

BEAT PLASTIC POLLUTION

From Branded Litter



#break
free
from
plastic

A large pile of discarded plastic packaging for various brands, including Nestea, Pop Corn, and others, scattered on a concrete floor. The packaging is crumpled and broken, showing various colors like blue, yellow, and red. The text "Waste & Brand Audit" is overlaid in white on the left side of the image.

Waste & Brand Audit

To identify types and quantity of Branded & Unbranded packaging with Manufacturers name in Plastic waste

WASTE & BRAND AUDIT, BENGALURU (20TH-22ND MAY, 2018)

LOCATION	TIME	CONTACT PERSON
1. HSR DWCC : 2299, 16 th Cross Road, 1 st Sector, HSR Layout, Bengaluru, Karnataka - 560102	8 AM - 10:30 AM	Shanthi : +91 9036057199
2. Koramangala DWCC inside High Tension Wire, Next to Empire Hotel, Jyothi Nivas College Road, Koramanagala	Sunday : 10 AM - 12 PM Monday & Tuesday : 9 AM - 11 AM	Neeraja : +91 9880668688
3. Lal Bagh, Meeting point Lalbagh café on MN Krishna Rao Road	8:30 AM - 11 AM	Renuka : +91 9740073635
4. Majestic Bus Stand, Main entrance.	8 AM - 10 AM	Anirudh : +91 8095903171
5. Mantri Mall, Food Court, Malleswaram	8 AM - 10 AM	Rabia : +91 8904198237
6. Maramanapalya DWCC	8 AM - 10 AM	Archana : +91 90606889529
7. Sarjapur ward 150 DWCC	8 AM - 10 AM	Amita : +91 9886749437
8. Yelahanka ward 10 DWCC	8:15 AM - 12:15 AM	Allen : +91 9343777777



Volunteers

HSR LAYOUT

Smita Kulkarni
Chitra Praneeth
Rajani Boppaih
Nalini
Suma Reddy
Krupa Seetaram
Tirumal Boppana
Nandini Sriraaman
Aditi Sudarshan
Mohan Govindiah
Prabha
B.N.S.Ratnakar
Sriakshitha

Ishana Modi
Vijayalakshmi Ravi
Likhith Ravi
Jagdeesh Sheshadri
Roopa De
Shreya Praveen
Sanjana Reddy
Vaishnavi Reddy
Shahsidhar
Divya Venkatesh
Dr. Shanthi

BELLANDUR WARD 150

Amita Pillai
Archana Prasad
Kashyap
K.P.Singh
Ravish Yavagal
Prabha Mohan

KORAMANGALA

Sunil Achar
Archana Murthy
Maria Raj
Uma Ravindranath
Shalini Suren
Swetha
Pria Arvind
Roopa Rai
Jayashree
Neeraja Shetty

LAL BAGH

Nylah Nalwad
Harsha Nalwad
Smitha Srinath
Shashi sastry
Geetha Narasimhan
Renuka Bhosle
Pooja
Kumuda M Saravor
Mekhala H M
Vani Bhaskar
Meghana Joshi
Raghu Verma
Roshita

YELAHANKA

Allen Joseph
Sarada
Ram Prasad
Prabha
Sunil Kumar D R
Abdul Salimani
Sobitha Balaji
Padma Badami
Poornima M N
Mangala Gowri M
Vaishnavi

MANTRI MALL

Vani Murthy
Deepika Aujer
Rabiya
Nataraj S
Satish P
Prerna.Harish
Anupama.Harish
Raghuveer
Jayoti B

MAJESTIC

Anirudh
Prajwal GV
Lohit BN
Rahul Anand
Niranjan M
Brunda M
Dhisha Mohan
Amar BP
Srinidhi Chandra
Nidhish
Bhuvan BN

MARAPPANAPALYA

Nalini Shekar

Archana.V

Midhun

Nagarjun

Indha Mahoor

Sharath

Mohan

Shivarajamma

Geetha

Vasanthi

16 students and

2 Supervisors from

University of

Minnesota

SWMRT

Sandya Narayan

Ramakant

Pinky Chandran

JAIN UNIVERSITY

Priyanka

Beula Anthony

Padma Priya

Usha

Manjula

Vijaya A



FINDINGS



1.

Brand Audit

Post consumer Plastic Waste

607

B R A N D S

479

L O C A L (L)

128

I N T E R N A T I O N A L (I)



12,000

PIECES AUDITED



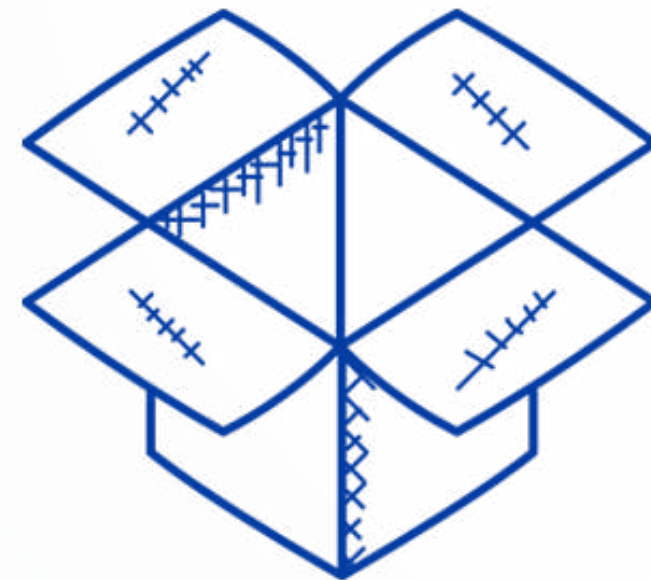
120

VOLUNTEERS FOR
THREE DAYS.



