

The Malaysia EcoBrickers Community Program

by



Our **Facilitator**



**MOHD FAISAL ABDUR
RANI, GPM-bTM**
- Certified Green Project
Manager

Professional Experience

- Head of Waste Management Division, SustNET
- Founder of Malaysia EcoBrickers Community
- Lead Event and Program, International Solid Waste Association
- Young Professional Group (ISWA YPG) Malaysia Chapter

Practice Areas

- Project Management
- Waste Audit Processes
- Green Technology
- Sustainable Waste Management

Qualifications

- BS, Chemical Engineering, Majoring in Environmental Processes, Montana State University, USA
- BA, History, Majoring in Religious Studies, Montana State University, USA

Awards

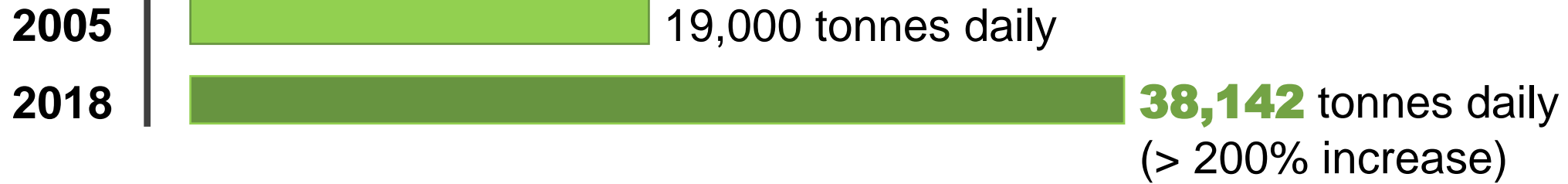
- Sustainability Award 2018 by Green Project Management Organization, USA
- Star Golden Hearts Award 2019
- MaGIC Youth CoLab : Winner

Fun Facts

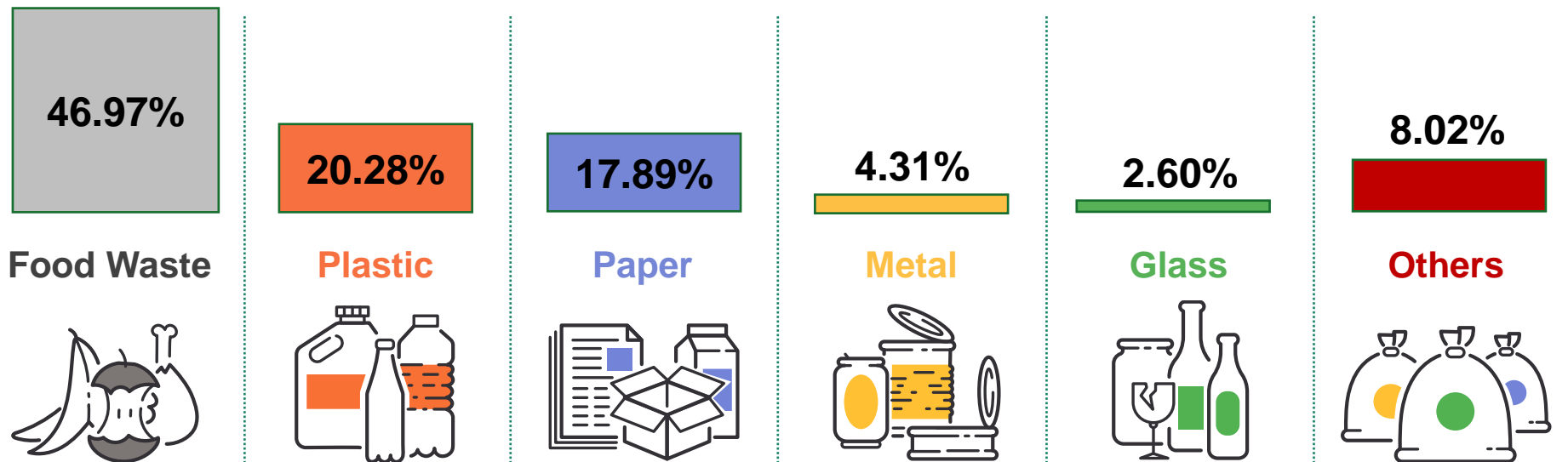
- zero waste practitioner (3 year)
- Started low carbon lifestyle in 2019



