

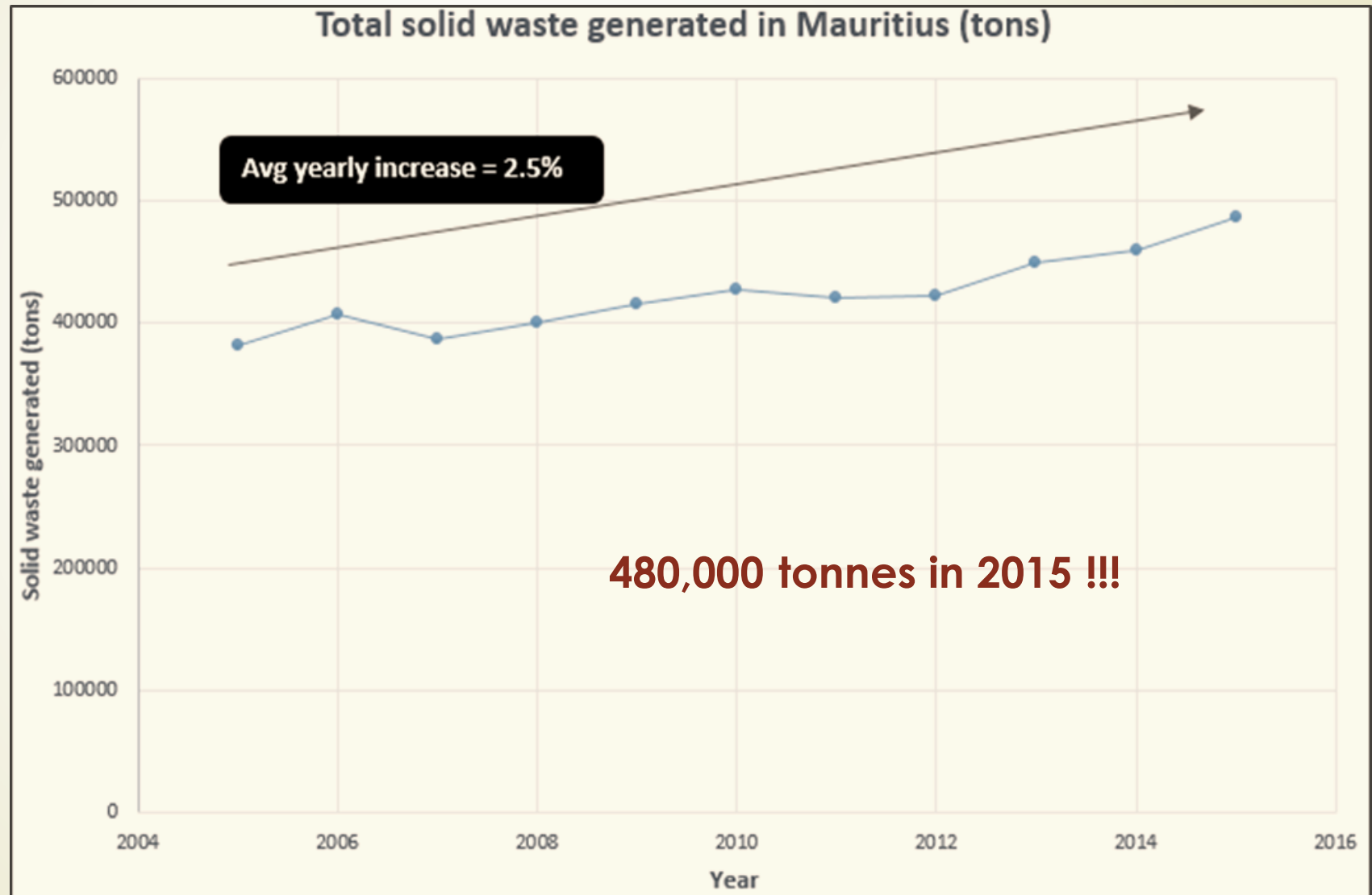
# OVERVIEW OF SOLID WASTE MANAGEMENT IN MAURITIUS

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**SOLID WASTE MANAGEMENT DIVISION (SWMD)**