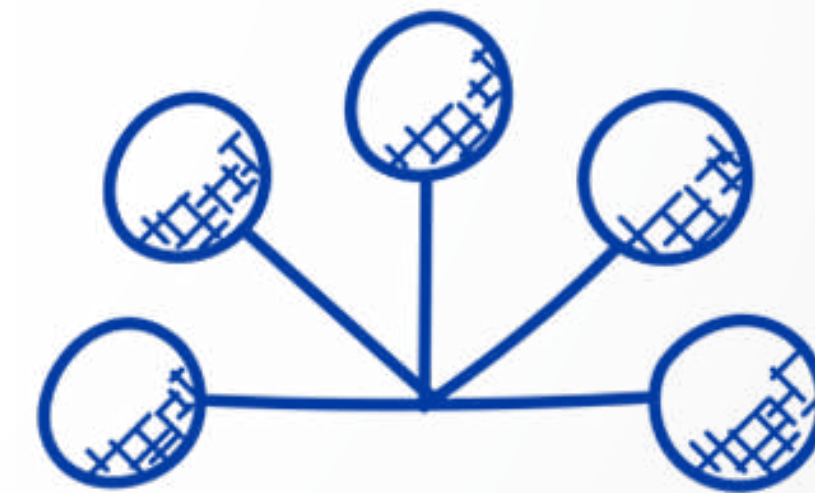
8

LOCATIONS



600 Kgs

OF PLASTIC
PACKAGING



5

CATEGORIES

BRAND AUDIT - PRODUCT PACKAGING TYPES.

L - LOCAL

I - INTERNATIONAL

UNIT = NUMBER OF PIECES



FP

FOOD PACKAGING

10,300

P I E C E S

L = 65%

I = 35%



PC

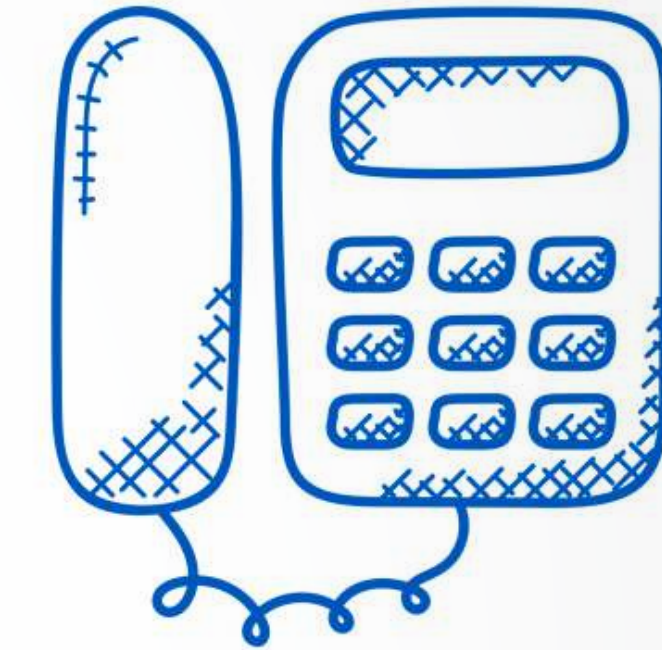
PERSONAL CARE PACKAGING

1000

P I E C E S

L = 50%

I = 50%



HP

HOUSEHOLD PRODUCTS
PACKAGING

700

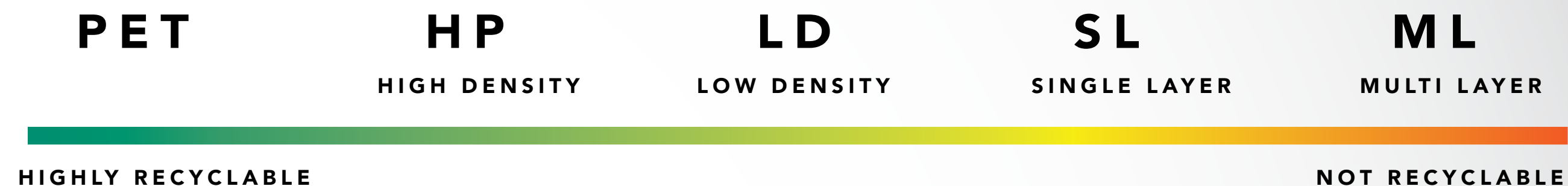
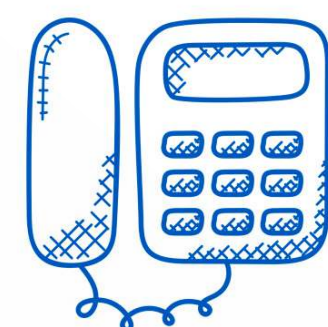
P I E C E S

L = 76%

I = 24%

BRAND AUDIT - COMPOSITION OF PRODUCT PACKAGING.

