

# IS ZERO WASTE TO LANDFILL ACHIEVABLE?



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**CONSTANTIA FLEXIBLES AFRIPACK**



**IWMSA Annual Seminar -16 September 2016- Botanic Gardens Durban**

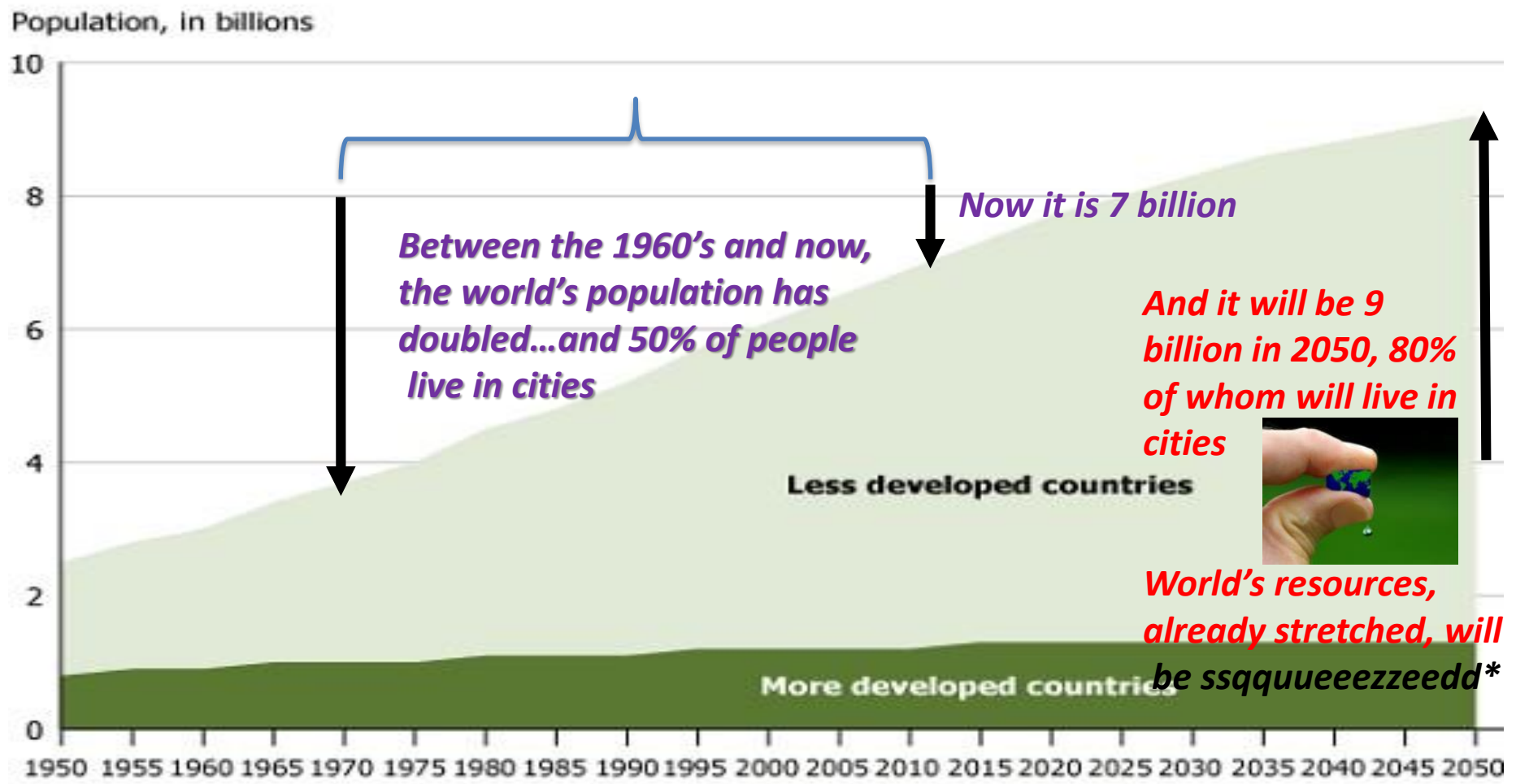




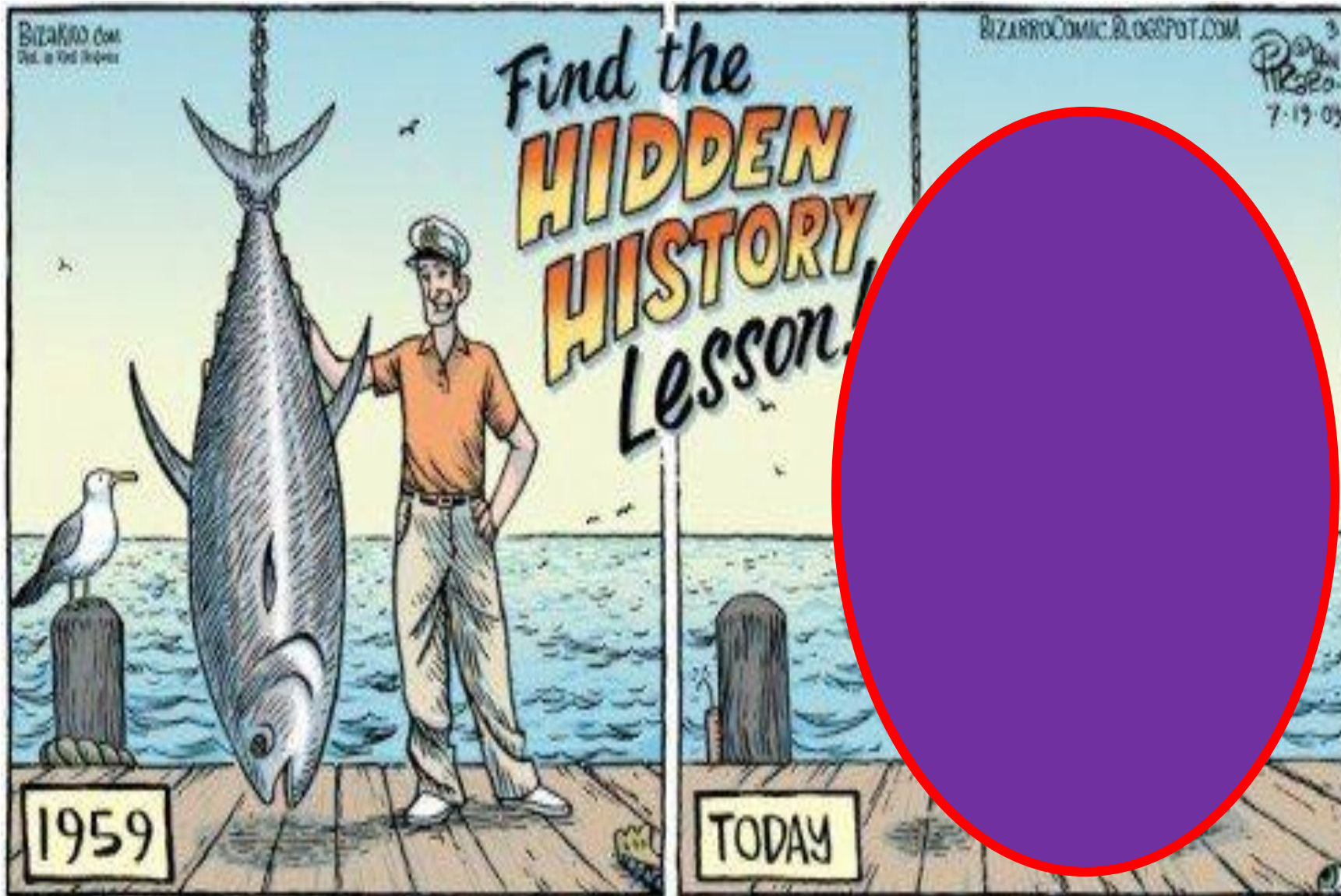
# Constantia Flexibles

## CFLEX AFRIPACK

# POPULATION GROWTH...







# THE EARTH NEEDS SOME TLC...



# **MORAL: CONSERVE RESOURCES**

## **WE PRODUCE TOO MUCH WASTE**

### **AND DON'T