# Solid Waste Generation Trend



# Solid Waste Management Infrastructure



# Importance of Transfer Stations

- ▶ Transitory disposal sites, strategically positioned to avoid collection vehicles to haul wastes over long distances
- ▶ Waste compaction
- ▶ Cost effective transportation

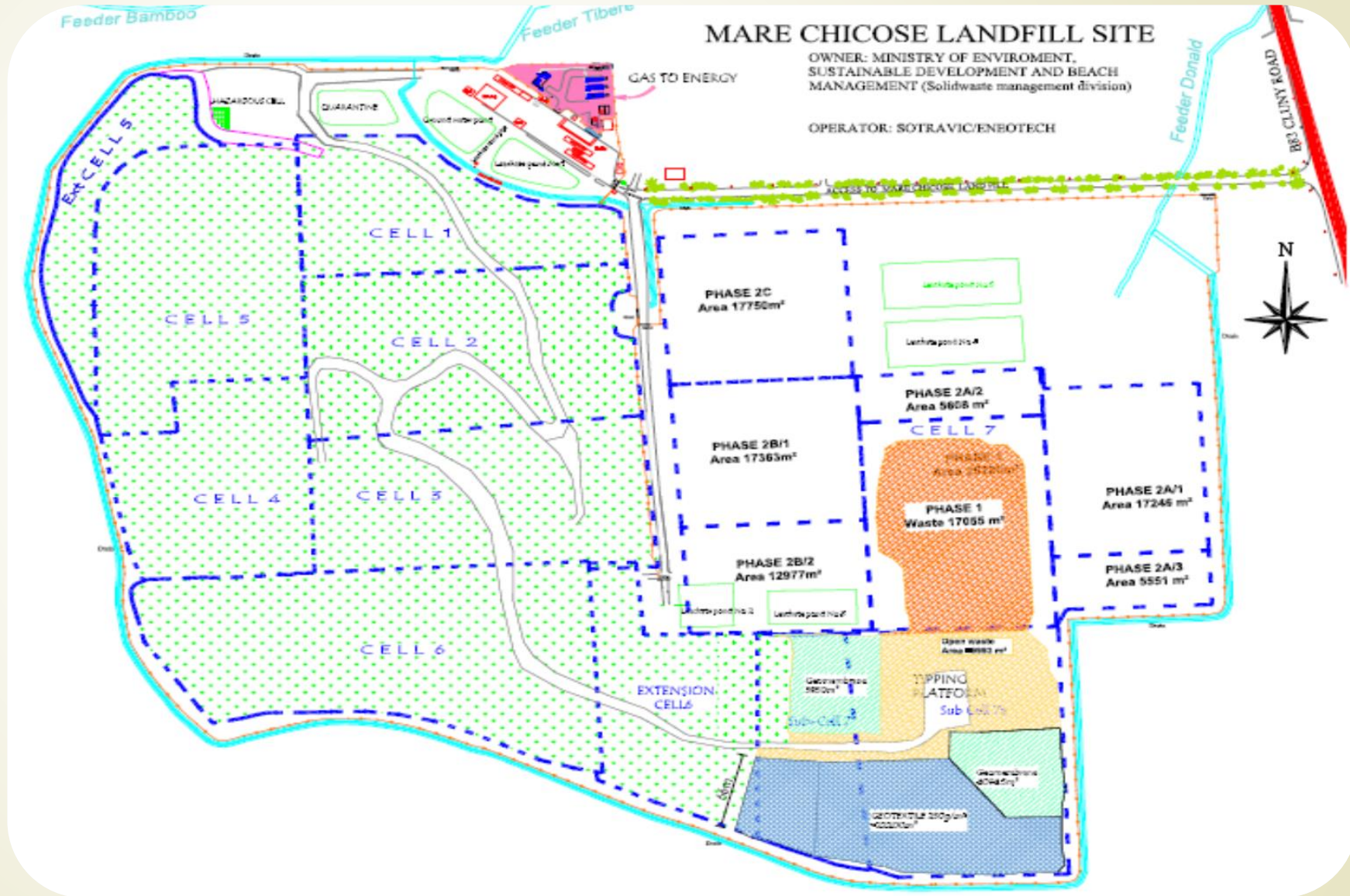




## Operation & Management of 5 Transfer Stations

- ▶ Solid wastes collected by 12 LAs transit through 5 Transfer Stations, where they are compacted before transported to Mare Chicose Landfill
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# Mare Chicose Landfill waste cells