UNIT = NUMBER OF PIECES



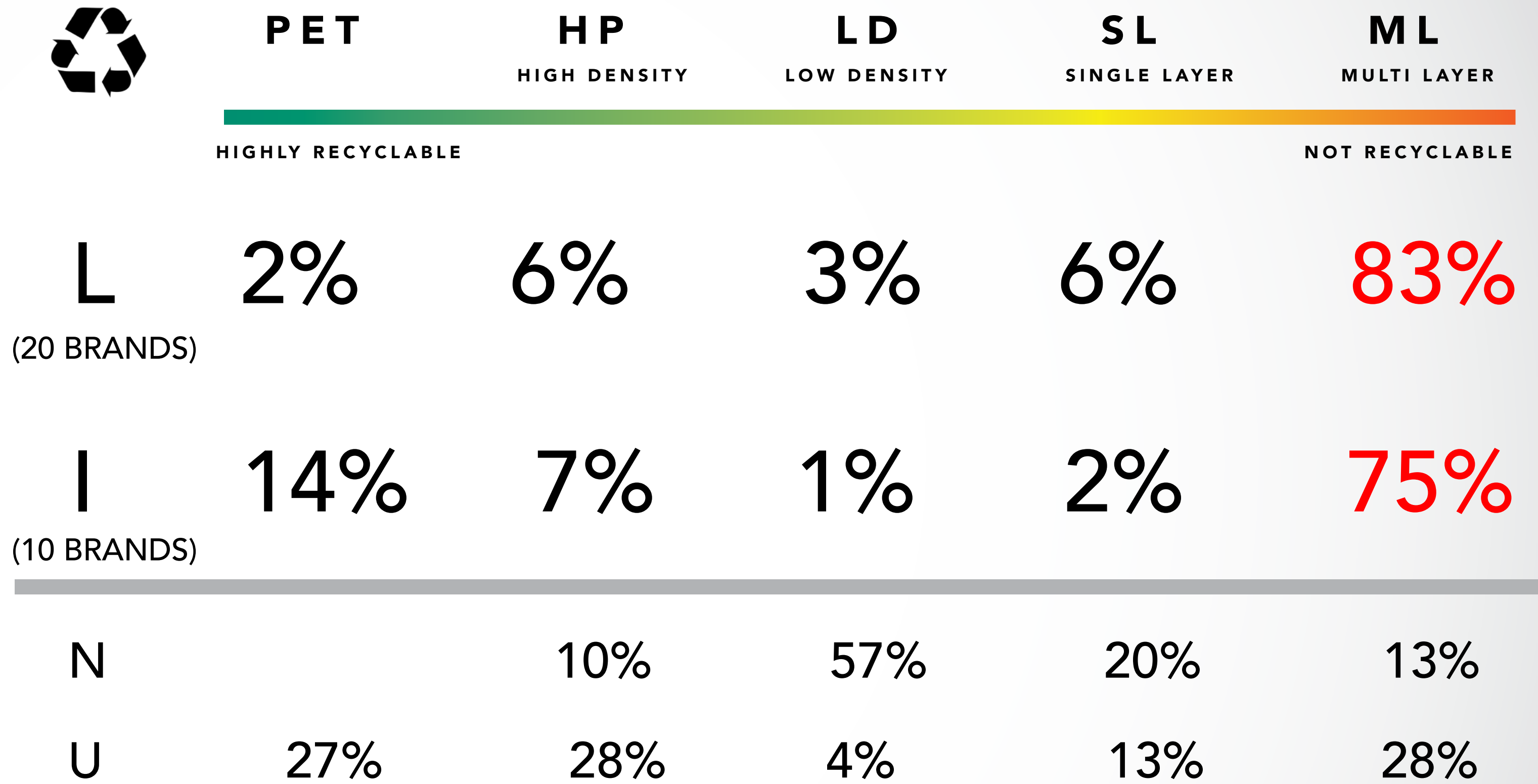
8%	12%	9%	10%	61%
8%	59%	6%	5%	22%
11%	40%	23%	12%	14%

OTHER OBSERVATIONS - INFERENCE

Composition of Product Packaging :

1. **Multi Layer Packaging** is higher in International Brands (75%) than in Local Brands (44%) . Because of its high cost Single Layer is preferred by Local Brands
2. No '**Super**' in the Data Samples indicates No Plastic Carry bags. (Super is a colloquial term for plastic carry bags)
3. '**Other – Polypropylene**' not found, implies that Non Woven Polypropylene (NWPP) is not getting recovered in the DWCC and is going out as discards to the Landfill. Possibly it is not considered as Plastic and being mistaken for cloth.
4. No '**Polystrene -Styrofoam**' was seen

COMPOSITION OF FOOD PACKAGING



L = Local Brands
 I = International Brands
 N = Nandini
 U = Unbranded

OTHER OBSERVATIONS - INFERENCE



COMPOSITION OF LOCAL BRAND PACKAGING

1. **20 Brands** comprise **90%** of the Branded Litter
2. **273 Local Brands** were identified
3. Brand Composition
 - 35% Nandini Milk Products
 - 17% Unbranded Products
 - 48% Local Bands
4. Unbranded Products are the inner packaging of the Branded Products

COMPOSITION OF INTERNATIONAL BRAND PACKAGING

1. 10 Local Brands comprise **95% of the Branded Litter**
2. **55 International Brands** were identified



INTERNATIONAL BRANDS COMPOSITION





LOCAL BRANDS COMPOSITION



35%



9.29%

Amul

6.65%

Galaxy

5.21%



2.77%



1.90%



1.62%



1.26%



1.06%



0.82%



0.80%



0.64%



0.54%



0.49%



0.49%



0.48%



0.40%



0.37%



0.31%



0.31%

FP

OTHER OBSERVATIONS

- INFERENCE



- Composition of All Brand Packaging (Units = number of Pieces)
1. Multilayer is used by all Brands for Sweets snacks and Ready to eat foods and comprised **85%** of their packaging.
 2. **PET** by International Brands /HD by Local Brands is used for Soft Drinks-Oils and comprised of **15-35%** of their packaging. Bisleri Brand had **100% PET for Water**
 3. LD is used by Milk and Milk product Brands and comprised **60-80%** of the packaging. This is exempt from Ban
 4. SL upto **40% is used for Grocery –Provisions** packaging by Local Brands
 5. LD- SL upto **40% used by Food Takeaway Brands** was found, which is **banned** in Karnataka