Current situation with our waste in the country



Waste composition in Malaysia



Current situation with our waste in the country



90 Locations across Malaysia

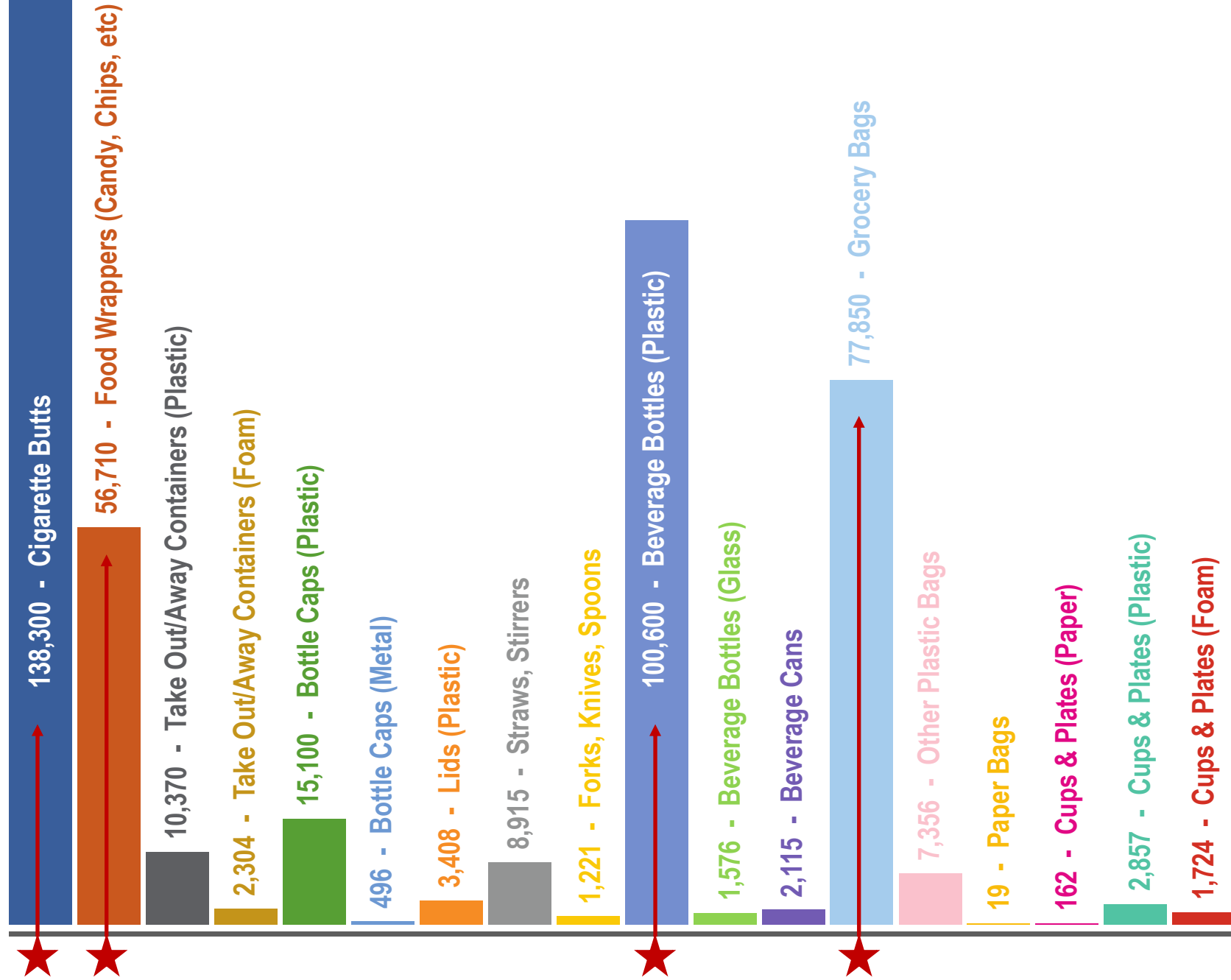
10,934 Volunteers



ADULTS
10,766
(98%)



KIDS
168
(2%)



WHAT IS MALAYSIA ECO-BRICKS COMMUNITY



Malaysia EcoBrickers Community

- Is a partnership program under the management of Impactlution (Impact Revolution Enterprise) a social enterprise. With the fully support and development by the Sustainable Business Network Association Malaysia, ISWA YPG Malaysia Chapter and supporting partners
- The Program has been running since 2016 till present

Up to date we have:-

1. Collected 10,800 Ecobricks since 2016.
2. Total of 4,073.4 kg of single-use plastic waste has been prevented from ending up in landfill
3. With about 30 drop off partners across Malaysia
4. About 24,440.18 kg of CO₂ that the program has cap and reuse through this program.

#makeyourfirstyourlast



What are **ECO-BRICKS**?

1. Plastic bottle packed to a set density with used, cleaned and dry plastic to achieve a building block that can be used over and over again.
2. Stepping stone out of the old paradigm of 'waste' and 'trash' giving back value to what was once value-less.
3. Designed to leverage the longevity and durability of plastic, to create an indefinitely reusable, cradle to cradle, building block.