MANAGE IT CORRECTLY**







Pic by Zanele Zulu. Credit: Independent Media

# IF PACKAGING IS LEFT IN THE ENVIRONMENT...

- Plastic Bag = 10-20 years
- Plastic Container = 20-30 years

...gradually breaking down into smaller and smaller particles..



# IF WASTE GETS INTO THE SEA...



INDIAN  
OCEAN  
GYRE

# IF WASTE GETS INTO THE SEA...

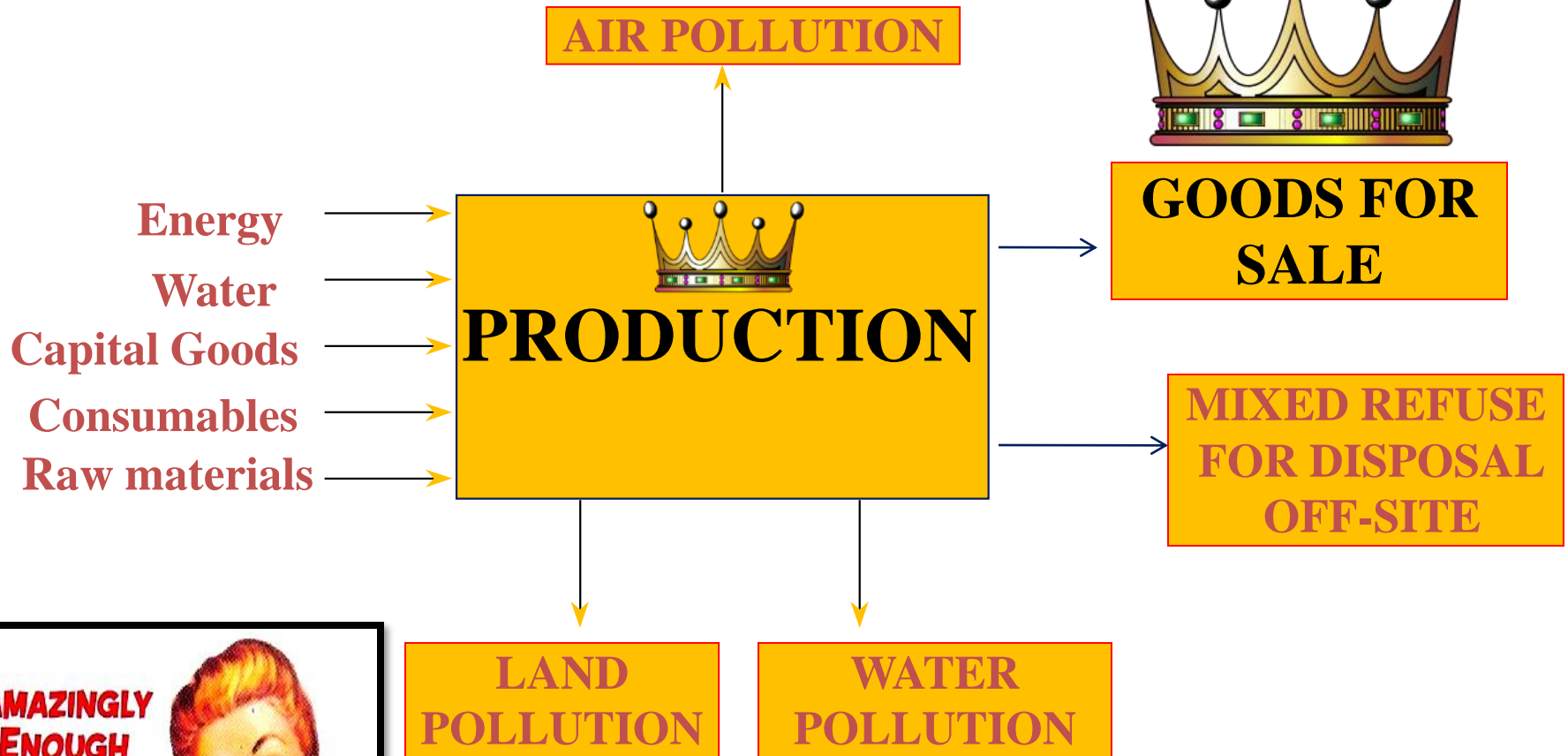


SEABIRD REMAINS ON MIDWAY ISLAND



This has severe implications for the whole food chain...