# Mare Chicose landfill is an **engineered** landfill, not just a dump site!

- Containment engineering (impermeable liners to protect ground water)
- Leachate Management
- Surface Water Management
- Capping and Post Closure Management
- Environmental Monitoring
- **Landfill Gas Management**

## Landfill Gas (LFG) as a Resource



....All landfills produce gas!!!



# Compost Plant at La Chaumiere (private initiative)

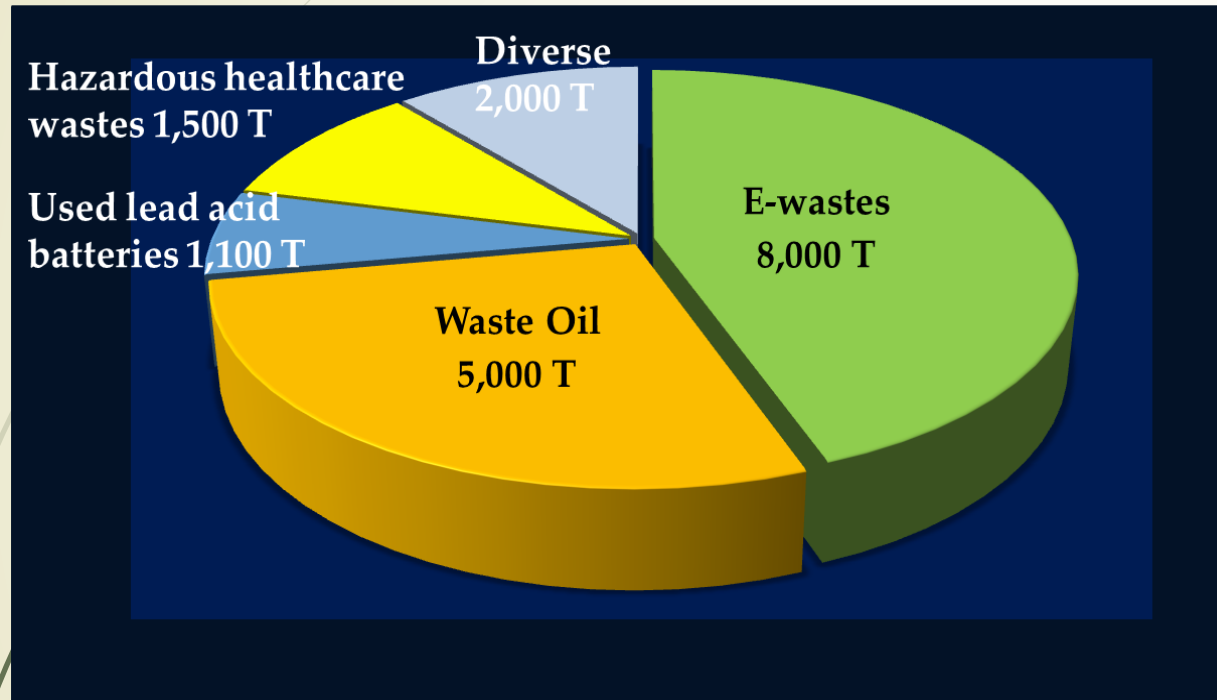
- ▶ Solid Waste Recycling Co. Ltd at La Chaumiere
- ▶ 90,000 tons of waste p.a (unsorted)
- ▶ Convert organic wastes into compost

Waste diverted from Landfill				
Year	2012	2013	2014	2015
Amount In 000's	34.8	19.3	41.0	38.0



- ▶ 40% rejects still have to be landfilled due to cross-contamination of waste fractions !!