Why ECO-BRICKS

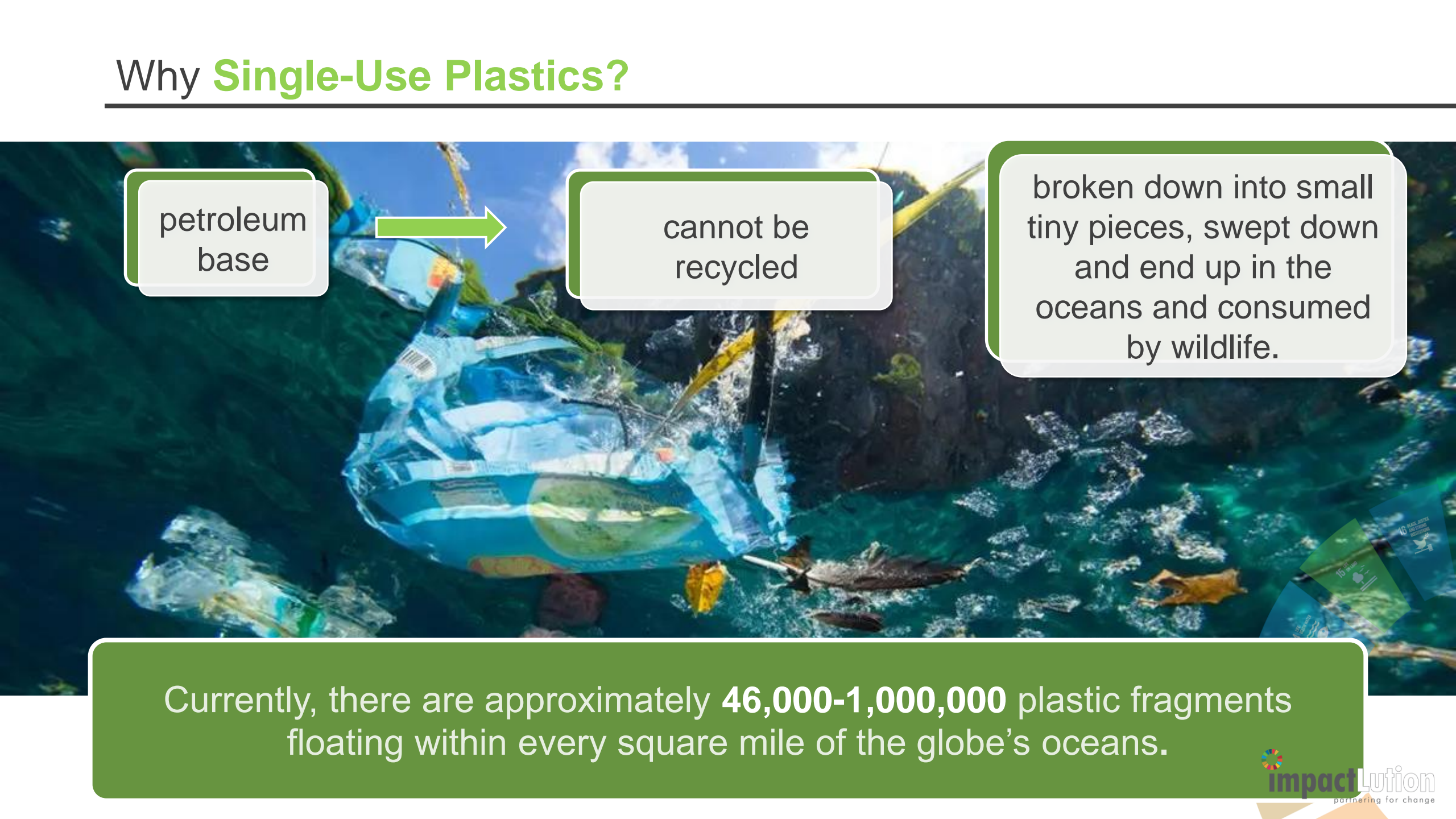
Plastic pollution

Simple, low-tech solution that empower individuals to take charge of their own plastic.

Without the need of machines, special skills, or funding, anyone anywhere can pack a bottle with plastic to make a useful building block.



Why **Single-Use Plastics**?



petroleum