# PRODUCTION FLOW CHART – “OLD SCHOOL” ...



**AMAZINGLY  
ENOUGH  
I DON'T  
GIVE  
A .....**

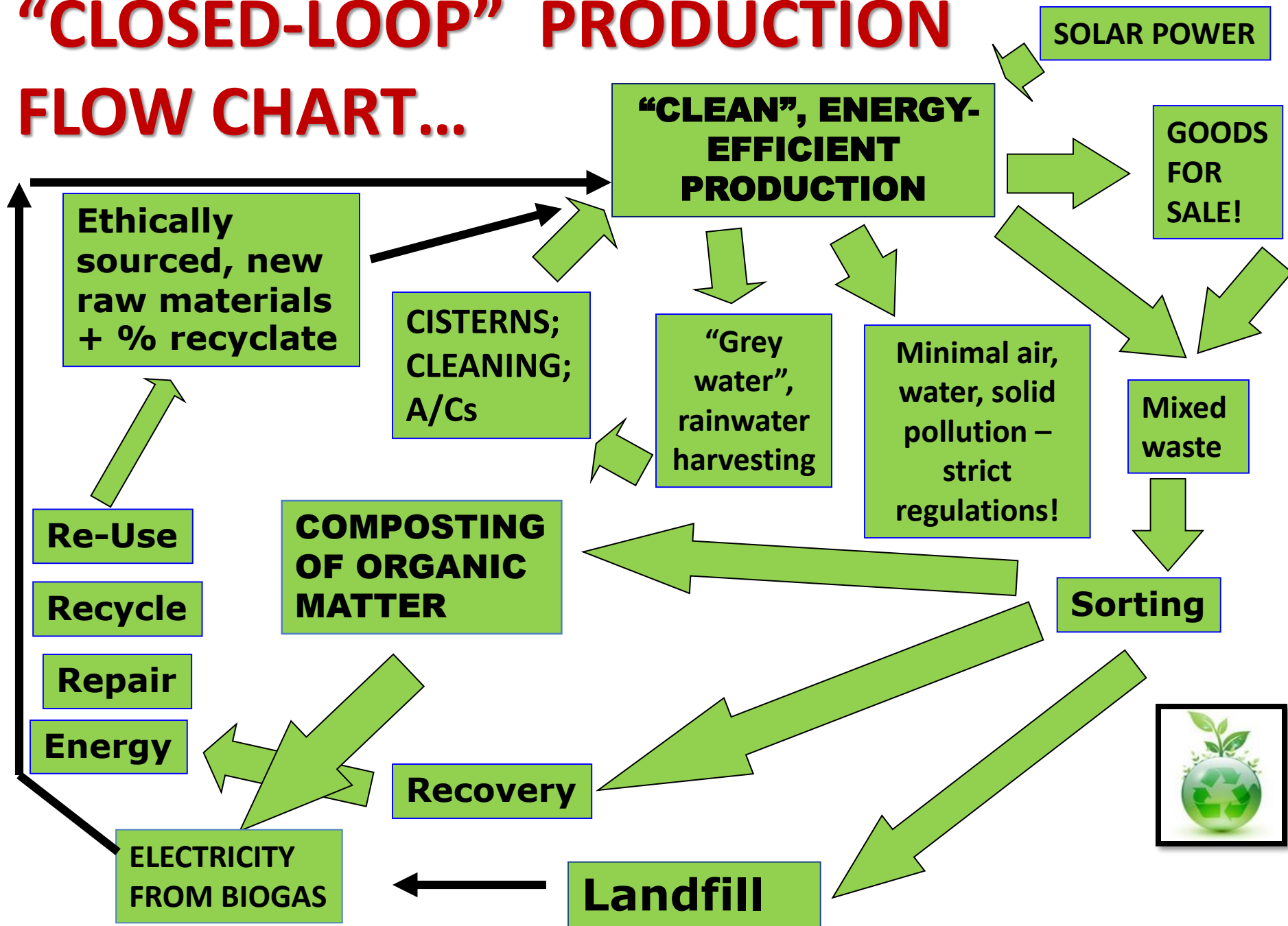




***SO WHAT DID WE **AS INDUSTRY**  
DO TO  
HELP THE SITUATION?***



# **“CLOSED-LOOP” PRODUCTION FLOW CHART...**

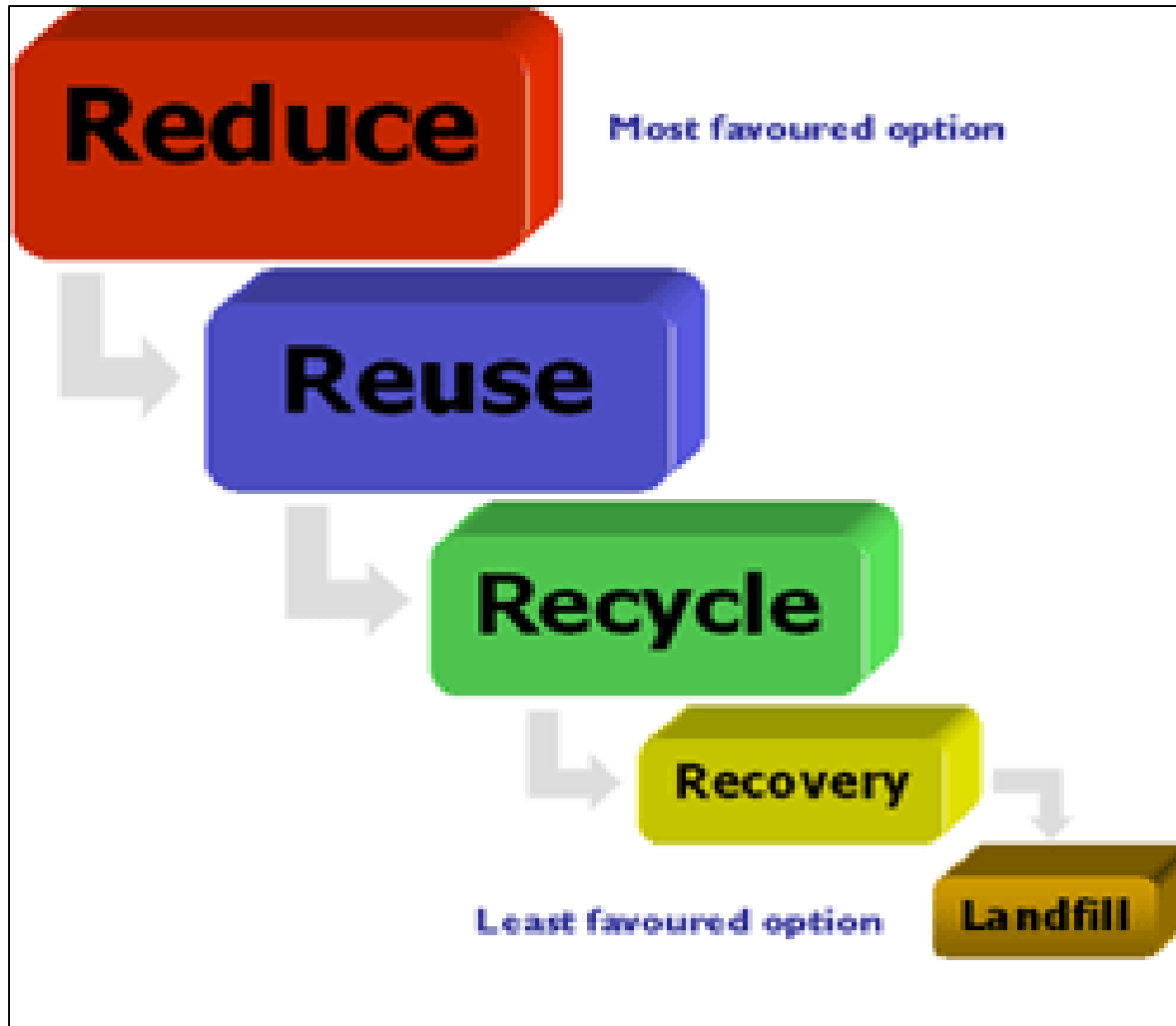




- **REDUCED ENERGY BILL/RAWS USE**
- **RECYCLED**
- **RE-USED**
- **REPAIRED RATHER THAN REPLACE**
- ***CHANGED THE WAY WE OPERATED***