PET

HP

HIGH DENSITY

LD

LOW DENSITY

SL

SINGLE LAYER

ML

MULTI LAYER

HIGHLY RECYCLABLE

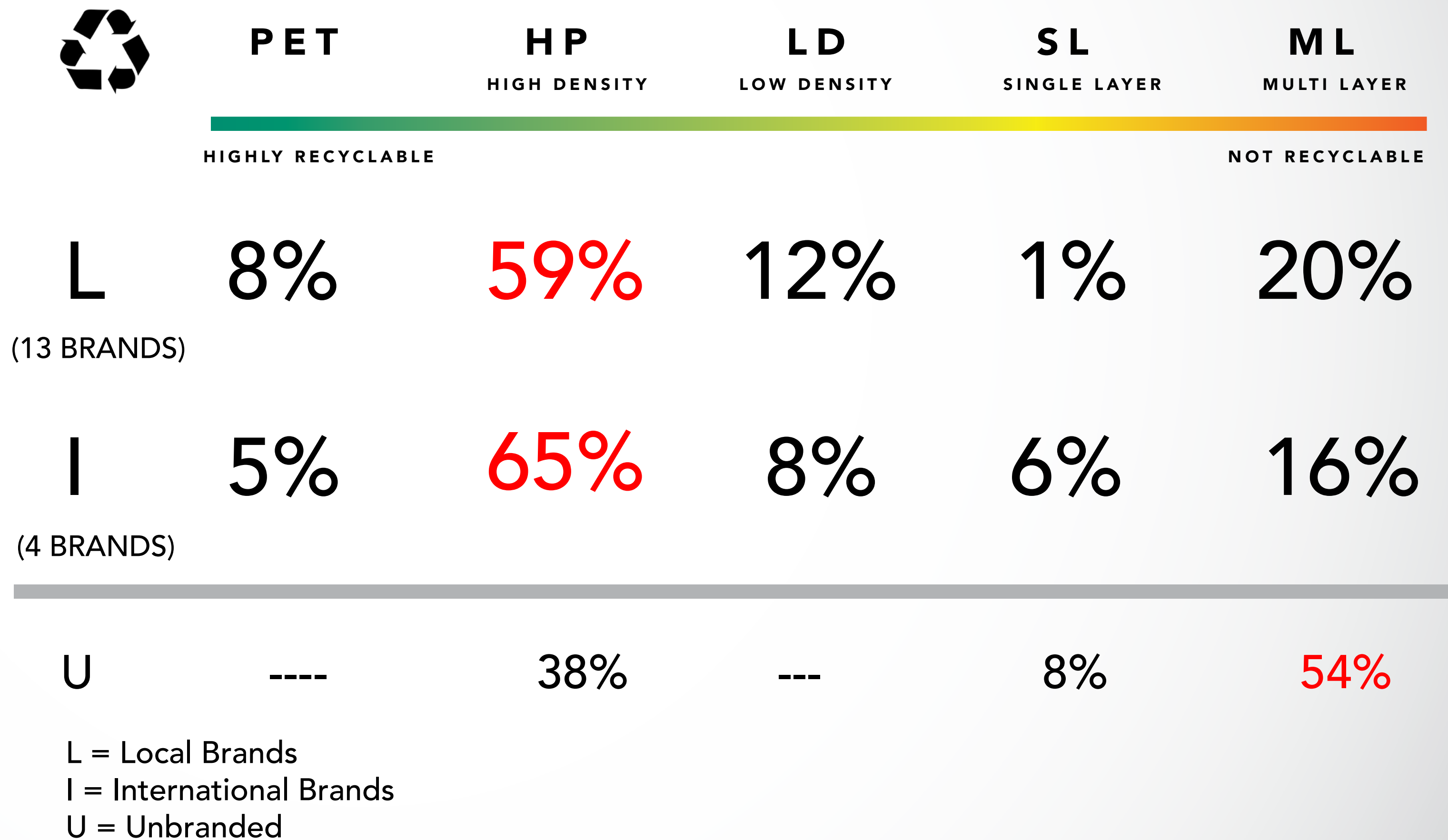
NOT RECYCLABLE



Hindustan Unilever Limited



COMPOSITION OF PERSONAL CARE PACKAGING



OTHER OBSERVATIONS - INFERENCE

UNIT = NUMBER OF PIECES



COMPOSITION OF LOCAL BRAND PACKAGING

1. **13 Brands** comprise **50%** of the Branded Litter
2. **96 Local Brands** were identified
3. **42%** of the Brand Packaging is of **low and non recyclable** quality