base

cannot be
recycled

broken down into small
tiny pieces, swept down
and end up in the
oceans and consumed
by wildlife.

Currently, there are approximately **46,000-1,000,000** plastic fragments floating within every square mile of the globe's oceans.

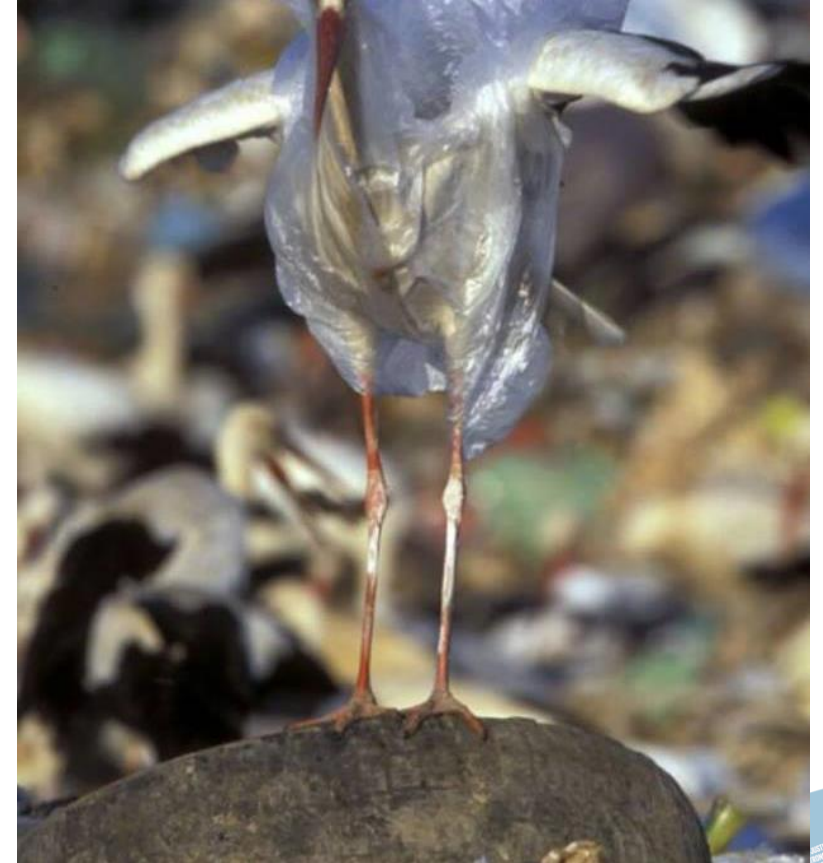
We are living in a marvelous time.....