# THE PACKAGING HEIRARCHY...





# RECYCLING





# RECYCLING



- ***SAVES RAW MATERIALS / LANDFILLS***
- ***USES LESS ENERGY & WATER***
- ***USES LESS NATURAL RESOURCES***
- ***REDUCES POLLUTION***
- ***CREATES EMPLOYMENT***

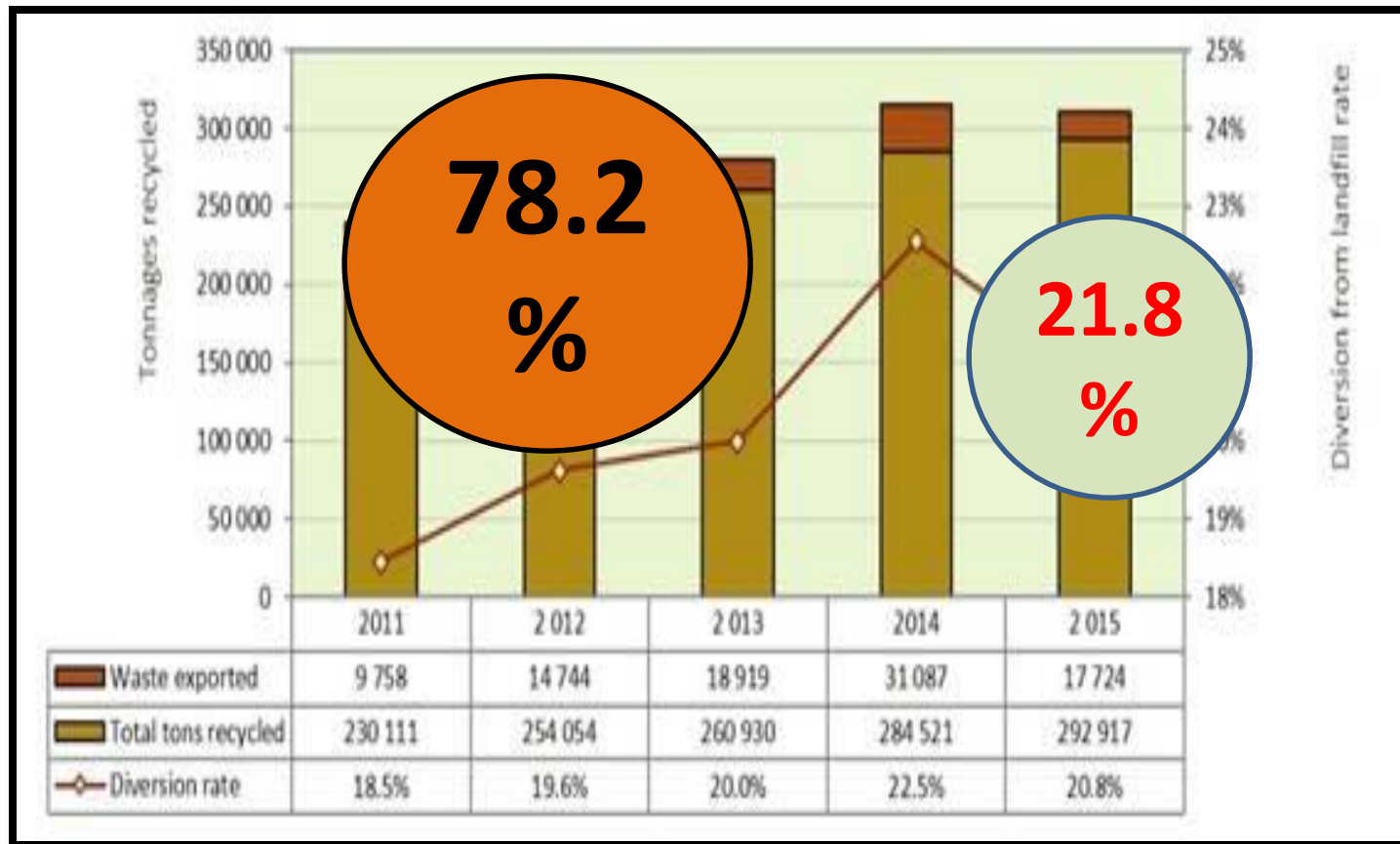




# PLASTIC in RSA...



- 293 000 TONNES/YEAR IS RECYCLED...
- OUT OF 1.5 MILLION TONNES OF PLASTIC PRODUCED



# PLASTIC in RSA...

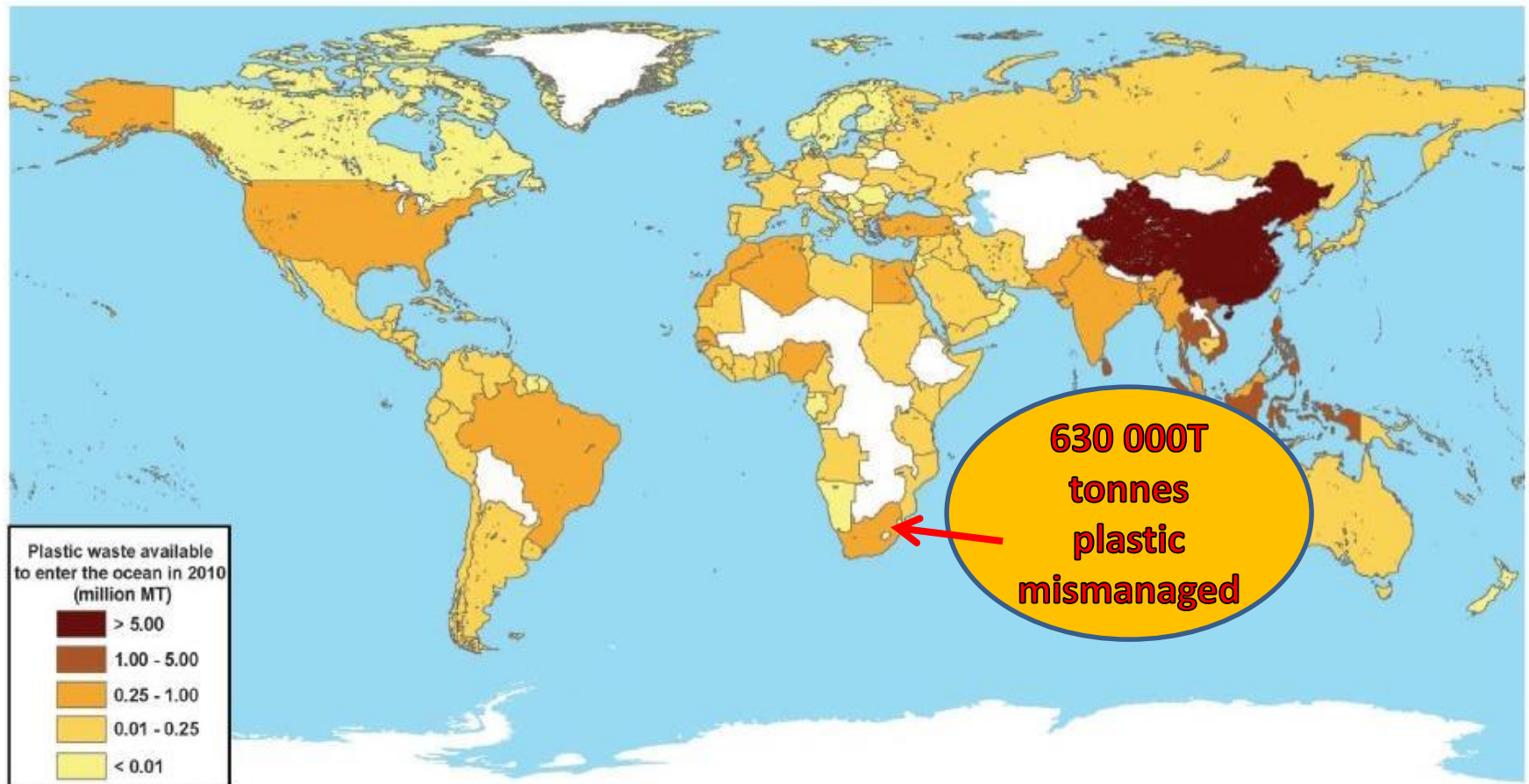
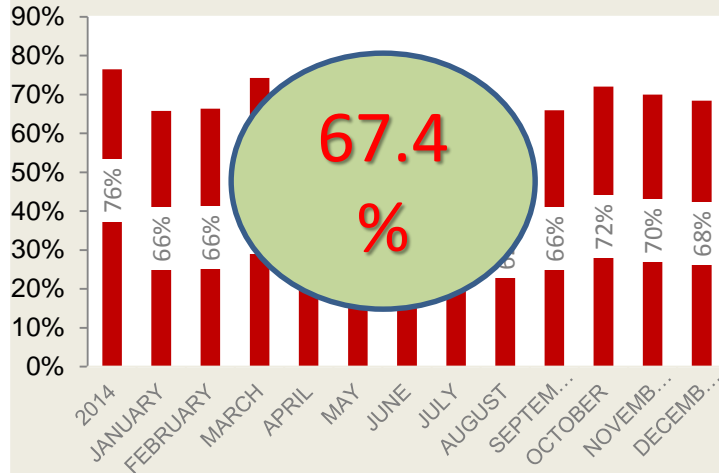