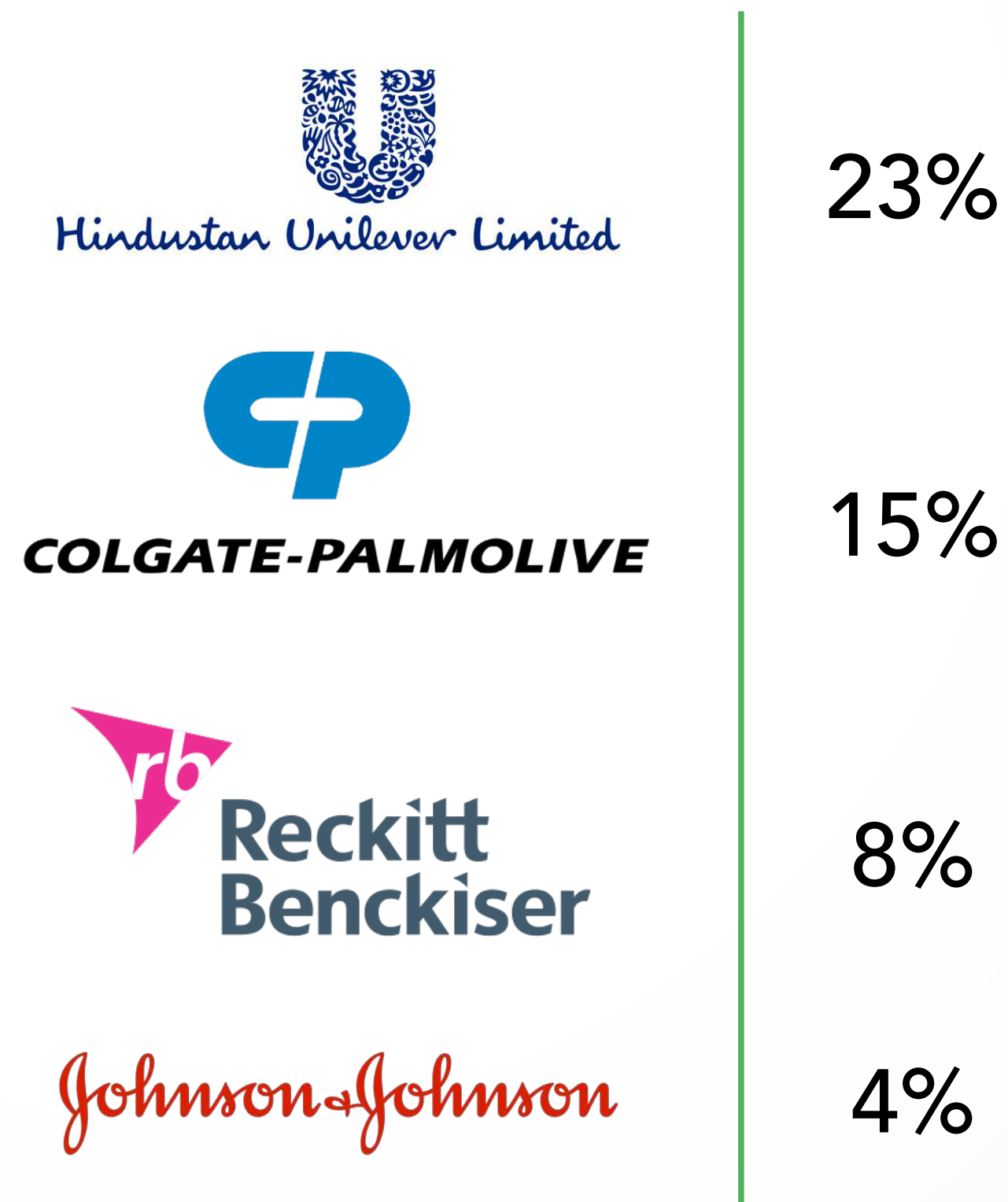
COMPOSITION OF INTERNATIONAL BRAND PACKAGING

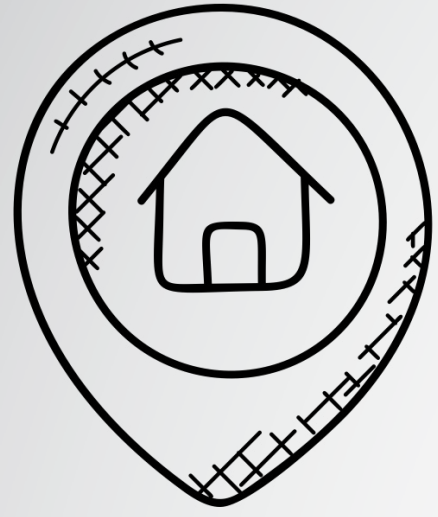
1. **4 Brands** comprise **51%** of the Branded Litter
2. **48 International Brands** were identified
3. **30%** of the Brand Packaging is of **low and non recyclable** quality

Unbranded Products could possibly be the inner packaging of the Branded Products have almost 54% component of low, non recyclable quality



