MALAYSIA ECO-BRICKERS Community











2019 | IMPACT REPORT



PROGRAM INTRODUCTION

The Malaysia Eco-Brickers Community is a partnership program managed by Impactlution (Impact Revolution Enterprise), a social enterprise and with the full support and development by the Sustainable Business Network Association Malaysia, the program has grown since it was founded in 2016.

To date, the program has a total of 3,500 active group members accounted for, through the online community, and many more across Malaysia, unaccounted for. With the creation of the drop-off or collection partners in 2018, the community now has a total of 30 partners, of which, there is at least 1 drop off partner in each state throughout Malaysia.

Through the Eco-Brick Collection Program, the community has banded together in the fight on plastic pollution with a total of 10,800 Eco-Bricks since 2016, equivalent to a total of 4,073.4 kg of single-use plastic waste that was prevented from ending up in the landfill and a conversion of about 24,440.18 kg of CO2 the program has capped and reused.

PROGRAM TIMELINE

ACTIVITIES · Focused on R&D and project application and development. Applied donated completed Eco-Bricks within communities which saw an increased in the building of walls, park benches, modular structures, upcycle decorations, as well as communities' sustainable 2019 waste management. Concentrated in fixing and looking out for projects for the 45% of collection in 2018 that was underqualified, to be utilized. · Introduction of Eco-Brick Competency Training and online instruction videos and guidelines as a countermeasure to reduce faulty Eco-Bricks. · Created Malaysia Eco-Brickers Community FB Page to connect and share more information. · Started drop-off and collection programs. Started partnership with NGOs and Corporate. Pilot project with M.O.A.M.I for application in modular and wall. · Program concentrated on awareness and talks. Tested presentation module. · Program founded. Key was to understand the methodology of building Eco-Brick the right way. Developed a localize presentation and approach for

ACHIEVEMENTS

- 5,535 Eco-Bricks collected
- 36 Modular Structures
- 18 School Talks
- 12 Public Engagements
- 8 Workshops
- 2 Wall Applications
- 5 New Pilot Projects
- 6 Application Project Structures
- 12 Drop-Off Partners
- 2,323 New Community Members
- 1 Christmas Tree
- 2 Christmas Decoration
- 4,679 Eco-Bricks collected
- 25 Modular Structures
- 24 Talks
- 5 Public Engagements
- 2 Workshops
- 2 Wall Applications
- 8 Drop-Off Partners
- 1,096 Community Members
- 567 Eco-Bricks collected
- 3 Hexagon Modular Structures
- 2 Triangular Modulars
- 6 Talks
- 19 Eco-Bricks collected
- 1 Hexagon Modular Structure
- 5 Talks

education and awareness.

COLLECTION SUMMARY

Eco-Brick Program collection summary is from year 2016 to year 2019. The collected number of Eco-Bricks in 2019 increased by 18% compared to 2018. However, the actual number of EcoBricks collected throughout Malaysia is more than the reported number, as there was no data submission in certain areas.

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

TABLE 1: Eco-Brick Collection On A Yearly Basis

The Eco-Brick Program has been at the forefront in creating a sustainable and measurable program in the reporting of carbon offset. In total, from 2016 to December 2019, the project has collected a total of 4,073.364 kg of single-use plastics which is equivalent to 24,4408.18 CO₂.

YEAR WEIGHT (kg) WEIGHT CO₂ (kg) 2016 10.45 62.70 kg 2017 214.06 1,284.36 kg 2018 9,624.44 kg 1,604.07 2019 2,244.78 13,468.68 kg TOTAL 24,440.18 kg 4,073.364 kg

TABLE 2: Carbon Offset Data

Calculation is based on the analysis of the carbon dioxide (CO₂) emissions for the production and incineration of plastic bags. The carbon footprint of plastic (LDPE or PET, polyethylene) is about 6 kg CO₂ per kg of plastic.

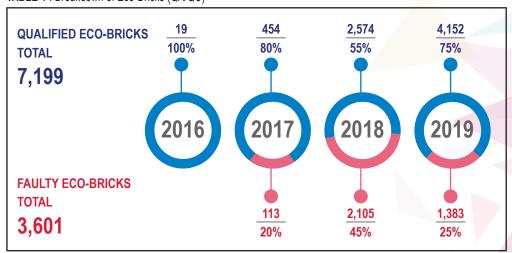
The number was based on the calculation for the production of 1 kg of polyethylene (PET or LDPE), which requires the equivalent of 2 kg of oil for energy and raw material, while the burning of 1 kg of oil creates about 3 kg of carbon dioxide. In other words: Per kg of plastic, about 6 kg of carbon dioxide is created during production and incineration (JUERG, 2009)

COLLECTION SUMMARY

TABLE 3: Eco-Bricks Breakdown Base On Bottle Size

YEAR	1.5 I		500/600 ml	
2016		19		0
2017		350		217
2018		2,907		1,772
2019		3,951		1,584
TOTAL		7,227		3,573

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



The construction of the Eco-Brick is critical to ensure that it befits the applied purpose. Eco-Bricks go through a stringent Quality Check to conform to standards. Measures were taken to look into the reduction of the faulty Eco-Bricks collected since 2018. With increased public engagements, online mentoring and guidelines through Trainer Qualification Workshops, we were able to reduce the faulty Eco-Bricks by 20%.

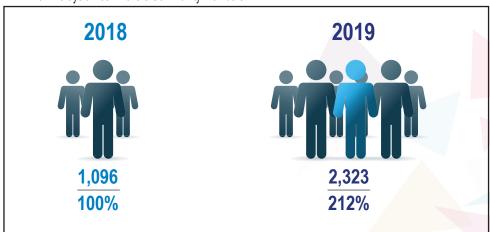
Some faulty Eco-Bricks were utilized in a few simple application projects, whilst a volunteering program for repacking and fixing the Eco-Bricks was carried to make good of these Eco-Bricks. The Eco-Bricks that can be fixed were cut open and repacked, and the damaged bottles were sent to recycle.

Overall, Eco-Brick collection in 2019 has increased by 18% as compared to 2018, with a reduction of faulty Eco-Bricks by 20%. As the community members grew and the awareness broadens, the increase of drop off locations, partners and members resulted in the increase of the collection.

COLLECTION SUMMARY

Surveys done on active members and Eco-Brickers from 2016 showed a decrease in the making of Eco-Bricks as the members moved towards sustainable and less plastic consumption. This echoes the program's direction and motivation which is aligned with Malaysia Towards Zero Single-Use Plastic Roadmap.

TABLE 5: Malaysia Eco-Brickers Community Members



ECO-BRICK PROJECTS

Continuous Projects

- o Modular Structure: Eco-Brick Furniture
- Eco-Brick Park Bench Development
- Eco-Brick School Garden
- Eco-Brick Community Garden
- Eco-Brick Wall : K9-Cottage

Pilot Community Projects

- ♦ Eco-Brick Wall with Sg Relang and Kg Labu Tekir
- ♦ JKR Create : Eco-Brick Sculpture
- ◆ P.O.R.T IPOH: International Art Festival Decoration
- ♦ Eco-Brick Voluntutoring Program
- ♦ Eco-Brick Platform Construction
- Eco-Brick Upcycle Christmas Tree

PROGRAM STRUCTURE

The Malaysia Eco-Brickers Community is managed by Impact



Support Partners











Program Sponsors







Program Partners & Drop-Off Locations



