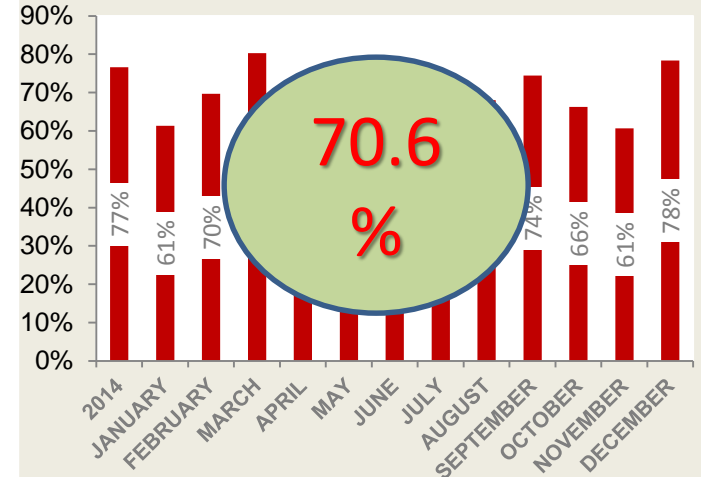
Fig. 1. Global map with each country shaded according to the estimated mass of mismanaged plastic waste [millions of metric tons (MT)] generated in 2010 by populations living within 50 km of the coast. We considered 192 countries. Countries not included in the study are shaded white.

