

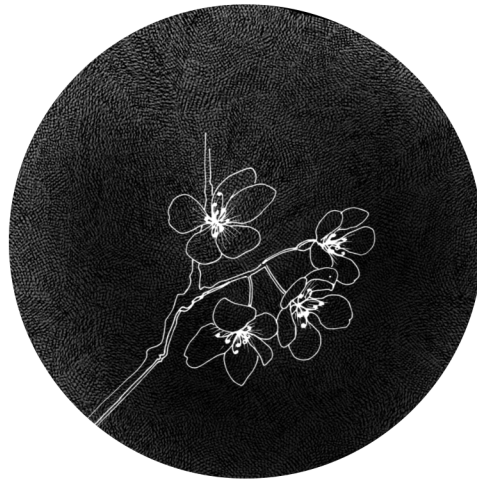
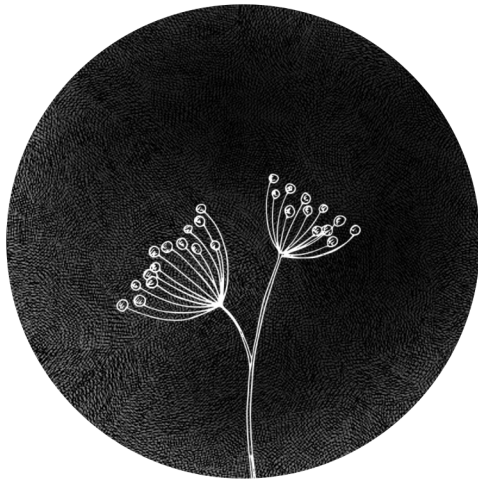
**MY
ZERO
WASTE
LIFE
-SUMMARIZED**

#BERSAMAKITAZEROWASTE



CONTENT

<i>Introduction</i>	<u>1</u>
WHO is this for?	<u>2</u>
WHY should one practice a Zero Waste Lifestyle?	<u>3</u>
HOW to live a Zero Waste Lifestyle?	<u>4</u>
DAILY LIFESTYLE 	
• BYO (Bring-Your-Own)	<u>5</u>
• RECORD a Waste Diary	<u>6</u>
• SHOP Sustainable	<u>7-9</u>
• WATCH and Learn	<u>10-11</u>
• 2ND HAND, Swap, Rent and Borrow	<u>12</u>
• REPAIR	<u>13</u>
• Finish Your FOOD	<u>14</u>
• Go NUDE	<u>15</u>
• COMMUTE and Carpool	<u>16</u>
• Eat a Plant-Based DIET	<u>17-18</u>
• REUSABLES, not Disposables	<u>19-20</u>
• Learn RECYCLING	<u>21</u>
• Learn COMPOSTING	<u>22-23</u>
COMMUNITY SUPPORT 	
• Join a COMMUNITY	<u>24</u>
• Host a Zero Waste EVENT	<u>25</u>
SYSTEMIC CHANGE 	
• WRITE to Brands and Local Representatives	<u>26</u>
• SPEAK UP	<u>27</u>
• SUPPORT Businesses	<u>28</u>
<i>Acknowledgement</i>	<u>29</u>



Do you find the zero waste lifestyle to be intimidating? That's understandable when the term itself suggests that the goal is to send nothing at all to the landfill. If your answer is yes, kudos for picking up this guide.

Using real life, local experiences gathered from the zero waste community in Malaysia and stories shared by our team, we will show that living a zero waste lifestyle doesn't have to be intimidating nor complicated.

MY Zero Waste Life - Summarized Guide provides guidance for you to kick start your zero waste lifestyle by adopting practical and achievable actions that contribute to daily lifestyle improvement, community support, and systemic change. This easy-to-read and concise handbook will be available in 4 of the most widely-used languages in Malaysia - English, Malay, Chinese, and Tamil.

To use this handbook:

- Firstly, understanding why you want to go zero waste is important — that's why it's one of the first sections in this handbook!
- Next, you can take your time to go through the items under