INTERNATIONAL BRANDS COMPOSITION

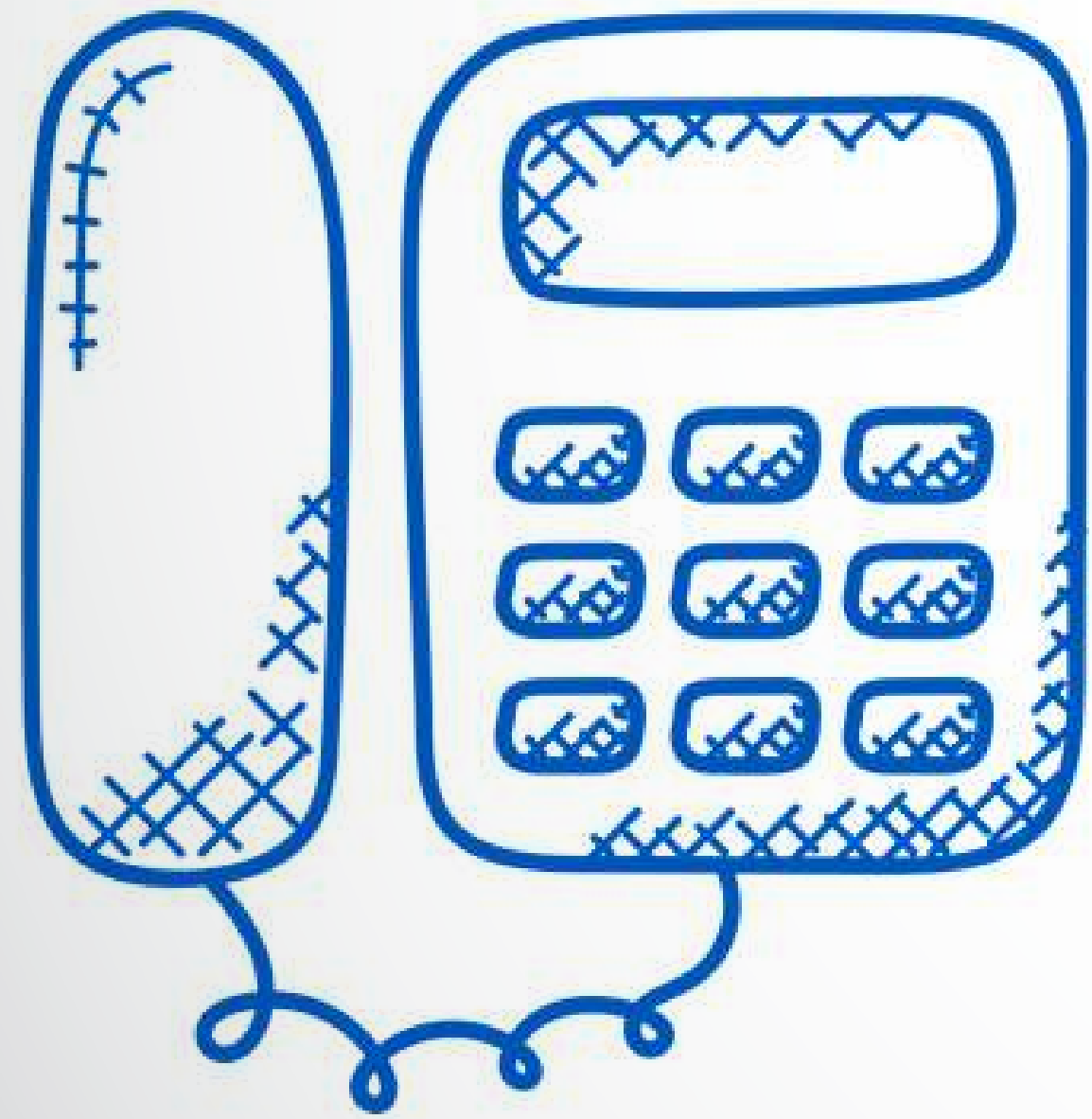
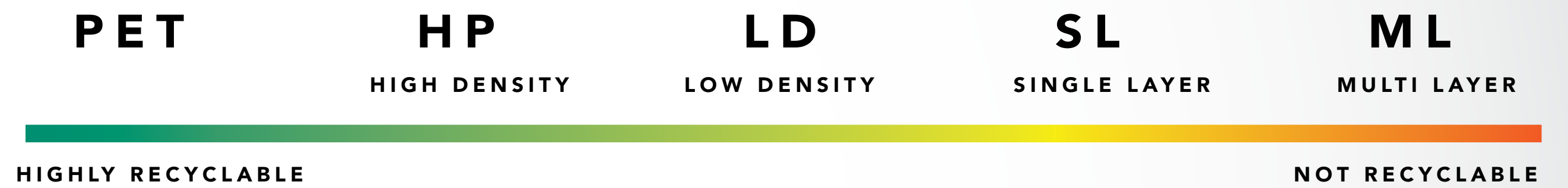




LOCAL BRANDS COMPOSITION



COMPOSITION OF HOUSEHOLD PRODUCTS PACKAGING



Material	Percentage
I (5 BRANDS)	4%
HP	51%
LD	1%
SL	30%
ML	13%

I = International Brands

OTHER OBSERVATIONS - INFERENCE



COMPOSITION OF LOCAL BRAND PACKAGING

1. No one Brand was prominent
2. **110 Local Brands** were identified

COMPOSITION OF INTERNATIONAL BRAND PACKAGING

1. **5 Brands** comprise **75%** of the Branded Litter
2. **25 International Brands** were identified
3. **44%** of the Brand Packaging is of **low and non recyclable** quality



INTERNATIONAL BRANDS COMPOSITION





2.

Dry Waste Collection Centres

Recovery of Post consumer Plastic Waste

12,325

T O N N E S

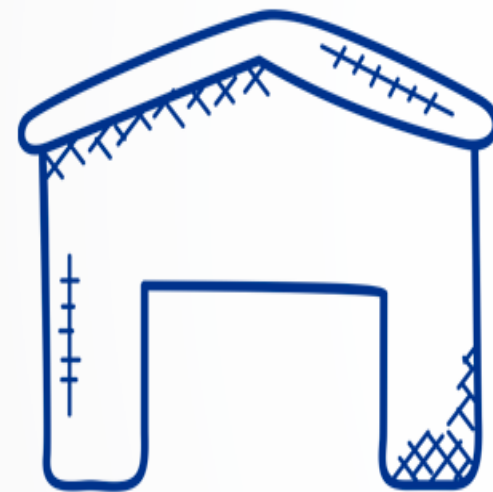
DOOR TO DOOR COLLECTION 1.15 TPD - BUY BACK 0.5 TPD
(JUNE 2017-MAR 2018) - FY2017-2018

