

Presentation to PIFSA

THE WASTE ACT

12TH April 2010

AGENDA

- Some statistics on Packaging /Paper and Waste
- The Waste Act
- How have we done in the 4R's
- Development of Industry Waste Management Plan



PACKAGING/PAPER IN PERSPECTIVE

- In 2008 we consumed 3,629 million tons of Packaging and Paper in SA.
- We recycled 1,595 million tons – a recycling rate of 43,9%
- Per capita packaging consumption in SA is 25 - 30% of that in Europe/USA. Probably similar with printed material?
- Packaging has a comparatively small carbon footprint.



PACKAGING IN PERSPECTIVE

cont'd

- Packaging accounts for less than 10% of mass to landfill in SA and 0,3% of solid waste generated in SA
- Packaging's protection and preservation roles saves much more than it wastes. and paper



NATIONAL ENVIRONMENTAL MANAGEMENT : WASTE ACT

- Act effective 1 July 2009
- Part of a grouping of environmental laws including Air Quality Act. We need to strategize how to deal with AQA going forward
- Defines waste hierarchy
 - Avoid
 - Reduce
 - Re-use
 - Recycle
 - Recover
 - Landfill



SOME SALIENT POINTS

Five new important elements to the Bill which is framework law

1. Introduces extended producer responsibility
2. May require the development of an Industry Waste Man Plan
3. Minister can declare priority waste
4. Municipalities empowered to force household separation and fine for littering
5. Controlled recovery (EFW) legalised



SOME SALIENT POINTS

- National Waste Management Strategy must be developed by DEA within two years of Waste Act being promulgated .PACSA sit on the steering committee and the draft NWMS has been recently published for public comment. Should be accepted by Cabinet by end this year
- Deals with all solid waste including electronic, oil, medical etc
- Strategy designed to build on voluntary compliance and using punitive measures only when Industry has failed. Deposits, recycling content, bans on certain types etc.
- Acceptance all must contribute – no free riders
- Government will determine targets but we must start the process by proposing them
- Acceptance that Municipal performance well below par and must be fixed



DEVELOPMENT OF NATIONAL WASTE STRATEGY cont'd

● Targets:

Five year plan

Job creation a big issue

Design to reduce, reuse and recycle – government wants targets in each sector

P&P; Tyres; Light fittings; Pesticides first



THE 4 R'S -WHERE ARE WE NOW?

REDUCE
RE-USE
RECYCLE
RECOVER



REDUCE

- Technology has enabled the packaging industry to reduce mass without compromising the basic functions of the pack
- For example:
 - The beverage can in South Africa has reduced to a weight of below 30g today versus a weight of 62 grams in 1966
 - A new 750ml lightweight glass wine bottle introduced in 2008 reduced mass by 21%



REDUCE cont'd

- The PET 2 litre cool drink bottle has reduced to a weight of 52g today versus a weight of 90g in 1979 when it was first introduced
- Detergent refill packs have reduced packaging material by 70%
- Microflutes in corrugated have reduced paper consumption
- Many more examples in recent Goldpack Entries
- Much more to be done ..
- How do we measure this going forward?



RE-USE

- Over 75% of malt beer and significant volumes of spirits and CSD sold in returnable bottles/crates in SA
- Investments by these Companies in returnables as follows
 - *Infrastructure (washing ,handling etc) R1,5 billion
 - *Packaging R 3,0 billion
 - *Annual operating costs R 300 million
- Returnable containers work in some industries but are certainly not the solution across the spectrum
 - Cost and energy of return loop
 - Water and cleaning material wastage
 - Nature of the product



RECYCLE

- In 2008 we collected for recycling 1,595million tons
- We consumed in total 3,629 million tons of packaging and paper in SA in that year. This includes all paper .plastic metal and glass packaging as well as printing and writing papers Only items excluded are wood packaging (pallets and wooden boxes) and printed books.
- Overall recycling rate of paper and packaging in SA in 2008 43,9%.
- Comparisons are difficult but this would put us in top third of world, around same as USA and better than all South American Countries.
- This information collected and verified by independent organisations.
- Major concern about “competing” stats and perceptions



RECYCLE cont'd

Significant investments made in developing markets for recyclate. Some examples below reflect our commitment:

- Petco members have invested and committed some R230m in the development of end use markets and a further R70m in supporting collection efforts
- Collect-a-can shareholders have invested over R600m since inception into the organisation in direct and indirect subsidies
- Glass producers in SA have spent and committed R 265m on Cullet colour sorting equipment at the Glass Factories
- The PRASA members have spent R600m on recycling infrastructure in SA and the Paper Industry many billions on paper machines that use recycled paper



RECYCLE cont'd

- We have the advantage of having developed end use markets for these products in SA .
Some unprocessed waste is exported from SA but small volumes – less than 20%.
- Commodity cycles are an issue
- Recycling reduces greenhouse gas



CARBON DIOXIDE SAVINGS

	CO₂ TONS PER TON PRODUCED		
	Primary Process	Recycling Process	Saving
Steel	1,54	0,68	56%
Aluminium	10,60	0,73	83%
Paper	0,17	0,08	53%
Polyethylene	1,69	0,50	70%
PET	3,01	0,47	84%

2007 study by Franhofer Institute, Germany



RECOVER

- Plastic has calorific value up to 40% better than South African coal
- Study completed in plastics industry on possibility of using waste for energy
- Used extensively in Europe
- The new law allows controlled EFW
- Makes sense to us to consider for contaminated/unwanted packaging and paper waste.



INDUSTRY WASTE MANAGEMENT PLAN FOR THE PACKAGING AND PAPER INDUSTRIES

- PACSA /RAG were approached by DEAT July 2008 to develop this Plan. Very difficult start.
- Started communicating this with PIFSA early 2009
- Why Packaging and Paper?
- Two key components to the Plan -- the Waste Supply chain and development of markets to absorb the extra waste collected
- Initial focus on household post consumer waste