Daily Lifestyle  **Community Support**  **Systemic Change** 

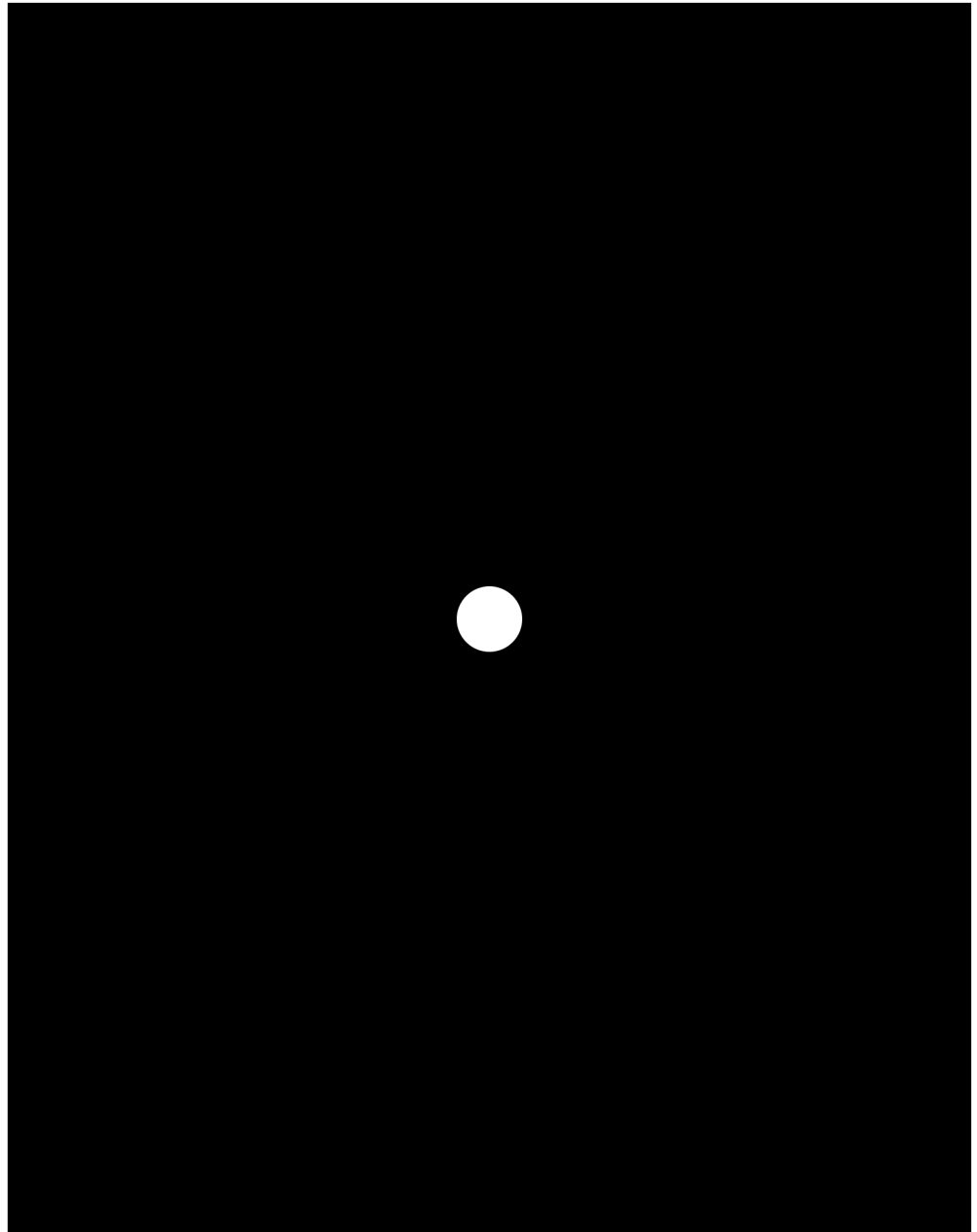
- Know that it's not necessary to follow the items in the listed order (Although they are arranged in order of difficulty), or do them all in a short timeframe. Being zero waste is not a competition!
- Rather, you can make these changes at a pace that's comfortable for you. This way, they'll become part of your lifestyle naturally, without putting yourself under stress!

We encourage you, the readers to use the zero-waste challenges and action items in this handbook to:

- Curate your personal zero-waste journey!
- Create awareness amongst friends and family!
- Develop team-building activity in your local school, or office!

INTRODUCTION

WHO IS THIS FOR



This handbook is for _____ (anyone)

no matter which stage you are at in your zero waste journey! Whether you have only recently heard of zero waste or whether you're knee-deep in making more sustainable choices in your current lifestyle, we hope that this handbook will be useful for you.

You can use this book as a source of inspiration or reference for your own personal goals, or to start a change in your own circle (e.g. school, office, neighborhood, or company).

Either way, we salute you for even thinking of trying zero waste!

Remember, the goal is not to be fully zero waste! We have to accept that some things are just out of our control. So just do the best that you can — **small steps can make a big impact too!**

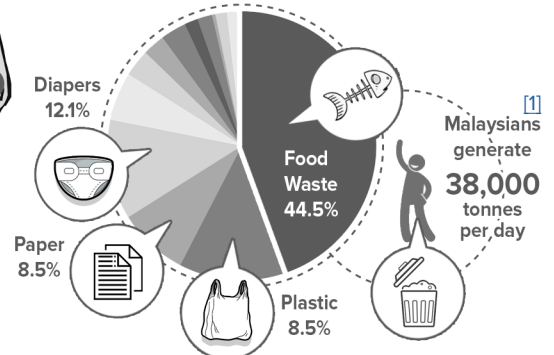
WHY SHOULD ONE PRACTICE ZERO WASTE LIFESTYLE?