# Snapshot of Recycling at CFlex Afripack 2015

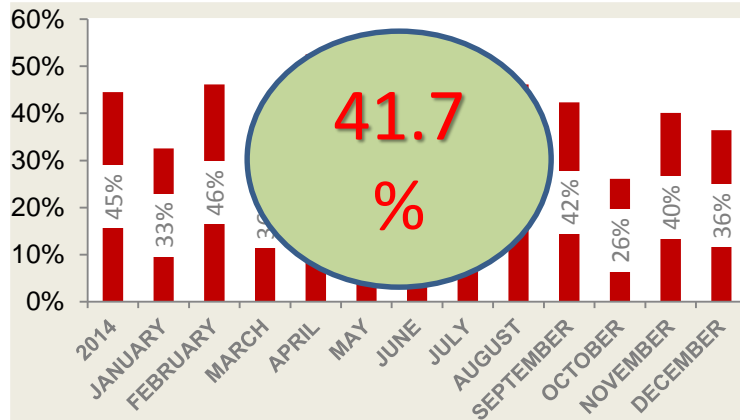
## Mobeni



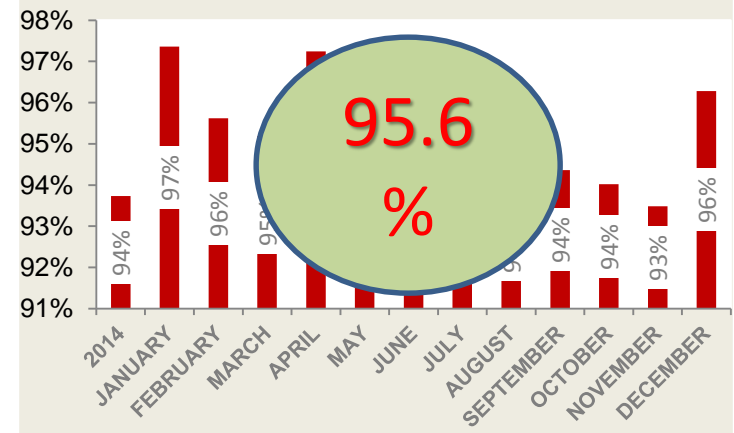
## Labels



## Flexibles

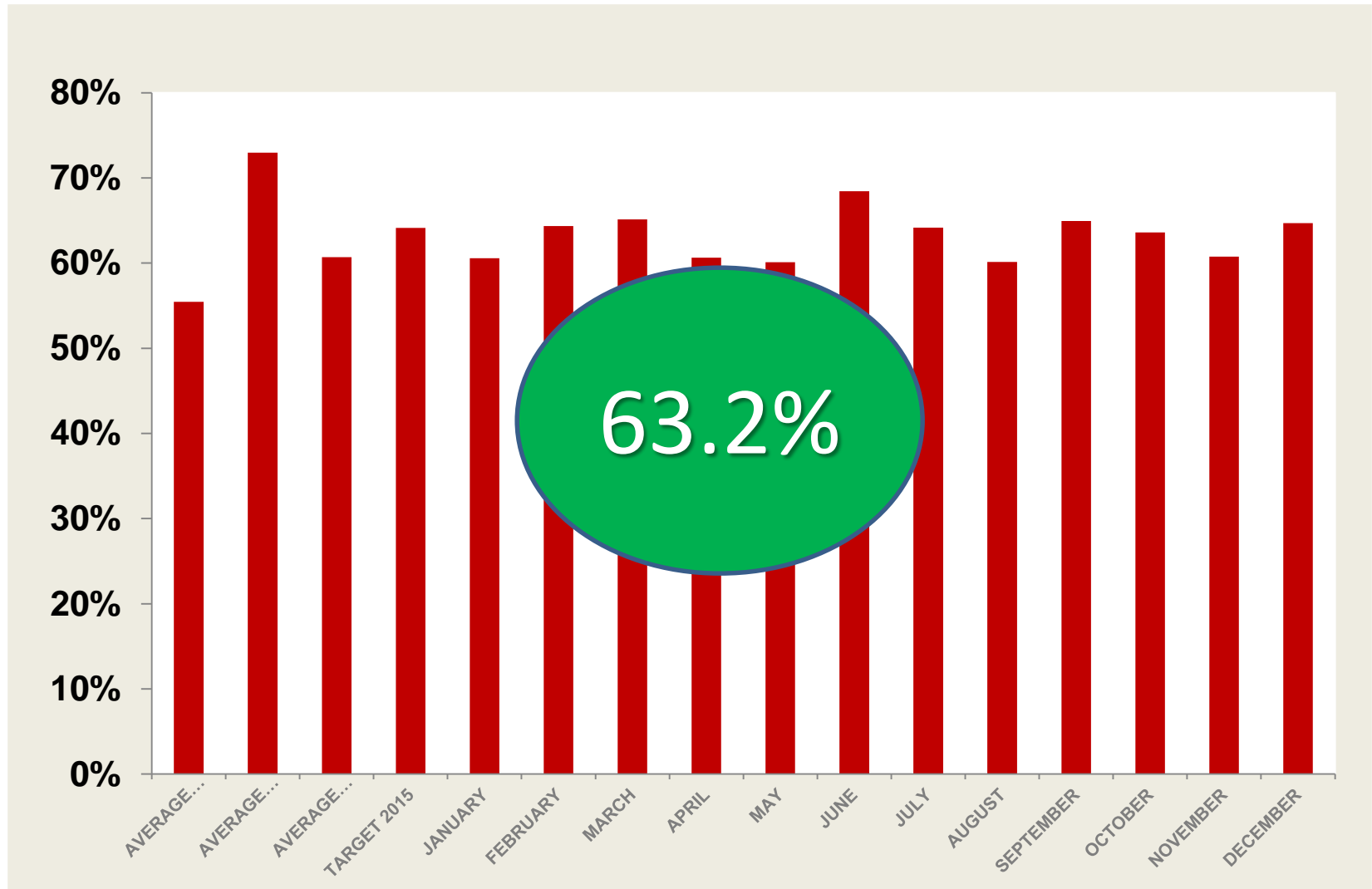


## Brits





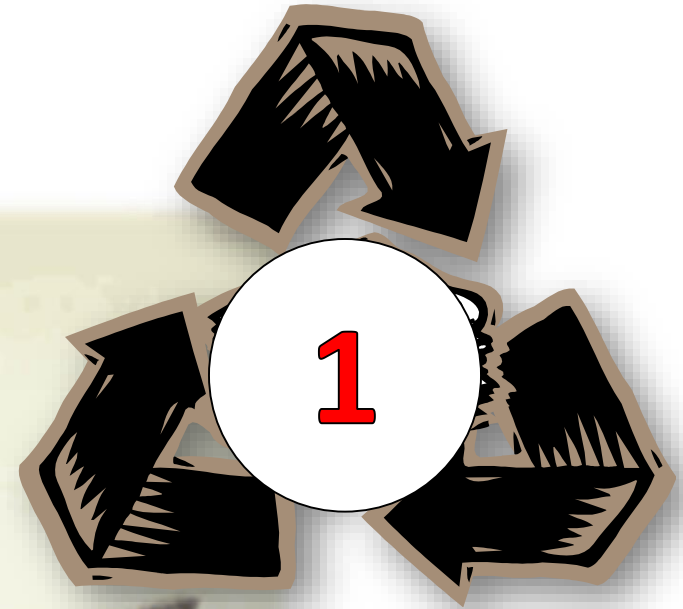
# % general waste recycled overall 2015



# ***SO WHY DOES EACH PLANT HAVE DIFFERENT RECYCLING RATES?***



# PET...



**BUT IN FILM FORM,  
NOT RECYCLABLE**



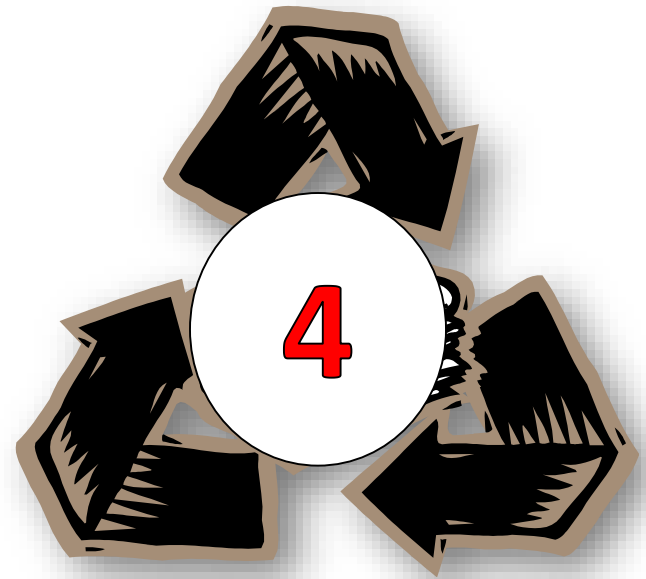
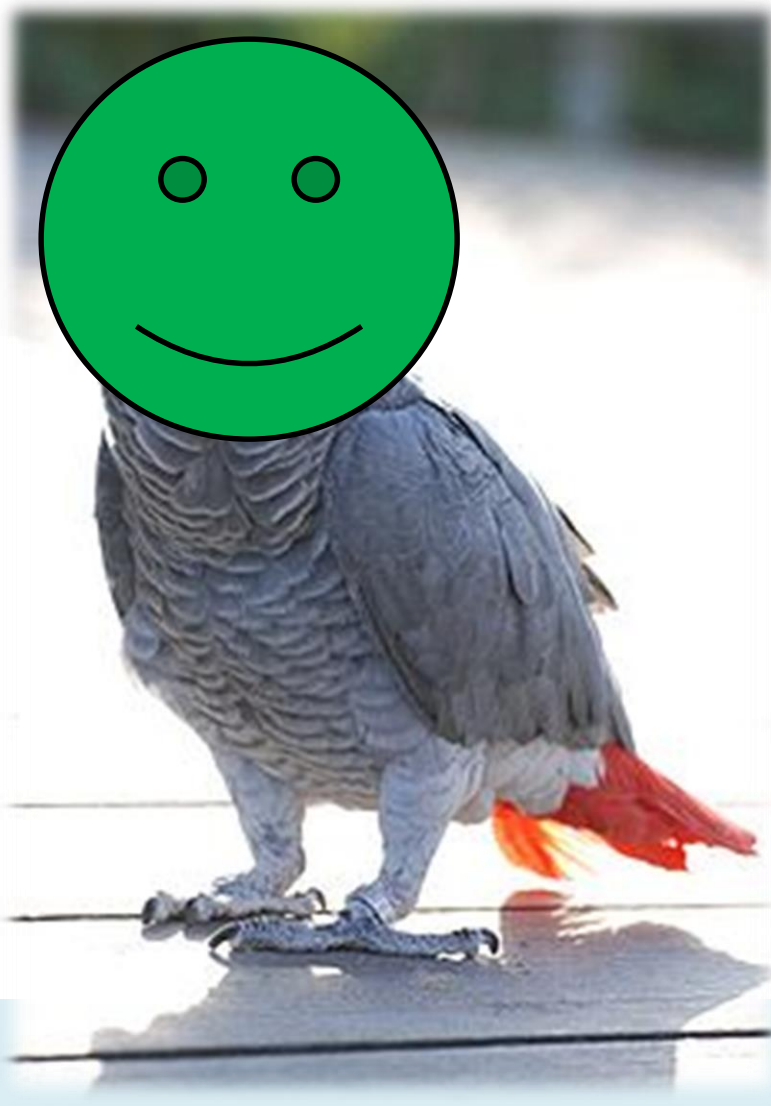
# PVC...



