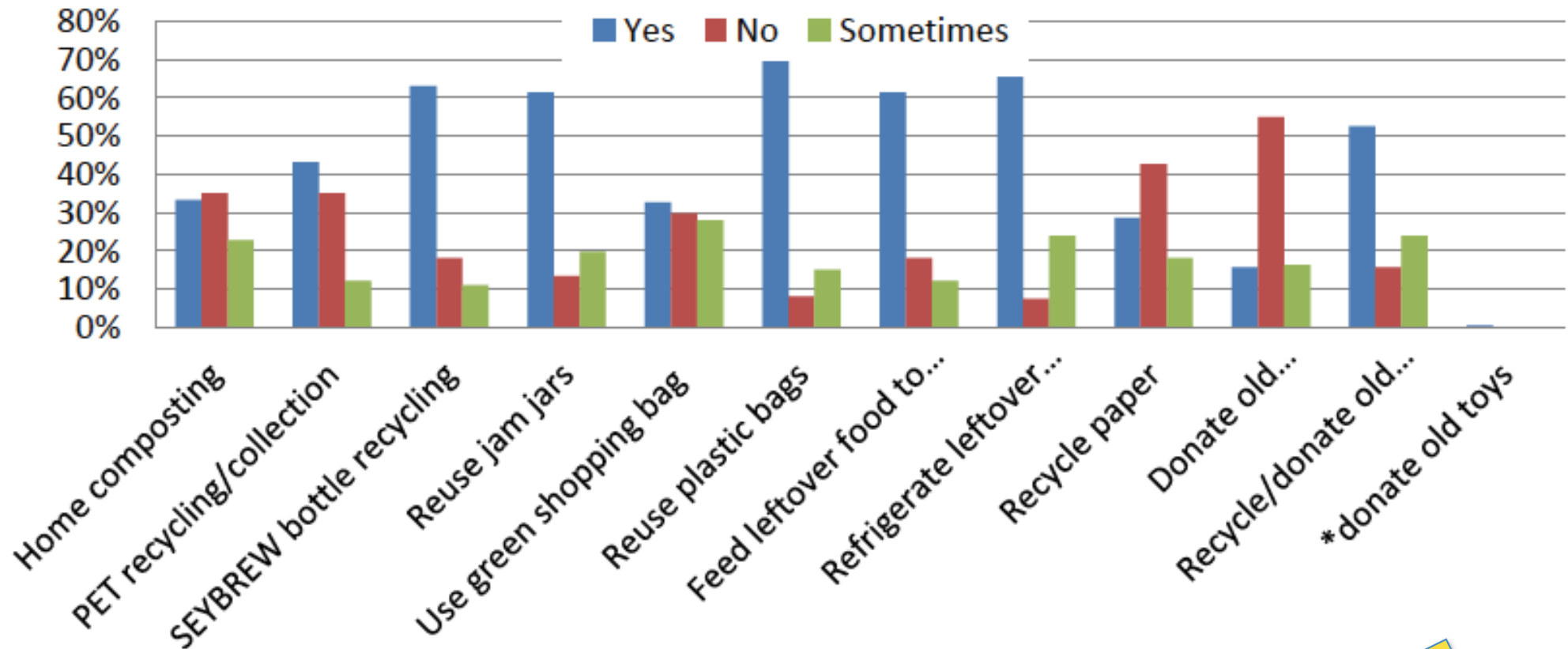
Survey on the 3 Rs (reduce, re-use and recycle)



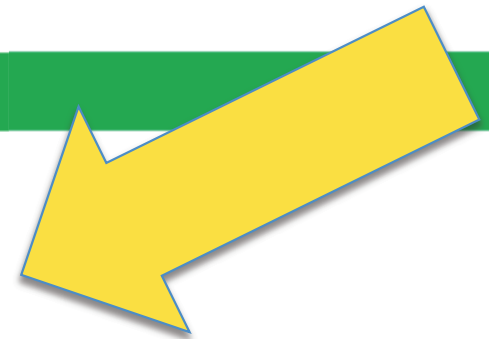
Presented prepared by Elke Talma  
For Sustainability for Seychelles