So why should we practice zero waste?
Let's take a step back!



FACT

Malaysian Household Waste



Transfer Station
(Pre-sorting)

Trash Truck

Big trashbin

Segregate
waste at home

Recycling collection point, e.g.: Tzu Chi Recycling Point

ZWM Map - Recycling & waste disposal centre [\[map\]](#)

Municipal collectors

Recycling facilities

Non-recyclable

Recyclable

SANITARY LANDFILL

ONLY 10 in Malaysia

NON-SANITARY

The majority of
Malaysia's landfills: **157**

BUT

Why most recyclables are not recycled:

- (1) Too dirty - Contaminated
- (2) Made from mixed material
- (3) Lack of facility / technology due to low profit value
- (4) Label unclear

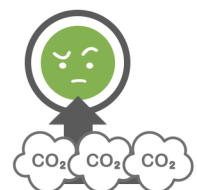
The overall household recycling rate
for Malaysian households is very low.

ONLY **9.7%**

[\[3\]](#)

OPEN DUMPING

Soil pollution



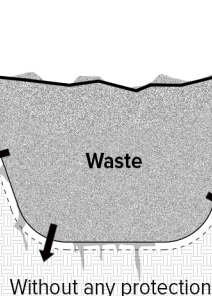
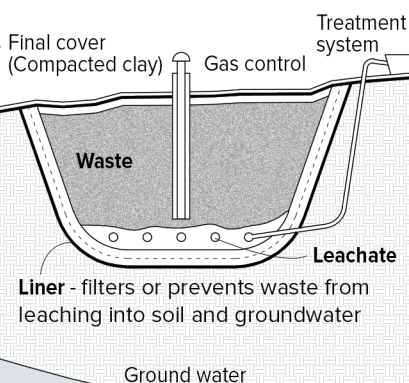
ENVIRONMENT

Water pollution

OPEN BURNING

Loss of wild life
Global warming

Ocean, river



Sanitary landfill is an engineered structure. It has a system to prevent waste from escaping into the natural environment during natural disasters such as flooding.

Non-sanitary landfill does not have a system to prevent waste and toxins leaching into the natural environment such as soil and water.