**BUT IN FILM FORM,  
NOT RECYCLABLE  
COMMERCIALLY**

3

# LDPE ('POLY')...



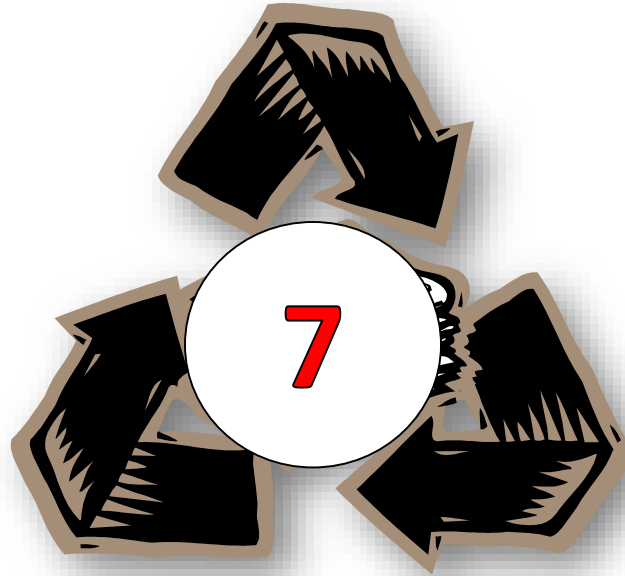
# POLYPROPYLENE (PP)



- Most common plastic film for wraparound (e.g. etc) and snack packs (e.g. etc)
- Also used for labels
- Clear, waxy, glossy, or matte
- Clear used for paper labels
- Generally 27.5μ to 50μ
- Easier to recycle post-industrial, not post-consumer



# 'OTHER'



PET LAMINATED TO PAPER

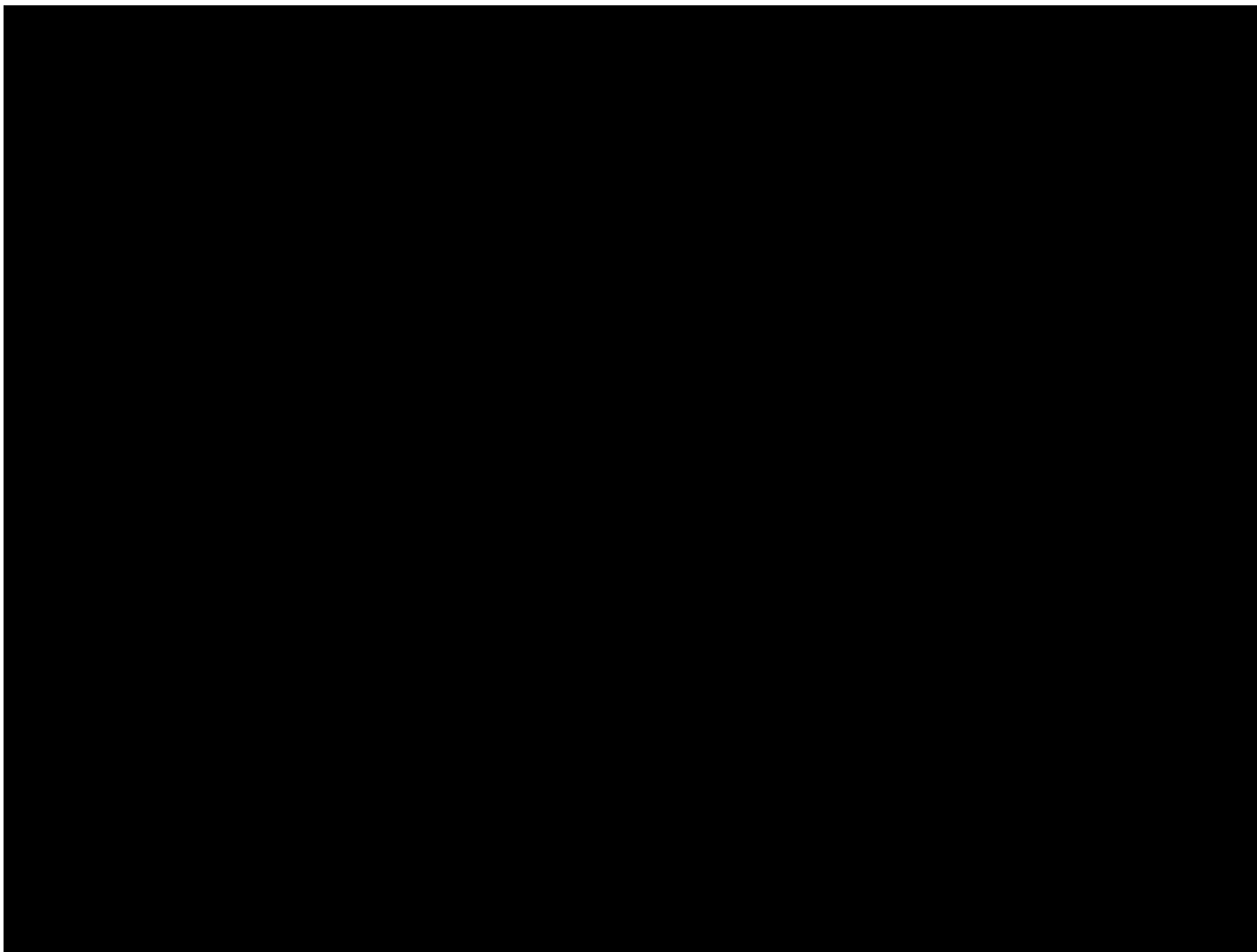


# ***ARE WE COMMITTED TO RECYCLING & WASTE MANAGEMENT ?***



# ***YEBO YES!***





***BUT YOU CAN ALSO  
UPCYCLE RATHER THAN  
RECYCLE...***

***...BY USING WASTE ITEMS  
TO MANUFACTURE NEW  
ONES WHICH CAN  
BEAUTIFY YOUR HOME OR BODY  
OR BE SOLD TO GENERATE  
INCOME...***