# the 3 Rs of sustainable waste management

## Results: sustainable waste management practices

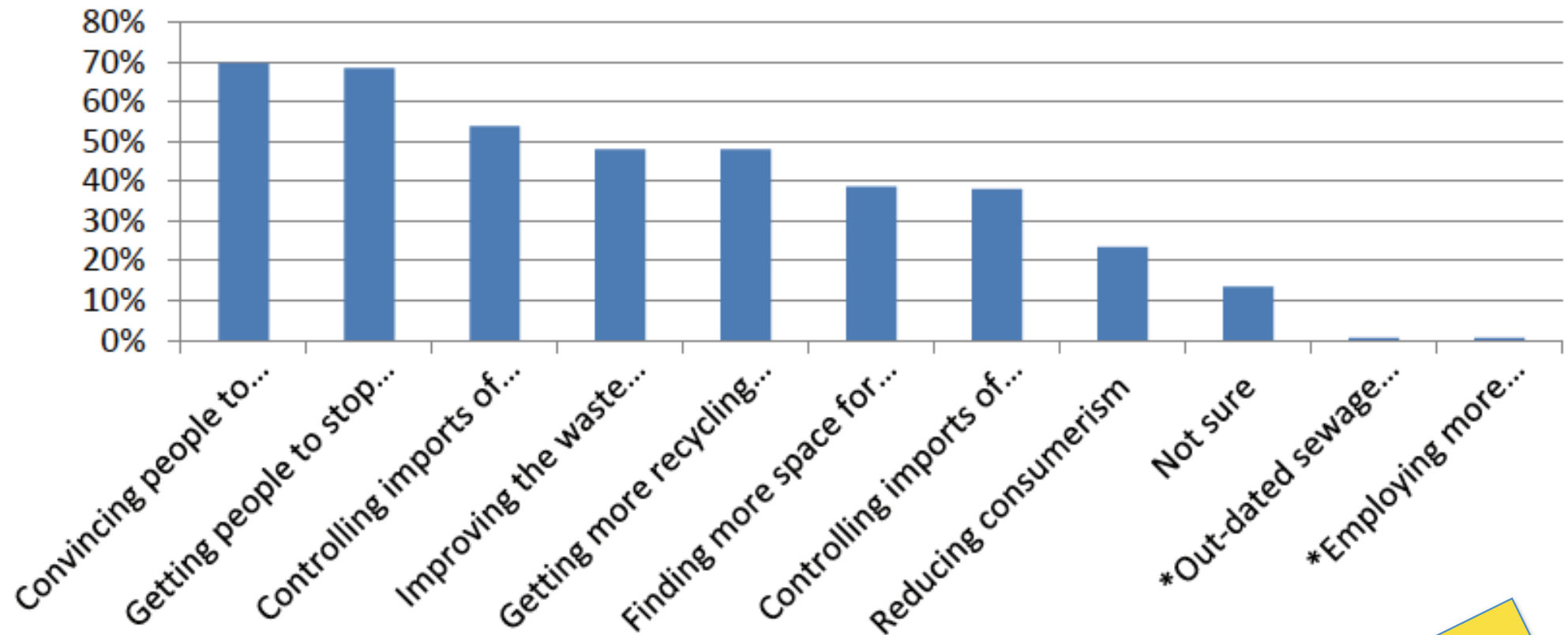


Top 3 practices		sustainable waste management practices	
1	Reuse plastic bags		
2	Refrigerate leftover food to eat later		
3	SEYBREW bottle recycling		




