

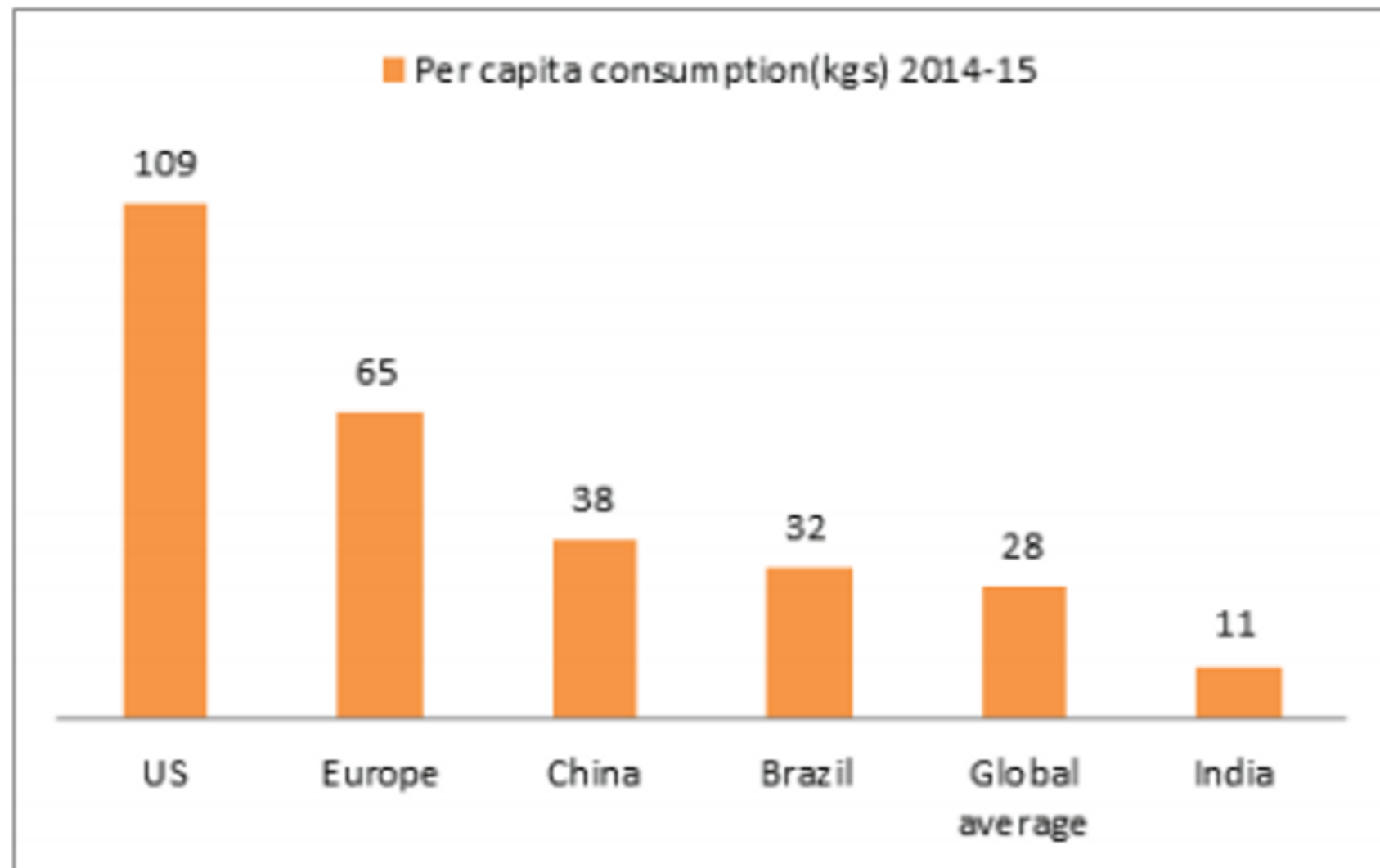


GROUP 4 PRESENTS

DIY Plastic Recycle Machine

Because everything starts at home

The present scenario



Source: FICCI

Average per capita consumption of plastic in India is about 11kgs.

Amount of Plastic Waste Created

Statistics from 2014-2015

An estimate by the Ministry of Petroleum and Natural gas suggests that the annual per capita consumption in India would be 20 kgs by 2022.

Design Process

1

Empthtize

Care enough to change their behaviour, and the skills to collaborate and create solutions for a better world.

2

Desire

Creative team gathers materials and inspiration.

3

Ideation

We brainstorm to get the final idea.

4

Prototype

We do the necessary steps to deliver the result.

5

Test

We show our design to client and wait for feedback.



THE PLASTIC
YOU USE
ONCE
TORTURES
THE OCEANS
FOREVER



COWS
IN INDIA
DIE
FROM
CONSUMING
**PLASTIC
WASTE**



We are responsible.

Why We Chose to Tackle the Problem of Plastic Waste

**DO SOMETHING
TODAY THAT
YOUR FUTURE
SELF WILL
THANK YOU FOR.**

*Our actions and decisions today will shape
the way we will be living in the future.*

Disturbing Facts About Plastic

50% OF PLASTICS ARE
USED ONLY ONCE

IT'S EXPENSIVE TO
MANUFACTURE PLASTIC.

