

The controversy around the definition of waste

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Why define waste?

- To regulate waste management
- Control potential impacts of waste on environment
- Control potential impacts of waste on human health



Importance of clear definition

- The definition of waste has a significant effect on the implementation of the Act
- Clear distinction needed between waste and non-waste to clarify the scope of the Act
- Criminal liability depends on whether or not substance falls within the legal definition of waste
- Prosecutions for violations of waste management regulations are decided on the interpretation of the definition of waste



Ongoing debates

- European Union
- Singapore
- New Zealand
- Taiwan
- United States of America
- South Africa



What are the options?

- Broad definition
 - All-encompassing definition
 - Environmental protection
 - Hampering implementation of the waste hierarchy
 - Examples – EU, USA, RSA
- Narrow definition
 - Limited to what is finally disposed
 - Low environmental protection
 - Waste minimisation is not actively pursued
 - Example – New Zealand
- Classify waste into broad types instead of definition
 - Define renewable resources
 - Control non-renewable resource disposal
 - Alternative legislation required to protect the environment
 - Example - Taiwan



Broad definition of waste

- **NEM: Waste Act 59 of 2008**

Waste means any substance; whether or not that substance can be reduced, re-used, recycled and recovered –

- That is **surplus, unwanted**, rejected, discarded, abandoned or disposed of;
- Which the generator has no further use of for the purpose of production;
- That must be treated or disposed of; or
- That is identified as a waste by the Minister and includes waste generated by the mining, medical or other sector, but
- A **by-product** is not considered waste; and
- Any portion of waste, once re-used, recycled and recovered, **ceases to be waste**.



Problems with broad definition

- Different interpretations
 - Who decides on what is surplus or unwanted?
 - Who decides on whether or not there is a further use or purpose for material?
 - What happens in case of differences of opinion?
- Bureaucratic processes
 - Licences for listed activities
 - Administrative burden on government and waste managers
 - Classification of waste streams
- Hampering implementation of waste hierarchy
 - Industrial waste exchange especially problematic



Interpretations

- When does waste cease to be waste?
 - Once re-used, recycled and recovered
 - At what stage in the process?
 - What about industrial waste that went through i.e. a metal recovery process?
- What is a by-product
 - A by-product is produced as part of a process that is primarily intended to produce another substance or product and that has the characteristics of an equivalent virgin product or material
 - How will this be determined?
 - Yet another burden of proof on the producer?