# the 3 Rs of sustainable waste management

## Results: challenges for dealing with waste



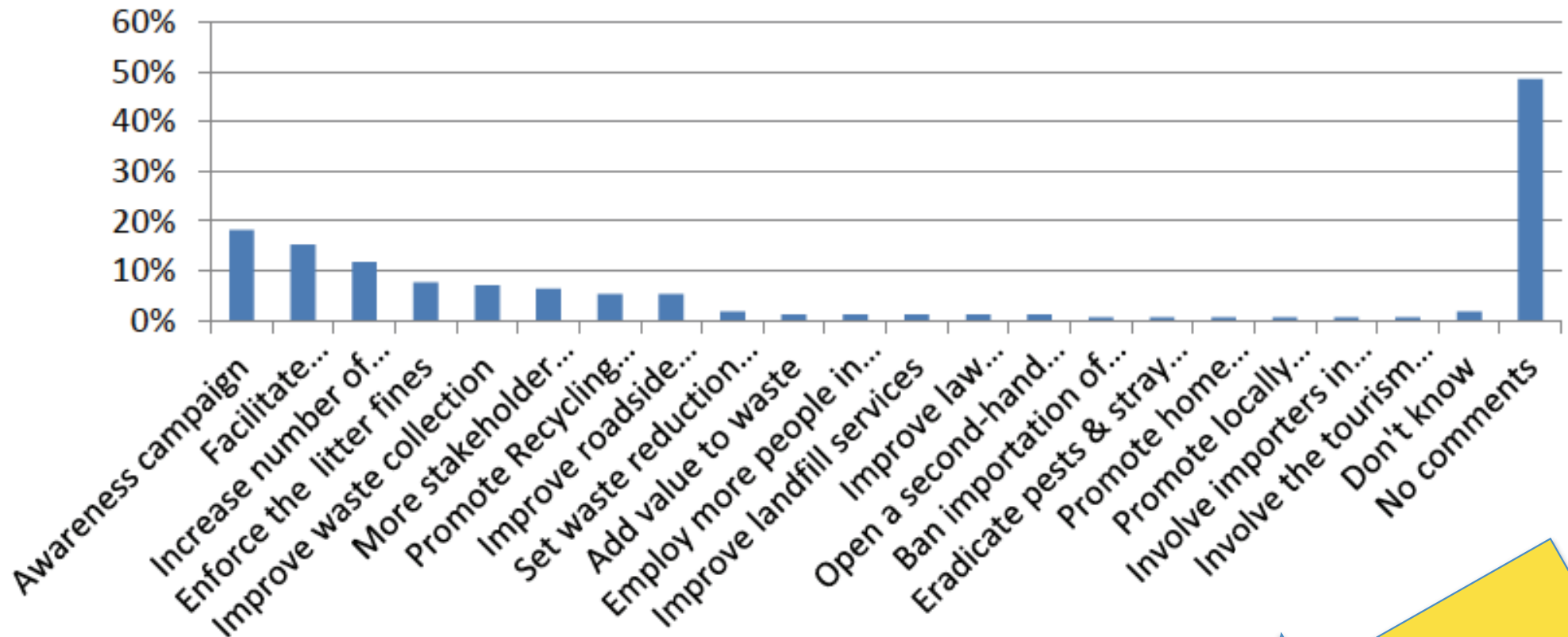
Top 3 practices		challenges for dealing with waste sustainably
1		Convincing people to recycle
2		Getting people to stop littering
3		Controlling imports of poor quality products that break easily





# the 3 Rs of sustainable waste management

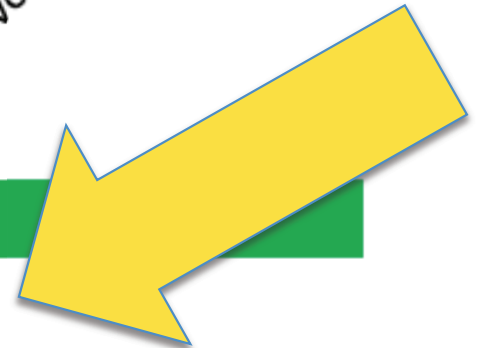
## Results: improving waste management



### Top 3 practices

### Improving waste management in Seychelles:

- 1 Awareness campaign - general and targeted
- 2 Facilitate implementation of 3r's from home to redeem centre/bin
- 3 Increase number of public bins



# Recommendations from survey

**Focus public awareness campaign on the 3 major challenges:**

- 1) Convincing people to recycle***
- 2) Getting people to stop littering***
- 3) Controlling imports of poor quality items***

**To improve waste management, focus on the top 3 practices:**

- 1) A good awareness campaign**
- 2) Facilitate implementation of recycling from home to redeem centres**
- 3) Increase number of bins**



### **3) Status of waste survey (with waste companies)**





# The status of waste management in Seychelles (2013)

By Elke Talma and Michele Martin  
For Sustainability for Seychelles





# Purpose of the survey on waste management

The aim was to interview organisations working directly with waste to get their views on how the system is working and what new options should be considered to accommodate their needs so as to provide baseline information for further discussion of the way forward through public consultation with relevant stakeholders.