The advance and most durable material created by engineers and scientists has become our life saver but also our curse...

On one hand it has made our lives easier for us but on the other, it has caused the biggest environmental challenge in the new world.





The Important of Data

How the program able to improve to solve plastic Pollution



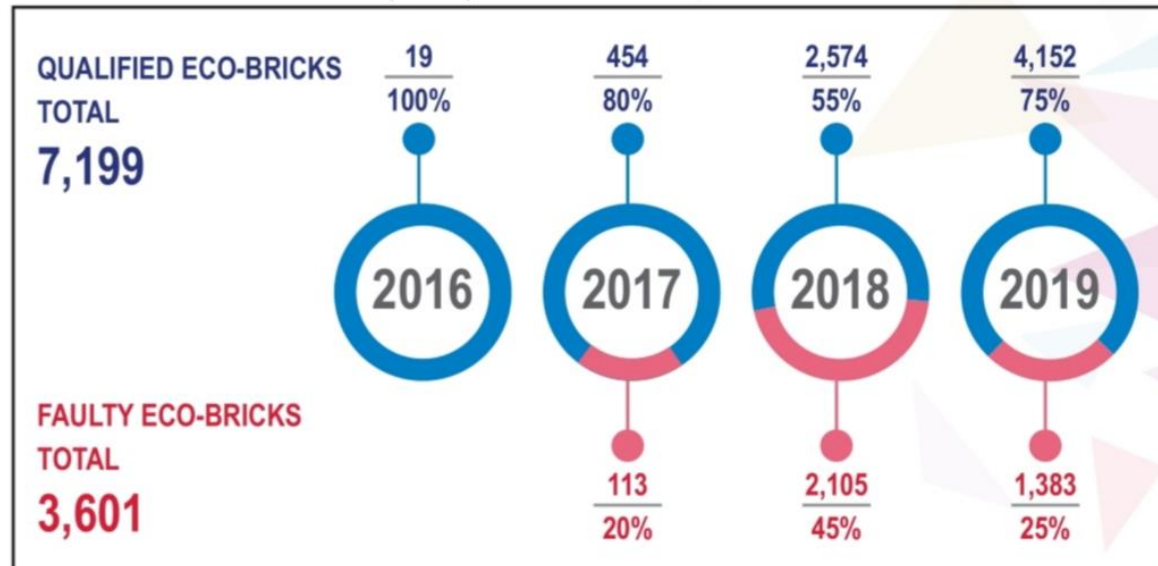
TABLE 1: Eco-Brick Collection On A Yearly Basis

YEAR	NUMBER	WEIGHT (kg)
2016	19	10.45 kg
2017	567	214.06 kg
2018	4,679	1,604.07 kg
2019	5,535	2,244.78 kg
TOTAL	10,800	4,073.364 kg

TABLE 2 : Carbon Offset Data

YEAR	WEIGHT (kg)	WEIGHT CO ₂ (kg)
2016	10.45	62.70 kg
2017	214.06	1,284.36 kg
2018	1,604.07	9,624.44 kg
2019	2,244.78	13,468.68 kg
TOTAL	4,073.364 kg	24,440.18 kg

TABLE 4 : Breakdown of Eco-Bricks (QA/QC)



The Fundamental
principal of the
program is
#zerowaste

Ownership of the
waste **YOU**
PRODUCE AND
CONSUME



WHAT HAPPEN TO THE ECO-BRICKS



Let's Turn **Waste To Wealth**

- With Engineering, Design and Creativity, we can look at this waste as an asset for **green development, urban beautification project or even community projects.**
- With collaboration efforts, we can put an **element of sustainability, creativity and green solution to better use.**



17 PARTNERSHIPS
FOR THE GOALS



What Can It Be **Used** For?