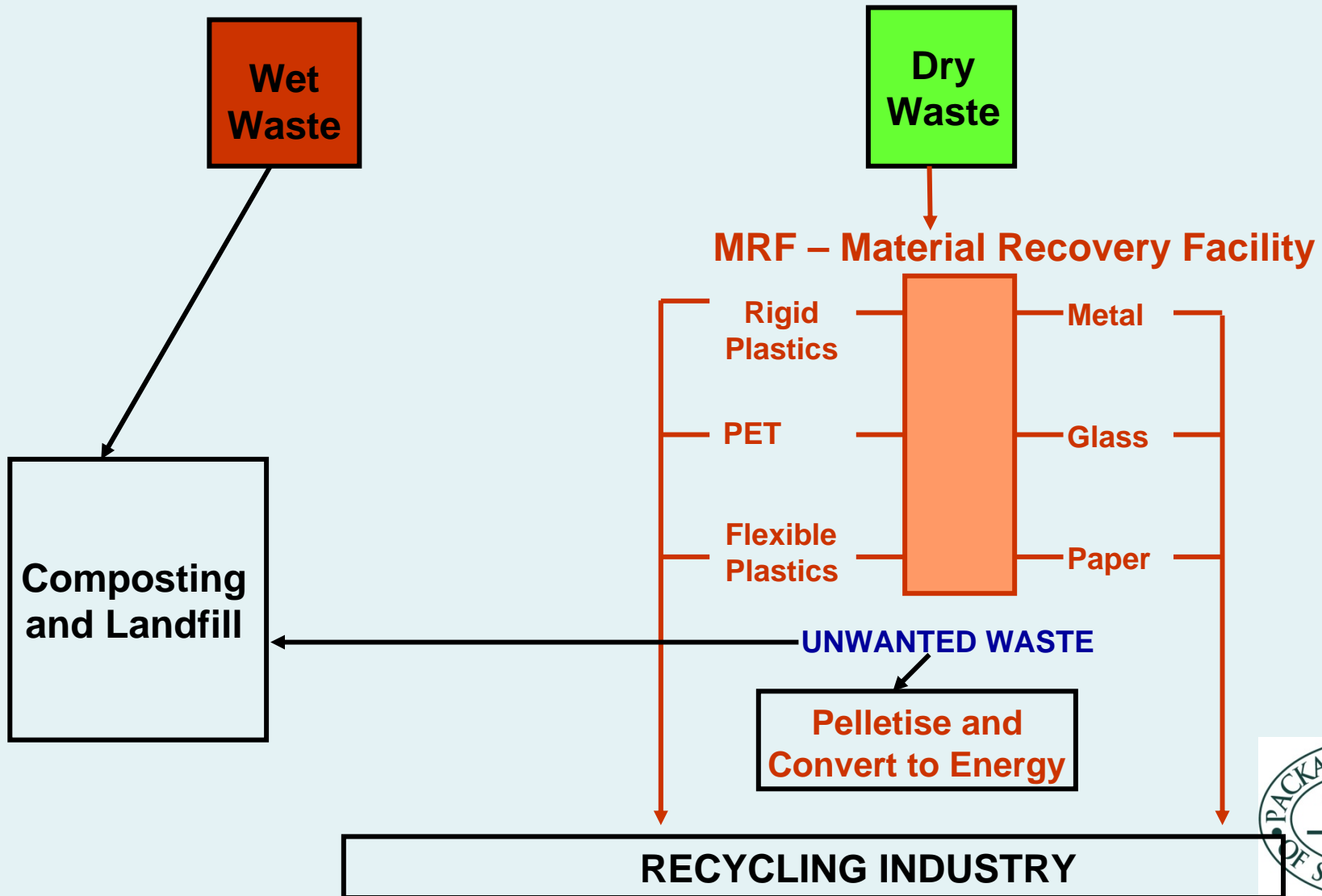
DOMESTIC POST CONSUMER PACKAGING WASTE - THE CURRENT POSITION

- No enforced separation at homes
- Most domestic waste collected at landfills
- About 8 MRF's in SA in 2007
- Much valuable recyclate contaminated/lost.



Ideal Model for Household Post Consumer Waste (Mid and Upper Income Groups)

HOUSEHOLD WASTE – SEPARATE INTO TWO BAGS:



THE WAY FORWARD

Government approached PACSA/RAG in 2008 to develop an Industry Waste Management Plan. What does Govt want?

- Government wants us to take responsibility for our waste and **pay for its removal from the waste stream**
- Initial focus on household post consumer waste, including all paper
- Govt wants harvesters off landfill and the recycling sector to create many jobs.



THE WAY FORWARD cont'd

We want :

- To ensure industry schemes in place already not compromised
- To involve all players in the entire supply chain from RM to retail.
- Government use Buyisa funds not already spent.
- Levy which is inevitable must be **as small as possible and compulsory.**



THE LEVY

- Quote example from USA
- Effectively two costs --1. Development of markets for recycled material collected . These must be borne by the material streams e.g.Petco 2. Cost of supporting and assisting the more efficient collection of waste post consumer . This an Industry wide issue
- The levy will be inevitable and hopefully small. Many examples of levies applying elsewhere in the world. No finality on the levy
- Will be managed and collected by Industry body
- Wherever it is levied – it must not stick in the chain
- PACSA preference



LEVIES

Rand per Ton

	<i>Glass</i>	<i>Flexible Plastics</i>	<i>PET</i>	<i>Steel</i>	<i>Corrugated</i>
<i>Sweden</i>		1438	1438	518	518
<i>Spain</i>		4343	3670	805	673
<i>Austria</i>	937	1386	1386	2640	554
<i>Portugal</i>	178	2231	2231	772	843
<i>Bulgaria</i>	476	1700	1700	340	1088
<i>Romania</i>	212	212	280	131	171
<i>Turkey</i>	67	146	146	75	51



THE WAY FORWARD cont'd

We want :

- To ensure industry schemes in place already not compromised
- To involve all players in the entire supply chain from RM to retail.
- Government use Buyisa funds not already spent.
- Levy which is inevitable must be as small as possible and compulsory.
- We have engaged overseas experts, Perchards to help us.



THE INDUSTRY WASTE MANAGEMENT PLAN –WHERE ARE WE NOW?

- Awaiting gazetted instruction from Minister to proceed, having received a letter from the Director General
- Participating in Government project to develop National Waste Management Strategy
- In the process of developing recycling targets for presentation to Government
- Expect the plan to start in 2011 for five years to 2015
- The Plan will be very comprehensive and extensive consultation required with affected parties e.g. Waste Pickers