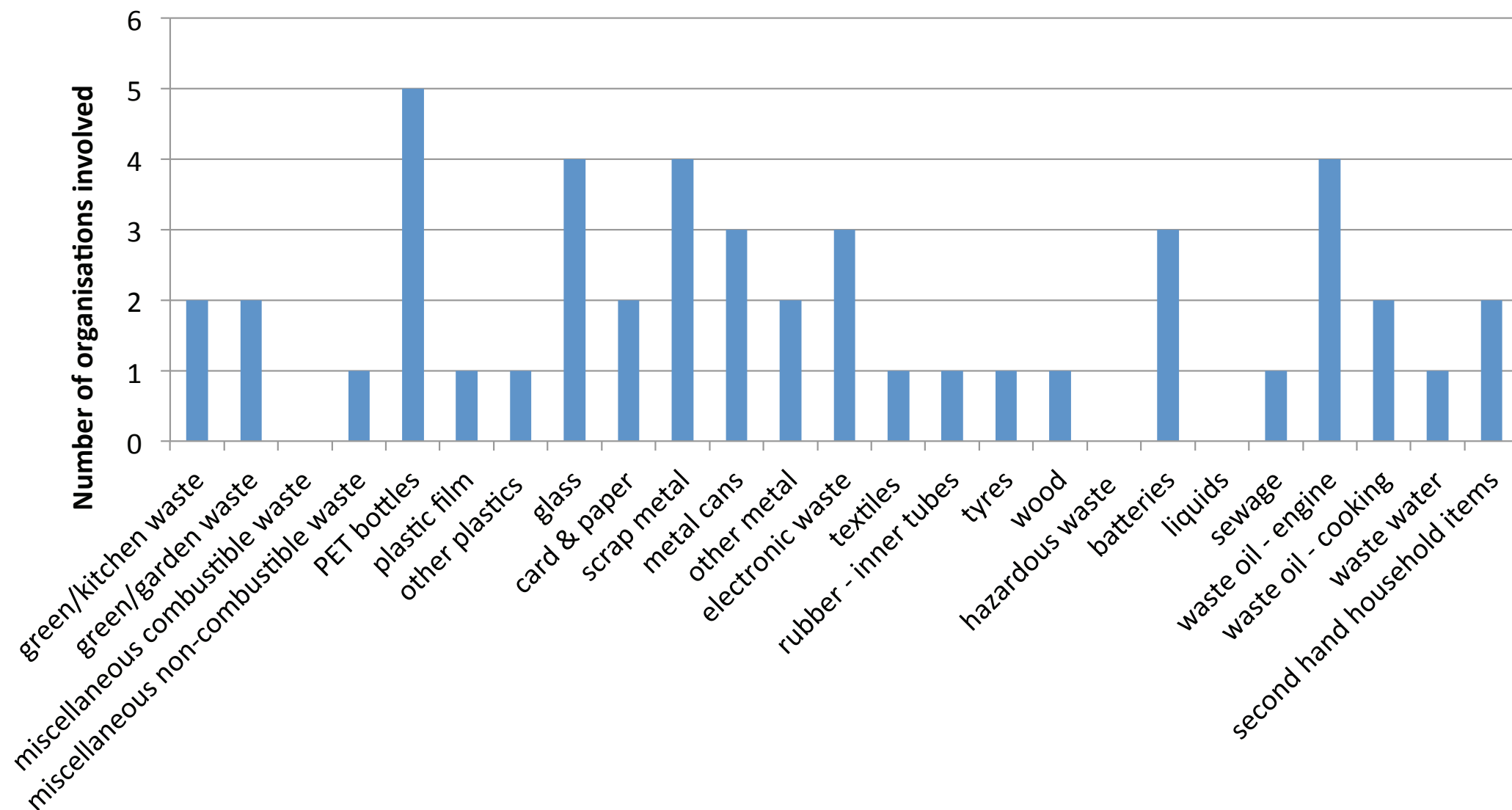
# Survey participants by category

Those interview could be divided into clearly defined categories:

- ✓ **Waste Agency**  
(LWMA Mahé, PRaslin and La Digue)
- ✓ **Redeem Centres**  
(Deenu's Redeem centre, Providence Redeem Centre, De-Recycling)
- ✓ **Waste Exporters**  
(De-Recycling, Surya Enterprise Providence, Leevac Trading, Samlo and sons, Harini Company Limited , Star waste oil)
- ✓ **Recyclers/Producers**  
(Navin's Paper Recycling, Regenerate, Melvin's Electronic Repair, STAR dust, Kaju Studio, MEC Pty Ltd)
- ✓ **Non-Governmental Organisations (NGOs)**  
(S4S, APANA, RCSS)
- ✓ **Charitable Foundations**  
(Shop 4 Hope, RCSS)
- ✓ **Corporate Social Responsibility (CSR) policy**  
(Seychelles Breweries , Lemuria Resort & Spa)

# Types of waste being processed/ recycled/exported

Categories of waste being recycled/processed/exported by organisations surveyed



# Operating a waste management company

## **Opening hours:**

- ✓ most operate (or operated) 5 or 6 days a week (36% and 41% of total respectively), as they tended to employ full-time staff
- ✓ a minority operate once a week or by demand and employed casual labour

## **Venue:**

- ✓ generally land was leased from Government (45%), although a few owned their own premises or relied on donations and grants

## **Current operating status:**

- ✓ most of the companies were operating actively (77%) and making a profit (41%) - mainly waste exporters and redeem centres
- ✓ 32% relied on donor funds and Government support to operate
- ✓ two (9%) are still in the planning stages
- ✓ one (5%) was operating at a loss and survive through subsidies from other business interests
- ✓ one (5%) was supposed to closed down after 3 months but lasted a full year

# Employment opportunities in waste

50% of the companies surveyed employed 100% Seychellois, while 36% employed a majority of Seychellois staff.

Nearly 100 people are or were employed in waste management based on the info provided during the interviews. Of these, 76 are in full time employment, 10 are part-time workers while the remainder worked on a voluntary basis.



# The good

The positive aspects of waste management according to the organisations surveyed

1. no lack of raw materials in Seychelles (86%)
2. sufficient space available to process this waste (64%).
3. team of reliable staff (55%)
4. equipped with good quality machinery (45%).
5. collection service offered (45%)
6. the company had a prime location to facilitate waste delivery (45%).



# The bad

The negative aspects of waste management according to the organisations surveyed:

1. high overheads, particularly with regards to utility bills (41%)
2. limited public cooperation in sorting waste (36%)
3. understaffed (32%)
4. increasing cost of electricity/gas (27%)
5. limited operating space restricting expansion (27%)
6. cannot operate to capacity due operating constraints (27%)

# The future

The organisations surveyed had the following plans for the future:

1. increasing their capacity for dealing with waste (32%),
2. working with S4S to improve visibility (27%),
3. expanding the business by adding new product lines (27%),
4. working with other local recyclers (18%),
5. improve their marketing and general public awareness (18%),
6. hiring more staff (18%)
7. buying more equipment (18%).

# A helping hand from Government

Suggestions from those interviewed on how Government can help waste managers

1. Government subsidies to help cover the operating cost (45%),
2. Tax exemptions (i.e. VAT) when importing equipment and/or selling finished products (36%).
3. suitable land or buildings with long term leases at reduced rates (23%)
4. assistance with marketing and/or public awareness (23%)