Eco-bricks are used to make **modular furniture, garden spaces, walls and even full-scale buildings.** Eco-bricks are an exciting way that individuals, communities, and companies can start their immediate transition from plastic towards ever **greener harmony with the Earth's cycles.**

They are made by cleaning, drying, then packing plastics into a PET drinking bottle. This enables plastics to be kept **out of the environment,** and out of the **ineffective industrial recycling system.**



Eco-Brick Wall

Building a bottle wall

Bottles

Students and volunteers stuff the plastic bottles with plastic bags and other insulating trash. More bags fill in the gaps between bottles.



Chicken wire

The bottles were bound between layers of chicken wire, which are attached to a metal frame.

Concrete

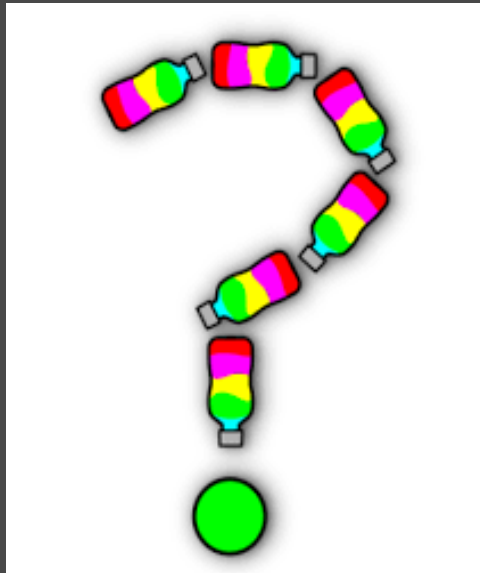
Up to three layers of cement mixed with sand were applied to the outside of the bottles, with orange paint adding the finishing touch.



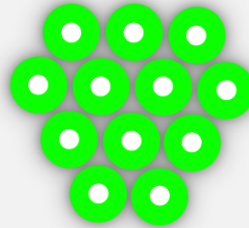
Different **Method** of Wall Construction



What To Build

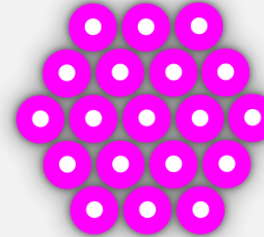


Triangle Milstein Module



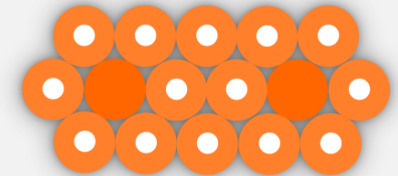
12 Ecobricks

Hexagon Milstein Module



19 Ecobricks

Dieleman Lego Module




16 Ecobricks



What **Else** Can We Make



A close-up photograph of two hands, one from a darker-skinned person and one from a lighter-skinned person, gently cupping a small globe of the Earth. The hands are positioned so that their fingers meet at the top and bottom, framing the globe. The globe shows continents in green and oceans in blue.

The world is
changed by your
example not by
your opinion.

-PAUL COELHO

SUSTAINABILITY FOR THE FUTURE



EGO



ECO



EGO VS. ECO



WE THE PEOPLE

Leaderships starts with
US

let's manage the plastic
production and
consumption and soften
the impact of plastic use
to the environment and
society.



THANK YOU

ANY QUESTIONS?