JUNE 2017 - MARCH 2018



3300

TONNES



12

DWCCs
(DOOR TO DOOR COLLECTION)



1

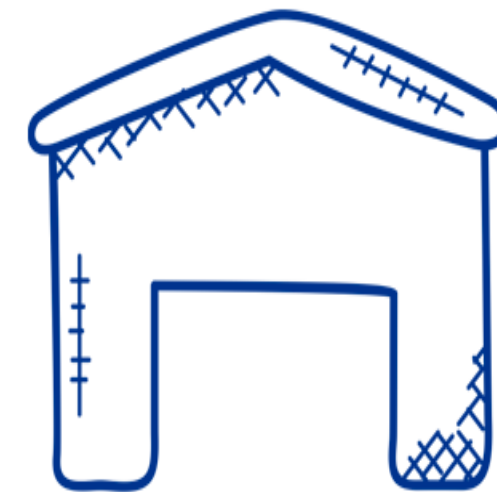
TONNE PER DAY

FY 2017- 2018



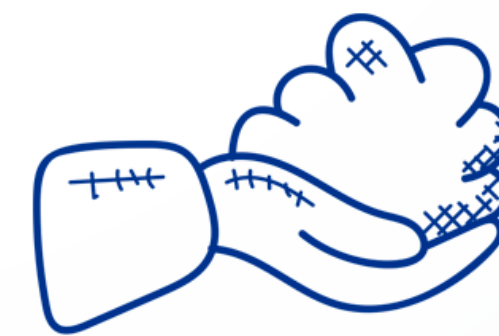
9025

TONNES



50

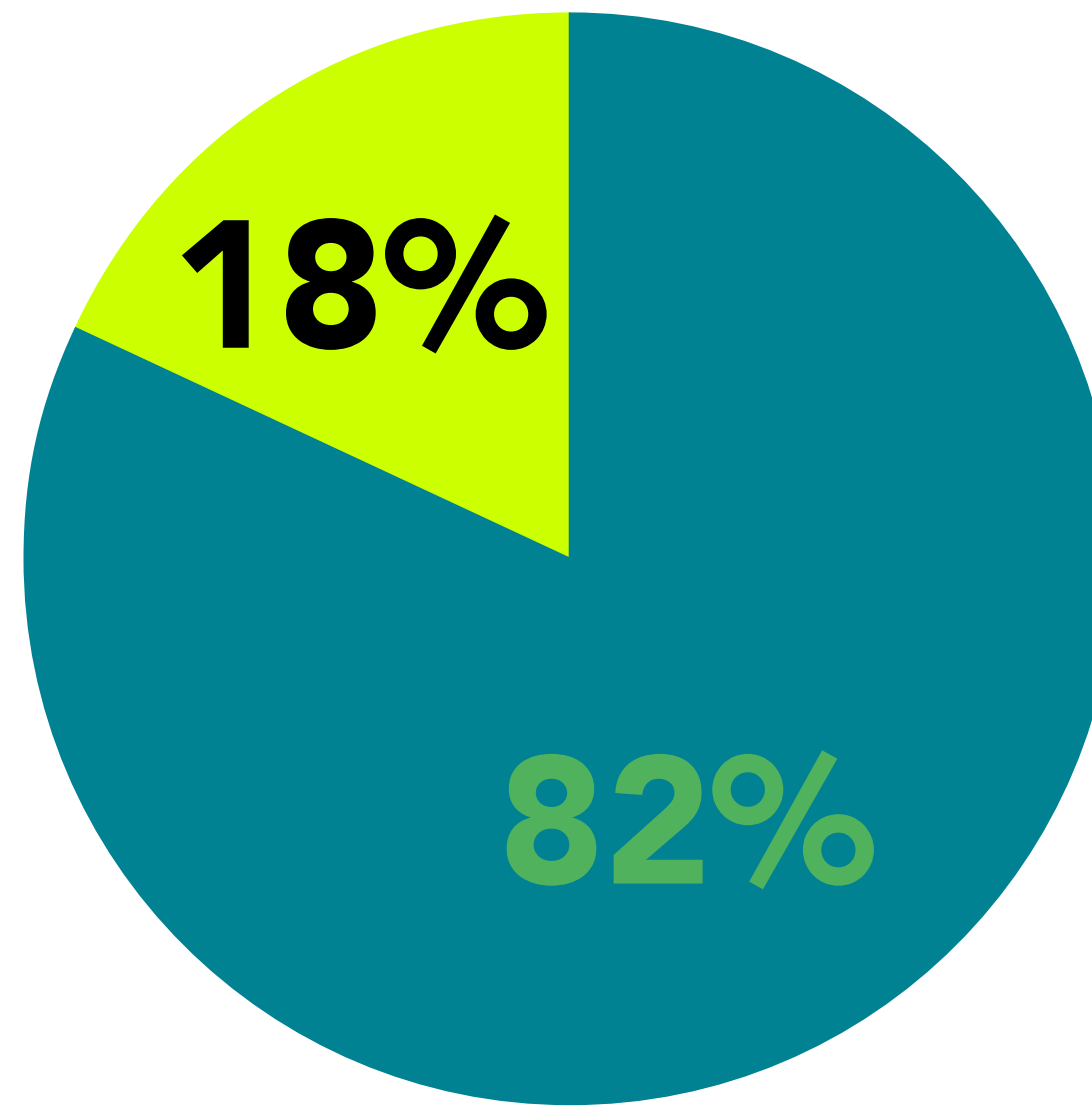
DWCCs
BUY BACK



0.5

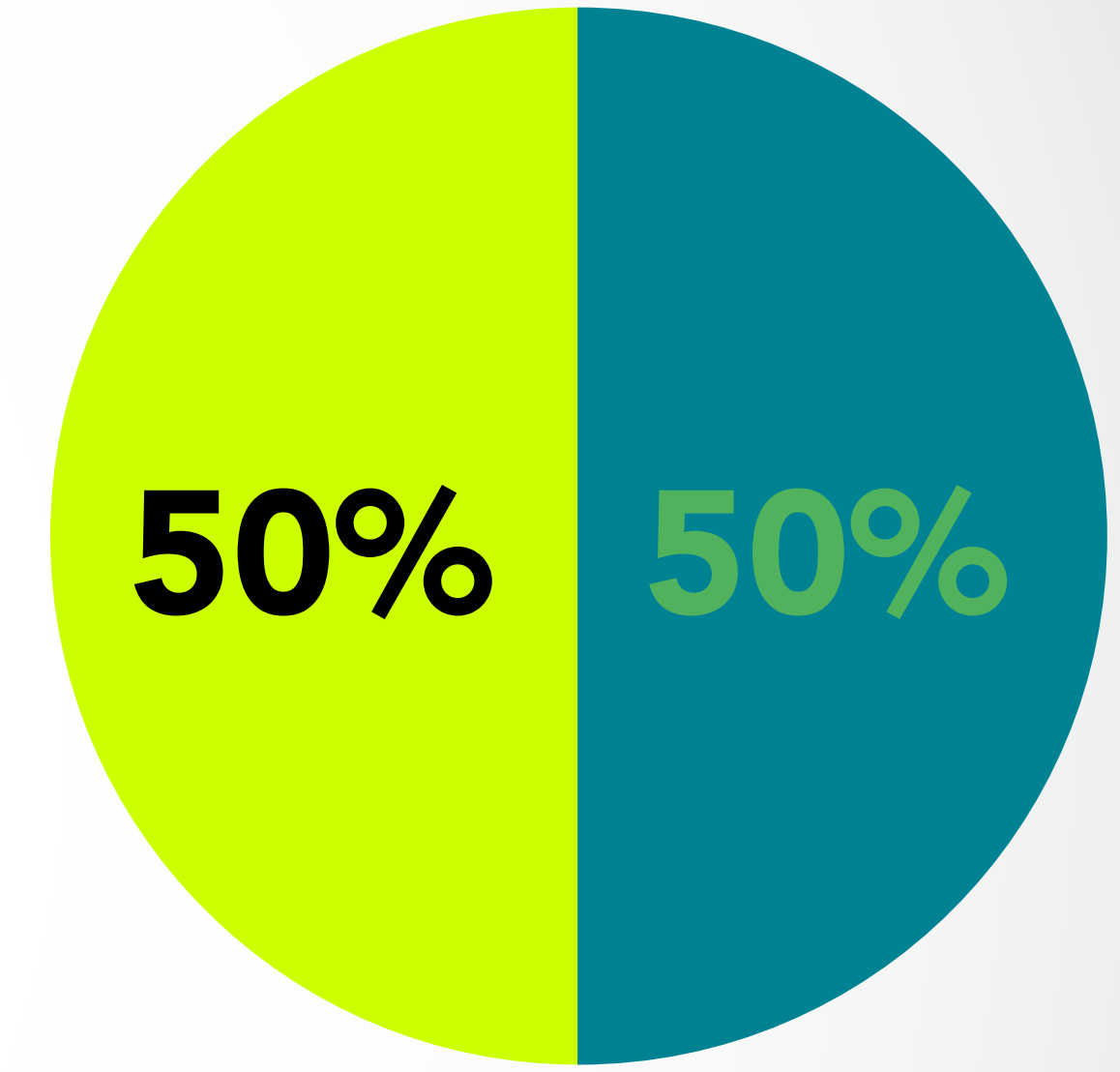
TONNE PER DAY

COMPOSITION AFTER SORTING AND GRADING



**Door to Door
Collection**

LVP – MLP
Low Value Packaging
Multi Layer Packaging



Buy Back

LVP – MLP
Low Value Packaging
Multi Layer Packaging



3.

Recommendations under the scope of

**Plastic Waste Management Rules 2016 - 2018
Solid Waste Management Rules 2016
Policy Resolution for Petrochemicals 2007**



A. RECOMMENDATION

IMPLEMENT :

Plastic Waste Management Rules 2016 - 2018

Solid Waste Management Rules 2016

A. REQUIREMENTS

Brand owners, MFg and Producers of plastic packaging to take up implementation of the Rule 9 of the PWM rules :

- Collection
 - Take back
 - Phase out
- Collection Facilities and Process
 - a) Door to Door, Institutional and Commercial
 - b) Using Waste pickers and CSO,NGO
 - Destination –Recycling, Energy recovery, Alternate use
 - a) Set up by Local Body
 - b) Brand Owners / Producer participation



B. RECOMMENDATION

IMPLEMENT :

The Petrochemical Policy Resolutions of 2007

B. REQUIREMENTS

Implement the Policy Resolutions for Petrochemicals 2007 :

- on Safe food packaging
- Plastic Parks for Recycling
- R&D Fund
- IEC and Community awareness programs to stop littering
- Waste Collection programs





C. RECOMMENDATION

IMPLEMENT :

The Petrochemical Policy Resolutions of 2007

C. REQUIREMENTS

- Ministry of Urban Development should be the nodal agency for the implementation of the Rules by the MOEF and the Ministry of Chemicals and Fertilisers



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Credits :