MOST PLASTIC ITEMS TAKE
450 YEARS TO BIODEGRADE.



REUSING PLASTIC BAGS

Few retail seller are promoting Bio Degradable Bags



CHOOSING REUSABLE STRAWS.

Instead of Plastic we have options for papers straw

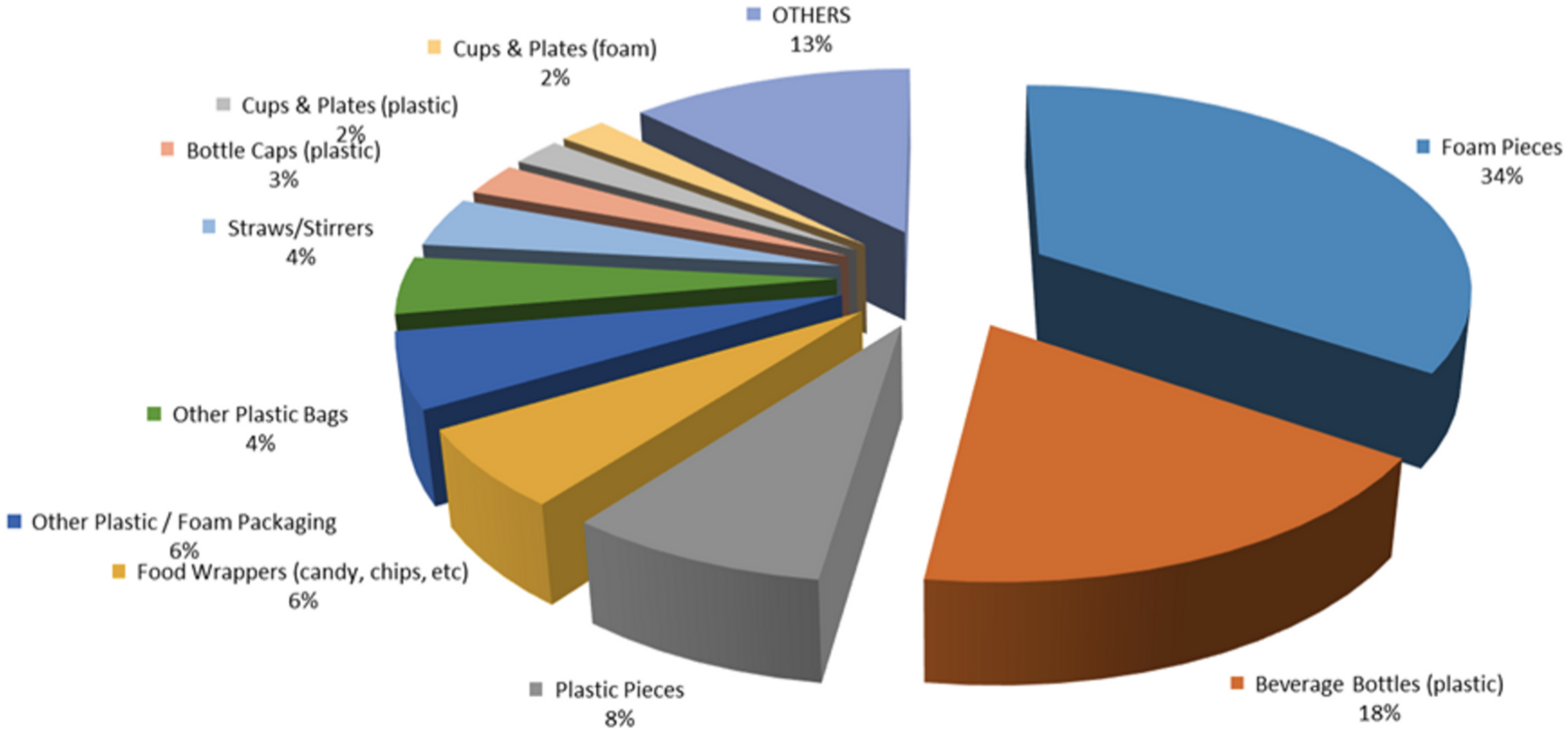


SAYING NO TO PLASTIC CUTLERIES.