## **4) Survey of waste production by large companies**



# Survey with waste producers on Mahé

By Elke Talma  
For Sustainability for  
Seychelles





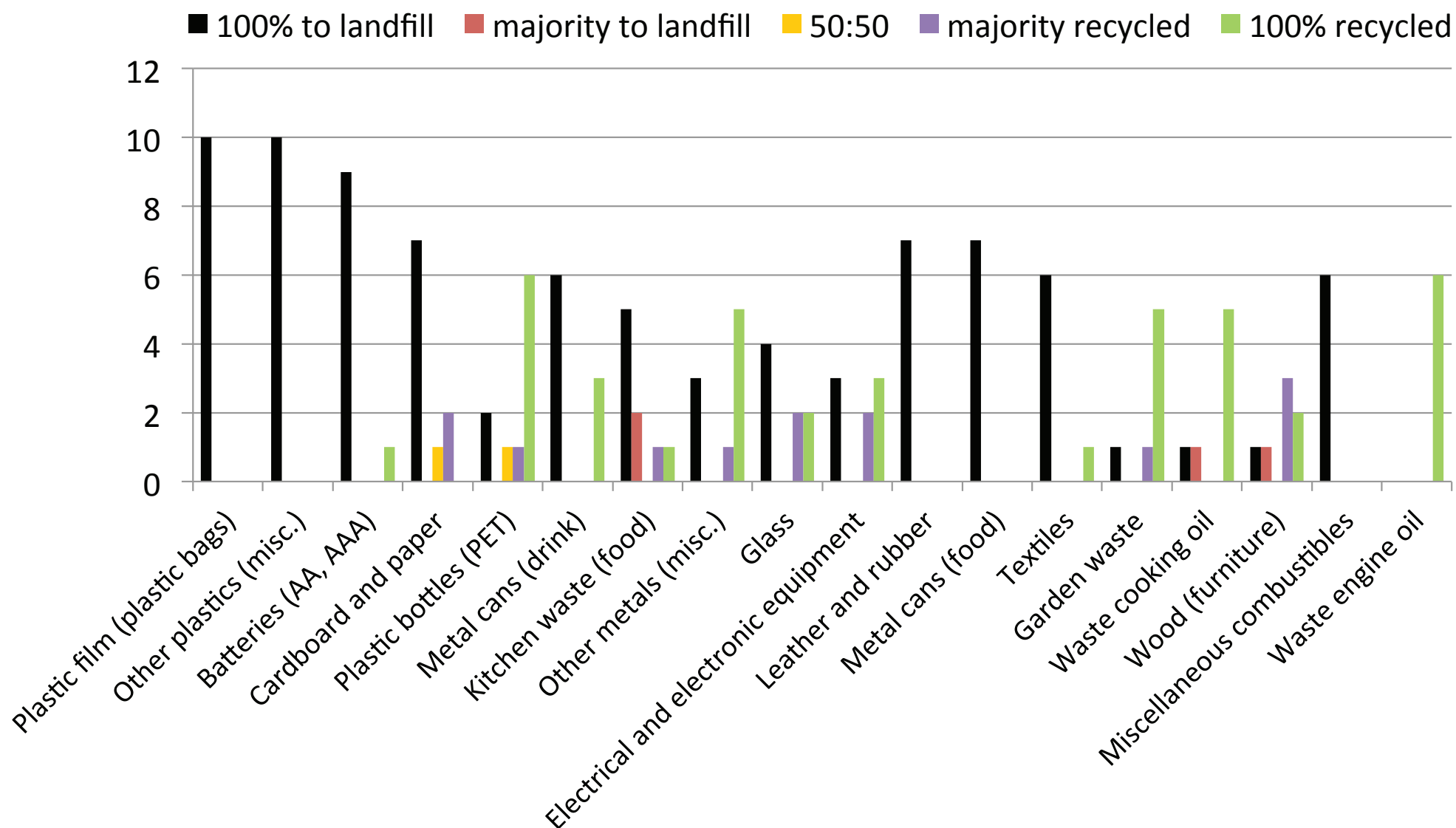
# Purpose of the survey

This survey looks at the views of 5 commercial establishments and 5 tourism establishment on how their waste management system is working, what they would like to do in the future and what Government and other agencies can do to make waste management more sustainable. .

The aim of the report therefore, is to provide baseline information about waste producers for further discussion of the way forward through public consultation with relevant stakeholders.