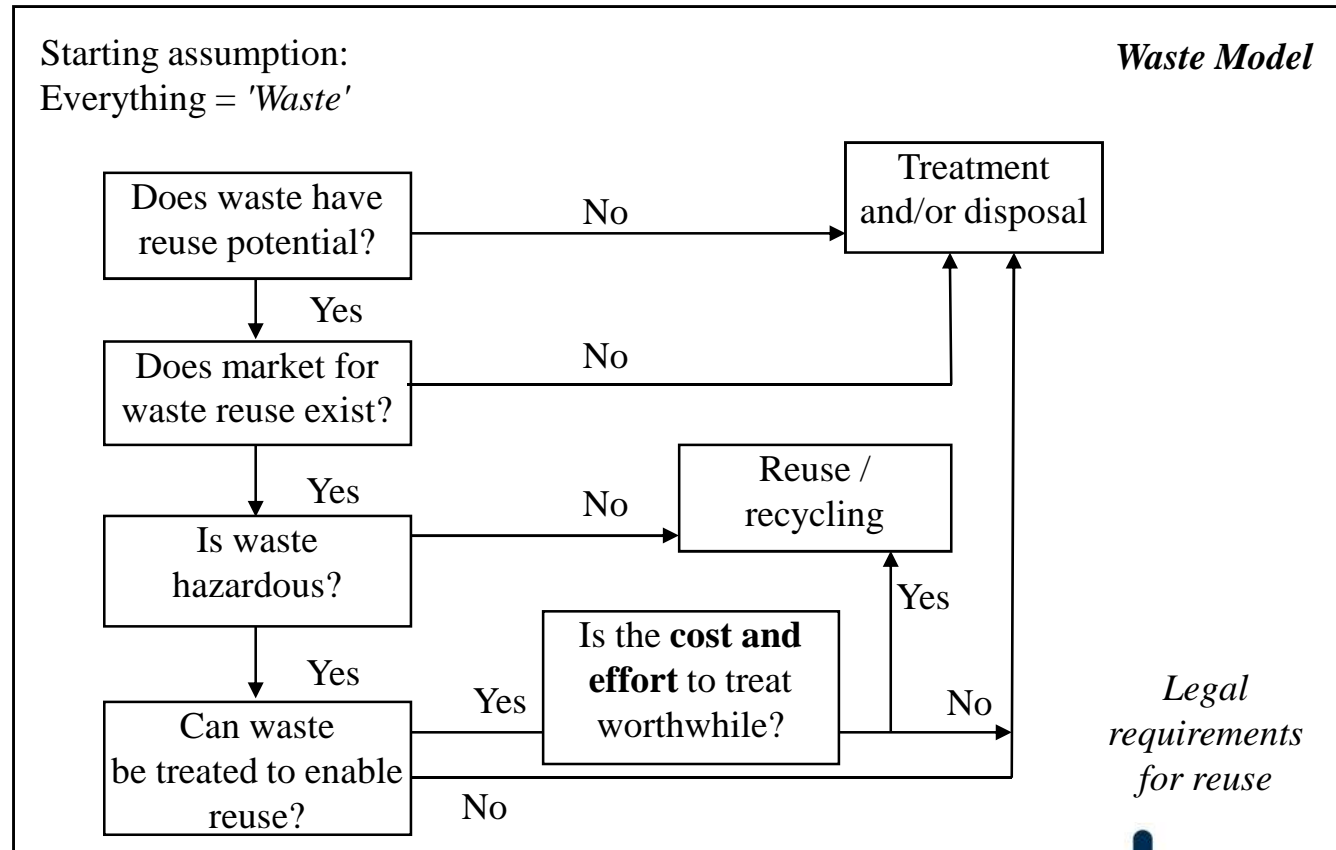


Narrow definition

- **Narrow definition**
 - Any material that is unwanted and/or unvalued **and** discarded or discharged.
- **Implications**
 - Waste is recognised as renewable resource
 - Support implementation of waste hierarchy
 - Waste minimisation is not actively pursued
 - Undermine environmental protection



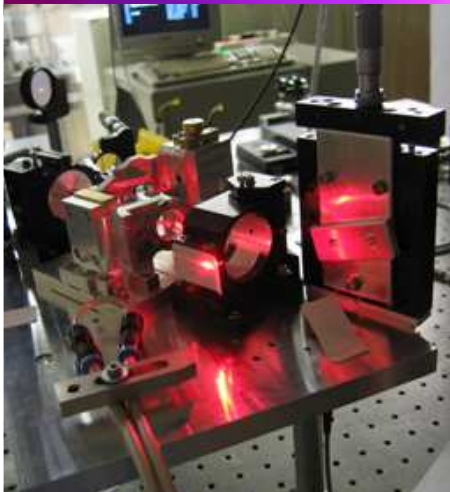
Current waste management model adopted for RSA





DEA solution to interpretation

- Debate on definition is closed
- Waste Act will not be revised in the short term
- DEA will propose an interpretation of the definition to ensure uniformity in interpretation
- Draft interpretation will be published in Government Gazette for public comment