edible cutlery and wooden spoons are innovated to tackle the probelms

**THINGS WE
ALREADY
HAVE BEEN
DOING
TOWARDS
REDUCTION
OF PLASTIC
WASTE**

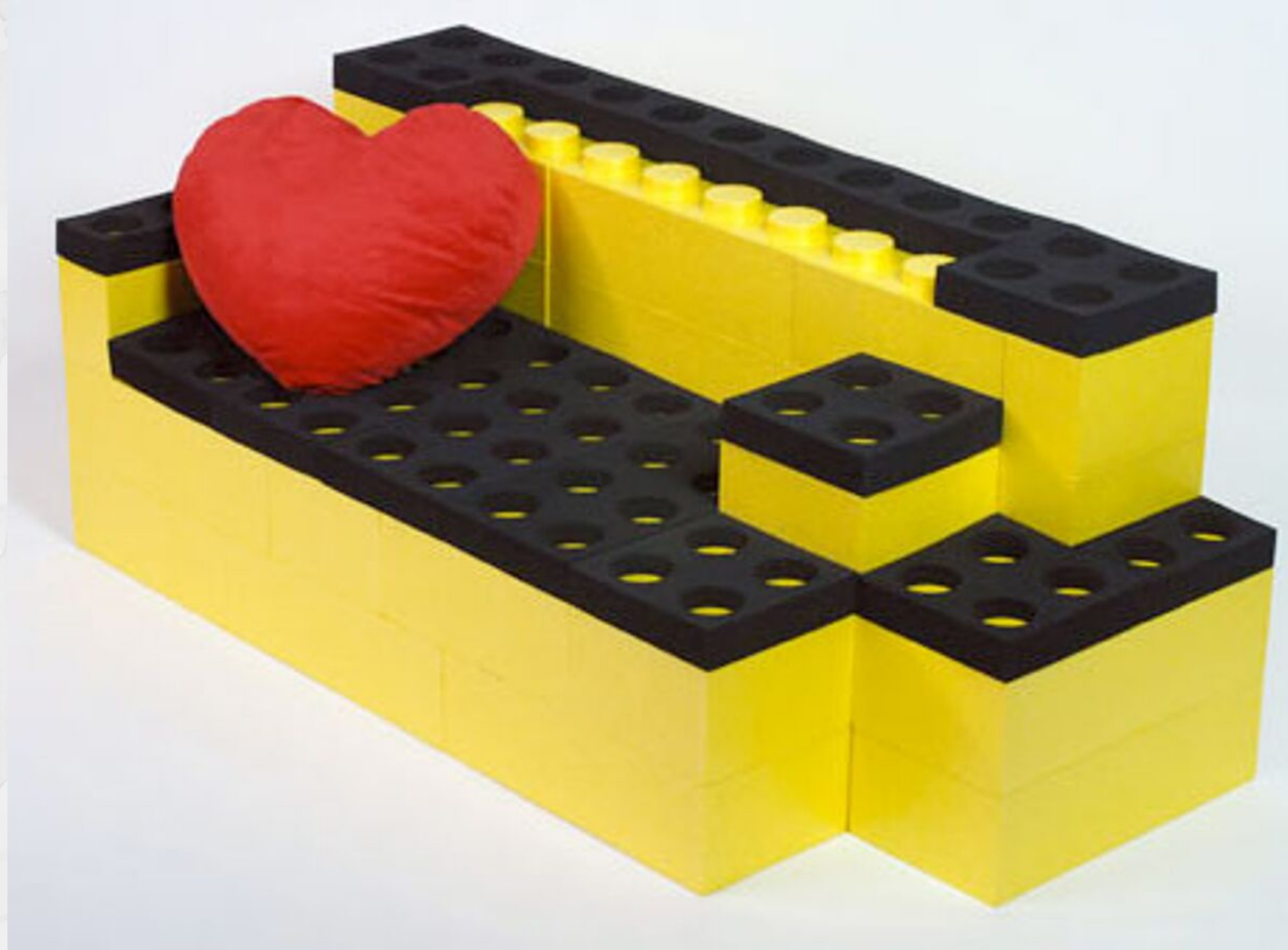
Forms in which it occurs



HMIW

How might we make better use of existing plastic
such that it benefits the society?

We decided to make a DIY kit that recycles existing plastic to form large Lego-like blocks which can be used in building of furniture for households.



Because who doesn't love Lego?!








BEHIND THE SCENES PROTOTYPING

Steps in recycling -

1. Shredding
2. Melting
3. Moulding



Most commonly used plastics

| | What is it used for? | Next life | Ease of recycling |
|--|---|---|-------------------|
| Polyethylene Terephthalate (PET)  | Soft drink bottles, food packaging such as punnets | Used to make more PET products | Easy |
| High Density Polyethylene (HDPE)  | Milk cartons, cleaning products, yoghurt pots, soap dispensers | Garden furniture, pipes and more milk cartons | Easy |
| Polyvinyl Chloride (PVC)  | Pipe fittings, window fittings, thermal insulation, car parts | Used to make more PVC products | Difficult |
| Low Density Polyethylene (LDPE)  | Food bags, shopping bags, magazine wrapping | Bin liners, plastic furniture and floor tiles | Manageable |
| Polypropylene (PP)  | Margarine tubs, microwave meal trays, fibres and filaments for carpet, wall coverings, vehicle upholstery | Clothing fibres, food containers, speed humps | Easy |
| Polystyrene (PS)  | Some yoghurt pots, takeaway boxes, plastic cutlery, protective packaging, insulation | As more packaging | Difficult |
| Other  | This includes other forms of plastic including composites, such as salad bags and crisp packets | Goes to landfill | Very difficult |



Recyclable



Recyclable at specialist points



Not easily recyclable

Which?

Infinite possibilities!