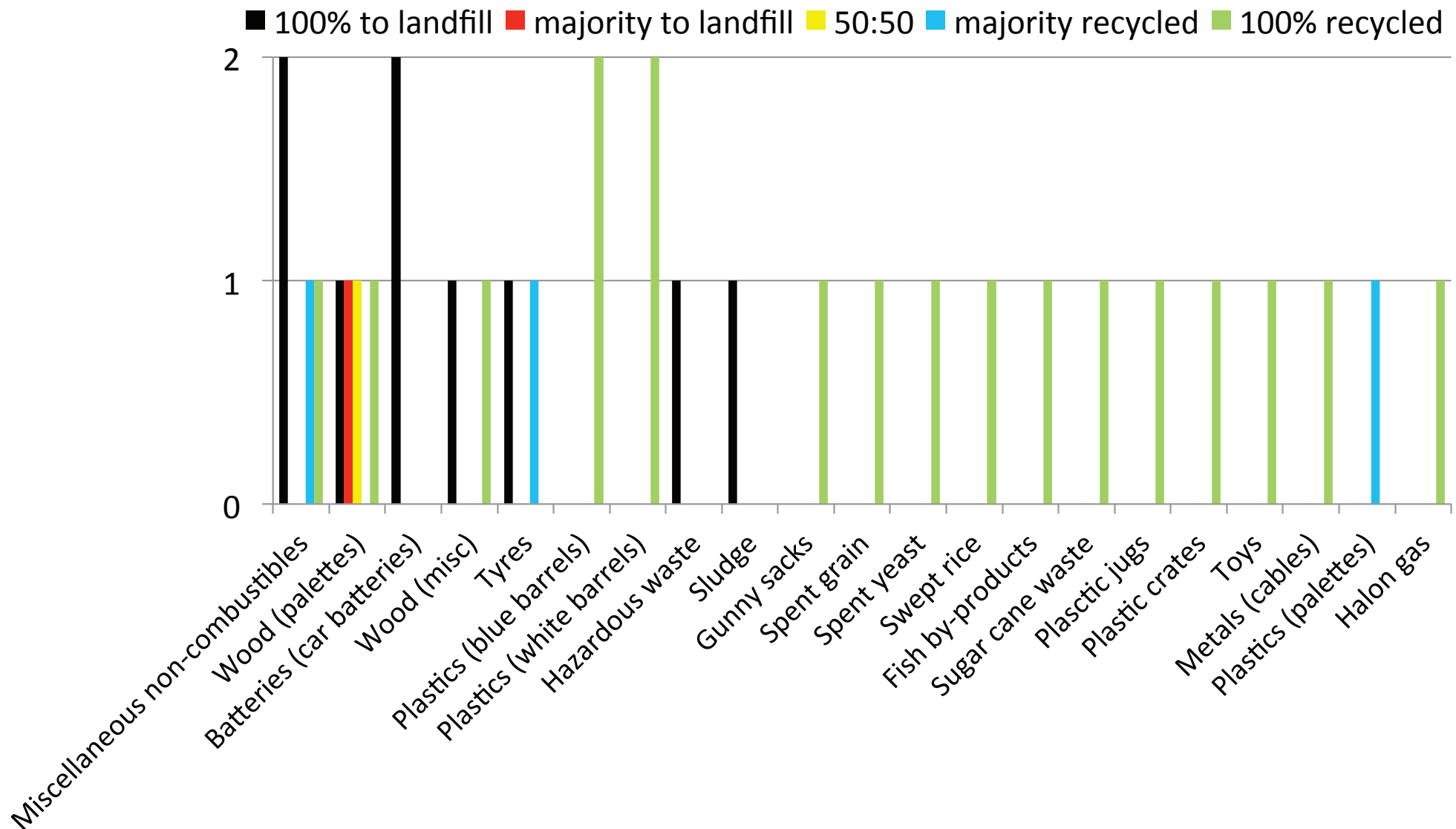
# Waste Stream: % to landfill vs. % recycled