# UPCYCLING – YES PLEEZ!



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Flexibles





# ***UPCYCLING – YES PLEEZ!***



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# ***UPCYCLING – YES PLEEZ!***



**VINES AND FLOWERS MADE FROM ICE CREAM  
CONTAINERS, UMCEBO DESIGN STUDIO,  
COMMISSIONED BY DIAKONIA**



# **UPCYCLING – YES PLEEZ!**







# UPCYCLING – YES PLEEZ!



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# ***UPCYCLING – YES PLEEZ!***



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# ***UPCYCLING – YES PLEEZ!***







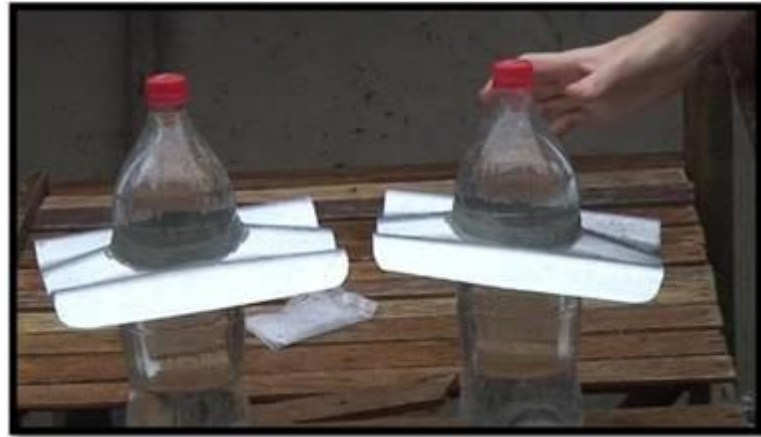
# **UPCYCLING – YES PLEEZ!**







# UPCYCLING – YES PLEEZ!



# ***DOWNCYCLING ????***

**I made this out of an old coffee table.**







# WASTE SUCCESSES...

## COASTAL CLEAN-UPS



# THERE IS ONLY ONE PLANET!



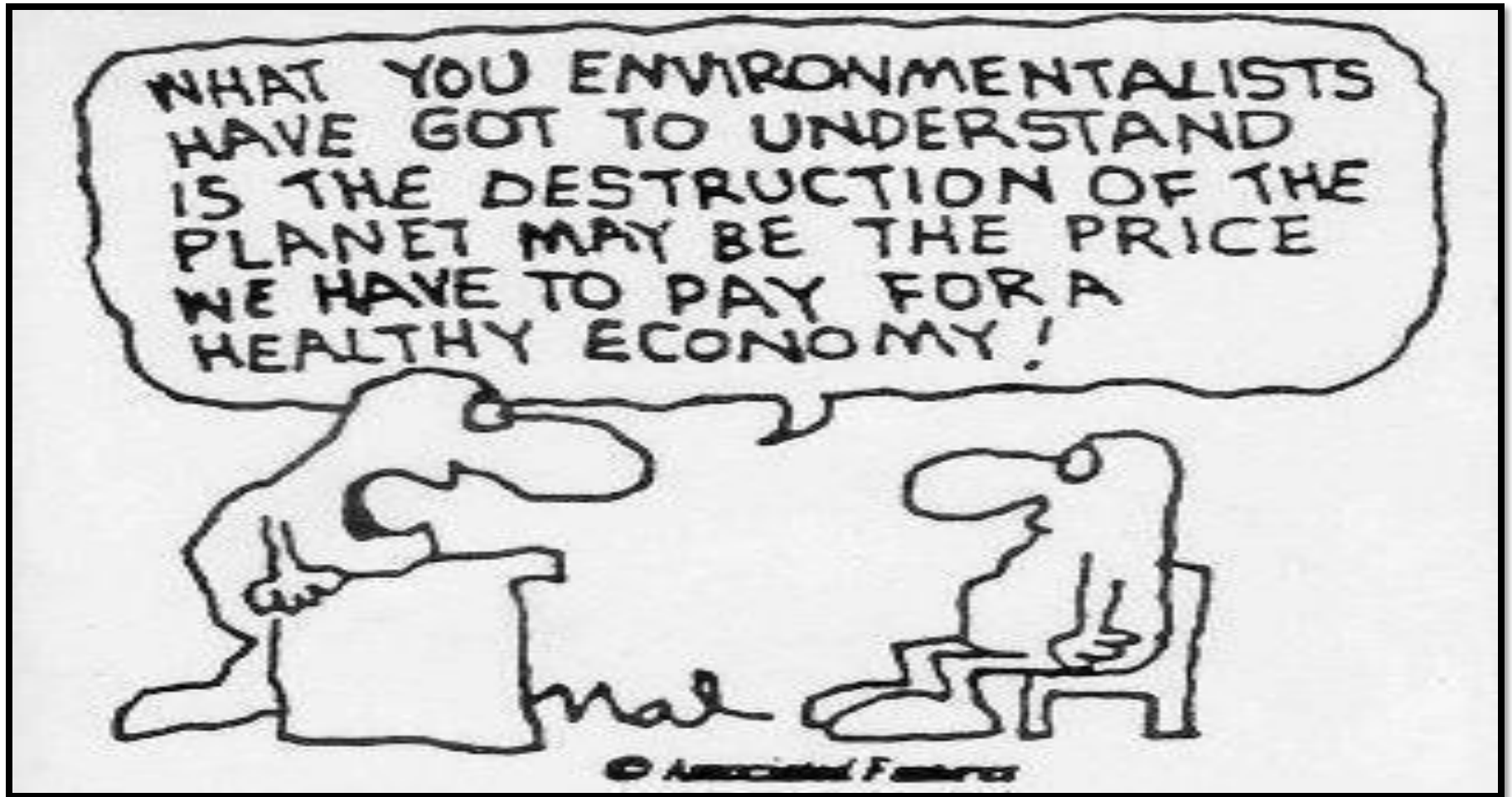


# THERE IS ONLY ONE PLANET!



**“THE AGE OF THE ANTHROPOCENE”**

# WILL IT COME TO THIS?





# IS ZERO WASTE TO LANDFILL ACHIEVABLE?



# THANK YOU



Make no small plans...



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Flexibles



Institute of  
Waste Management  
of Southern Africa