# Management of Hazardous Wastes (HW)



- ▶ 17,000 – 18,000 tonnes of HW wastes annually as per HW Inventory Study 2011



# Setting-Up of Interim Storage Facility for Hazardous Wastes



Interim Hazardous Waste  
Storage Facility Constructed  
at La Chaumiere

Facility to be  
Operational  
by Early 2017

# E-wastes

- Around 20,000 tonnes of electrical and electronic equipment imported in 2013.
- Overall, the estimated amount of e-wastes generated is between **7,000 to 8,000 tonnes per annum** and is growing.
- E-waste is becoming a **fast-growing waste stream in Mauritius** as markets continue to expand and innovation cycles become even shorter.
- **Need for a sustainable management system due to presence of hazardous substances** such as mercury, cadmium, lead, hexavalent chromium and polychlorinated biphenyls (PCBs) and ozone-depleting substances.
- Currently, **no established system** for managing e-wastes in Mauritius.
- **2 registered e-waste recyclers and exporters and 2 registered e-waste exporters** in Mauritius to date.
- Out of the 7,000 to 8,000 tonnes of e-wastes generated annually, it is estimated that a **small fraction (2-5 %) gets dismantled** and treated and around 0.4 % is landfilled.
- E-waste management is not economically viable on its own; cost of collection, transportation, dismantling, treatment and disposal > revenues derived from sales of recyclables → payment of Advanced Recycling Fee (ARF).

## E-wastes

- Consultant appointed by the EU Delegation in Mauritius in 2013–2014 to develop national policy, strategies and an action plan for the environmentally sound management of e-wastes.
- Main recommendations of Consultant:
  - Establishing a private-led e-waste management system: importers of electrical and electronic equipment responsible for setting-up, organising and financing the system for the collection, transportation and recycling of e-wastes in Mauritius, based on the principle of the widely accepted Extended Producer Responsibility and Polluter Pays Principle.
  - To be achieved through setting-up of a non-profit Importer Responsibility Organisation (ImpRO).

## E-wastes

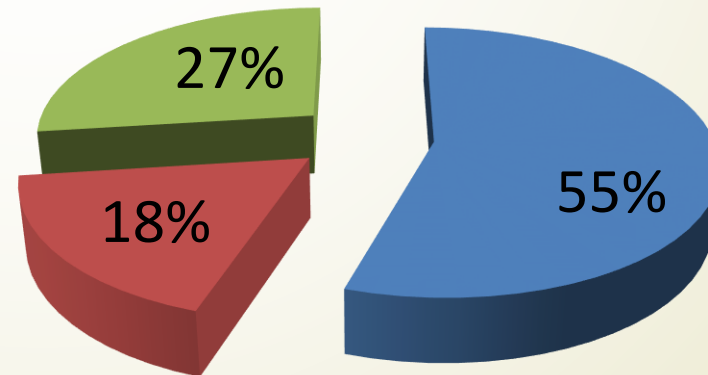
- Recommendations of Consultant subject to numerous discussions with the relevant stakeholders and a hybrid system was opted for whereby a joint public-private system will be put in place with the appropriate legal and institutional set-up.
- Government approval obtained in **January** 2016 for:
  - Establishment of e-waste management system in Mauritius involving private sector
  - Discussions be held with Mauritius Chamber of Commerce and Industry (MCCI) on appropriate mechanisms and modalities for operationalisation of the system through a Memorandum of Understanding.

# Solid Waste Management Budget

- Overall Waste Management cost including curbside collection, transfer station and landfilling is about 700 US \$/ton.
- What is costing most ?

## Cost Distribution

■ Collection   ■ Transfer Stations & Bulk Transportation   ■ Landfilling





# New Projects

**1. Waste Recycling & Resource Recovery Strategy**

**2. Operation of Interim storage facility for HW**

**3. Industrial Symbiosis**

**4. Setting up of an e-waste management system**

**5. Second landfill gas to electricity project**

**6 Identification of a new landfill site**

**7 Recycling of used tyres**





# OVERVIEW – Other activities



**1. Legal and economic instruments**

**2. Cost recovery mechanism for hazardous waste facility**