Disposal mechanism for common waste categories – mostly to landfill



# Waste Stream: % to landfill vs. % recycled

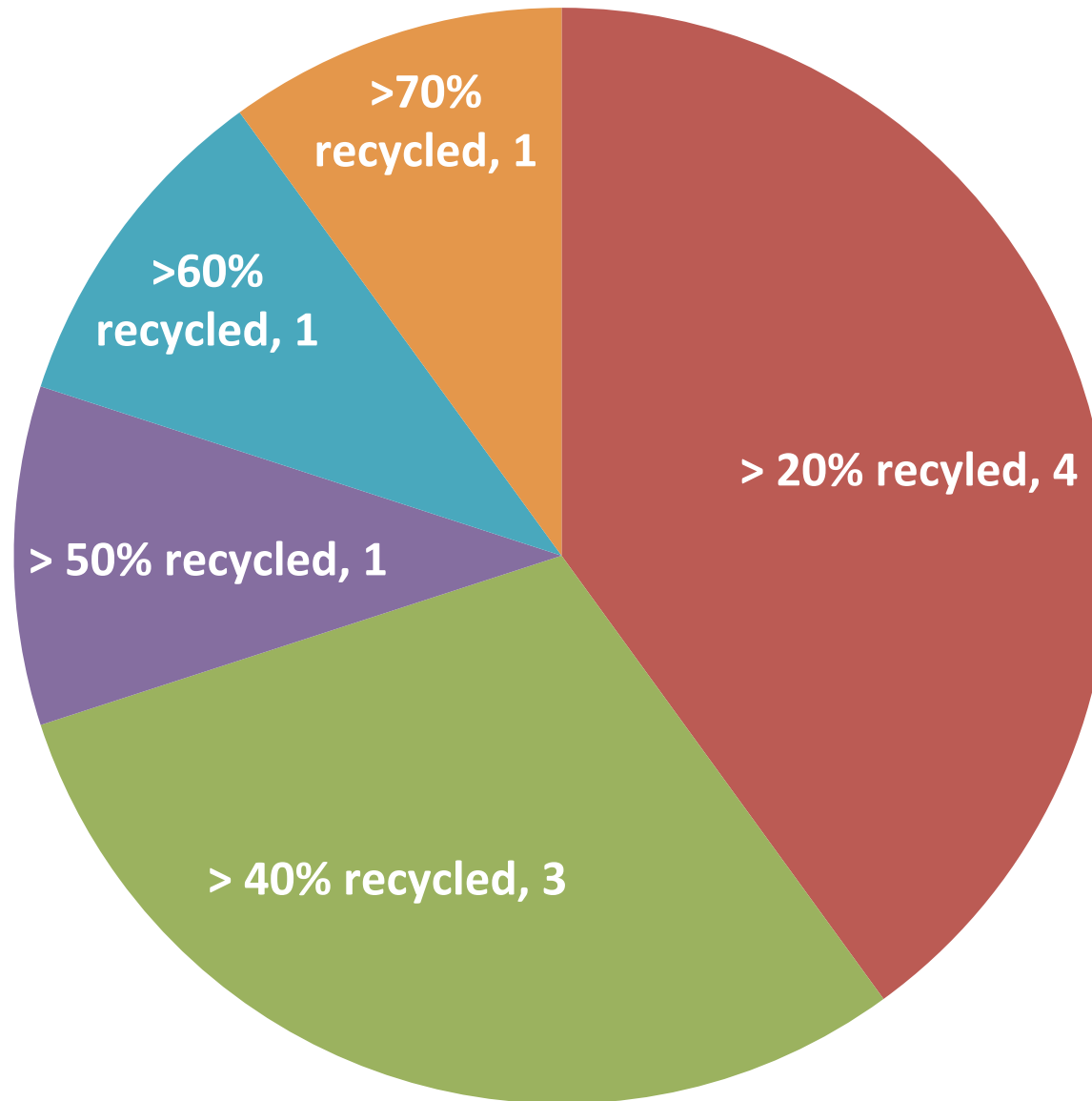
Disposal mechanism for special waste categories – mostly recycled





# Waste Stream: commitment to recycling

Percentage of total waste stream recycled by each company surveyed



# Sustainable waste disposal: future plans

top three most common responses were:

- ✓ We can sort and store recyclable waste on site
- ✓ We can reactivate staff training programme so as to sort waste provided it is disposed of sustainably
- ✓ We need to either develop or review our waste management plan so as to include more recycling activities

# Sustainable waste disposal: restrictions/challenges

The top 3 challenges:

- ✓ Lack of information in recycling opportunities
- ✓ Inconvenience/time consuming
- ✓ Lack space on site to store sorted waste

## Sustainable waste disposal: government assistance

The top 3 recommendations to improve waste management in Seychelles are:

- ✓ Tax deductions for sustainable waste disposal practices
- ✓ Need guarantees that waste is being disposed of correctly
- ✓ Provide easily accessible updated info on recycling opportunities



# Thank you!



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