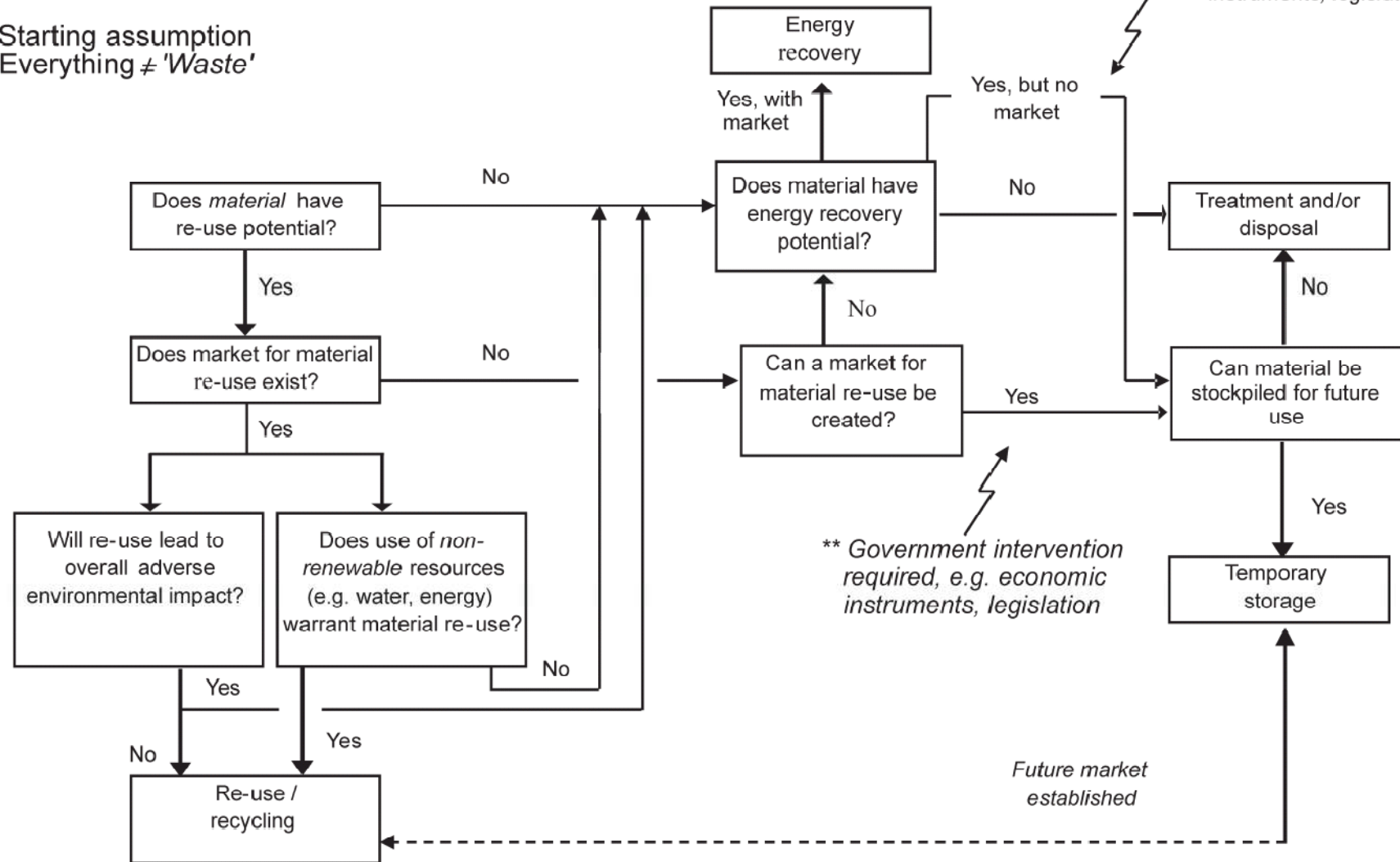


Renewable Resource Model

- Irrespective of definition and interpretation there will be a trade-off between protection and re-use
- Shift towards reuse will require a change in governance model

Renewable Resource Model

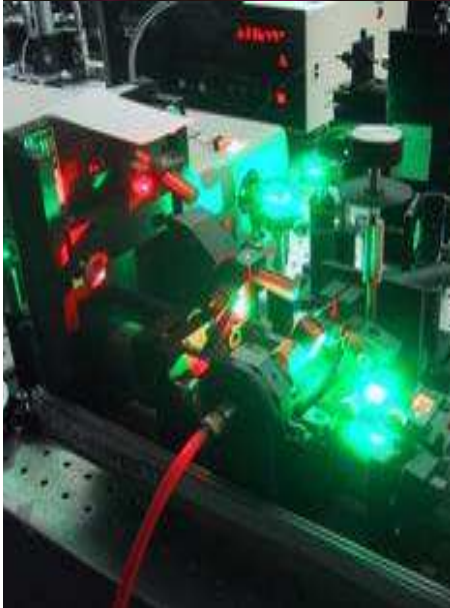
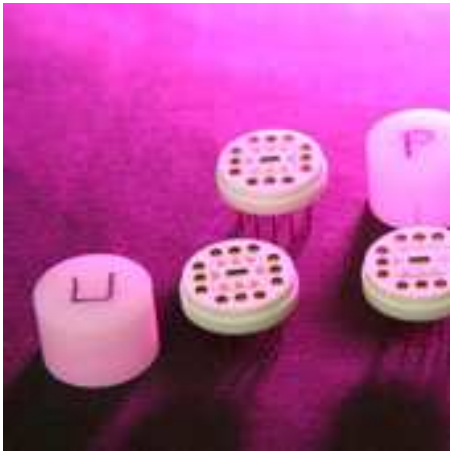
Starting assumption
Everything ≠ 'Waste'



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Future market established



International legal approach to waste recovery

- Waste stream specific legislation
 - Electronic Waste Recycling Act
 - Beverage Container Recycling Act
 - Computer Recycling Act
 - Cell Phone Recycling Act
- Strong government regulation is not advised
- Waste re-use typically come down to
 - Economics
 - Return on effort
- Extended producer responsibility can be applied irrespective of definition of waste if linked to pollution potential



Conclusions

- A clear definition of waste is imperative to implementation of the waste hierarchy
- Waste hierarchy is internationally accepted
- There is no agreed definition for waste to facilitate implementation of hierarchy
- The debate on the definition of waste is far from concluded
- Broad definitions create a minefield of regulatory requirements and bureaucratic processes
- Broad definitions allows for legislative control over all aspects of the hierarchy
- Broad definitions may act as disincentives to implementation of the hierarchy



Conclusions

- Viewing material as renewable resource may provide a good alternative to promote waste re-use
- Regulation of resource use extended to renewable resources will favour re-use and recycling initiatives and give due regard to virgin resource conservation
- A shift in focus away from waste management towards renewable resource use and recovery is therefore highly desirable

Acknowledgement

This presentation is based on the paper:

Defining waste in South Africa: Moving beyond the age of 'waste'
by Suzan Oelofse and Linda Godfrey
South African Journal of Science Volume 104 of 2008