HOW

TO LIVE A ZERO WASTE LIFESTYLE

BYO

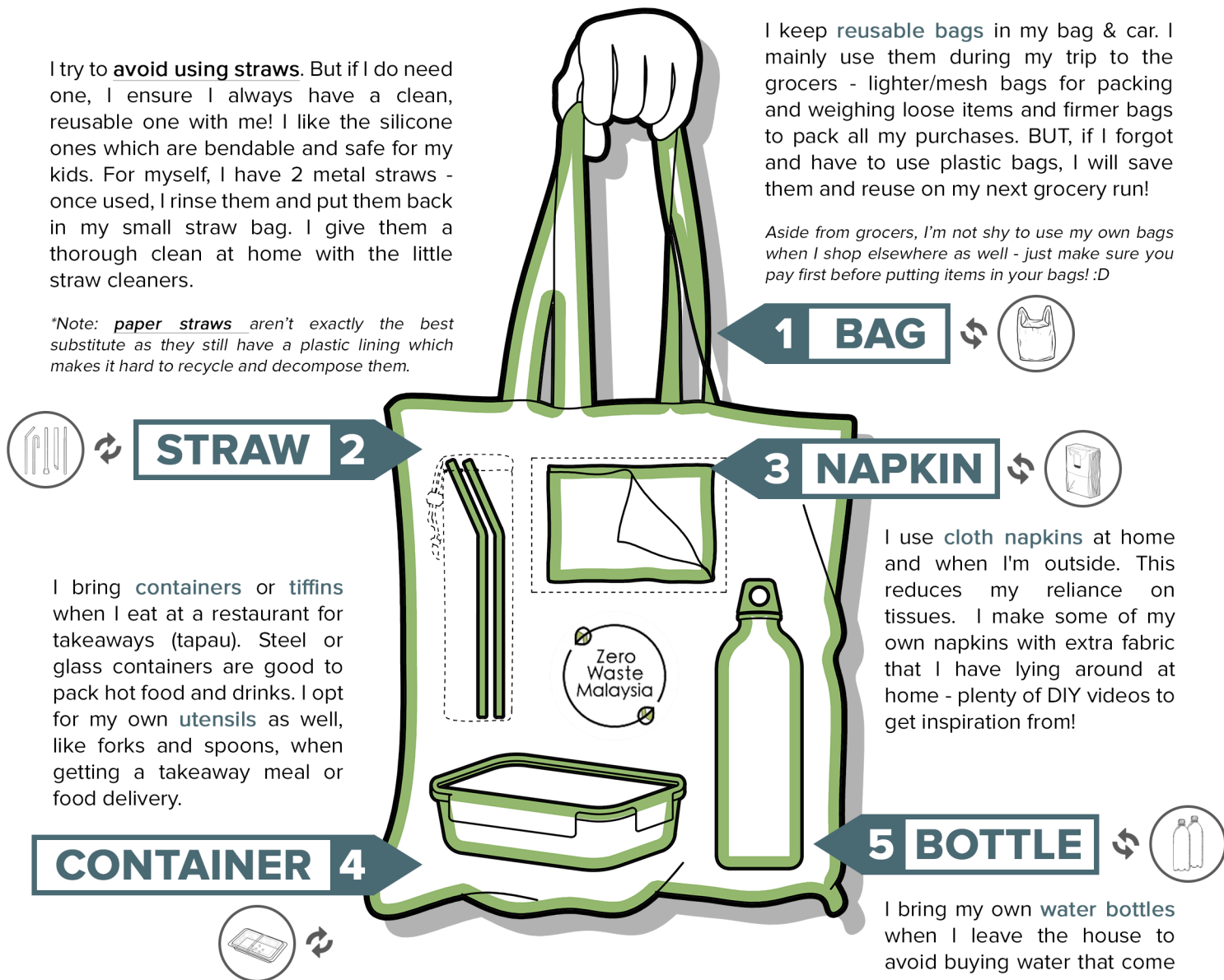
TODAY, I AM GONNA **BRING MY OWN**

I try to **avoid using straws**. But if I do need one, I ensure I always have a clean, reusable one with me! I like the silicone ones which are bendable and safe for my kids. For myself, I have 2 metal straws - once used, I rinse them and put them back in my small straw bag. I give them a thorough clean at home with the little straw cleaners.

Note: **paper straws aren't exactly the best substitute as they still have a plastic lining which makes it hard to recycle and decompose them.*

I keep **reusable bags** in my bag & car. I mainly use them during my trip to the grocers - lighter/mesh bags for packing and weighing loose items and firmer bags to pack all my purchases. BUT, if I forgot and have to use plastic bags, I will save them and reuse on my next grocery run!

Aside from grocers, I'm not shy to use my own bags when I shop elsewhere as well - just make sure you pay first before putting items in your bags! :D



I bring **containers** or **tiffins** when I eat at a restaurant for takeaways (tapau). Steel or glass containers are good to pack hot food and drinks. I opt for my own **utensils** as well, like forks and spoons, when getting a takeaway meal or food delivery.

I use **cloth napkins** at home and when I'm outside. This reduces my reliance on tissues. I make some of my own napkins with extra fabric that I have lying around at home - plenty of DIY videos to get inspiration from!

I bring my own **water bottles** when I leave the house to avoid buying water that come in single-use plastic bottles. I can refill my bottles at refillable water stations (check out Refill My Bottle!) or request eateries to refill. [4]

FACT

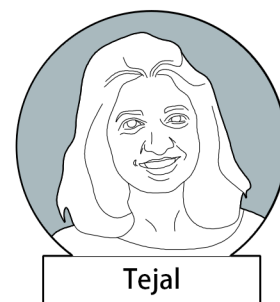
Malaysia is Asia's worst ocean polluter as Malaysians are the biggest individual consumers of plastic packaging.

Plastic products can take 1000 years to break down in a landfill, but shorter period of time when exposed to infinite sunlight in water bodies. The disintegrated plastic materials in the water pollute our ocean and seafood. [5]

Non-plastic products may not be the best substitutes either if they are not properly disposed of for recycling or composting.

TL;DR

Utilizing items that you already own and reducing your usage of disposable items which will be thrown away after one use!



Daily Lifestyle



RECORD

LET'S DO A WASTE DIARY

“

Have you ever started cleaning up your stuff and you're left there wondering how do you have this much trash?!

”

Before deciding to go amok and throwing everything, this is an easy solution that I do that can really help to understand and segregate my trash.

1 Gather all of my supplies.

2 Decide my timeline.



Look into my trash once a day every 2 weeks.

3 Divide my waste into categories.

pen
exercise book
plastic cup
teddy bear
...

paint
detergent
...

paper
glass
aluminium

banana leaf
food waste
...

aerosol can
poison spray
battery
...

SOLID

(inorganic)

LIQUID

RECYCLABLE

ORGANIC

HAZARDOUS

scale

newspapers

4 Find a pattern. Once I know my recurring waste, e.g. wrappers for a certain snack, plastic egg trays or take out containers, I can find ways to reduce them!

5 Replace the top 3 offenders with reusable or package-free options. (e.g. menstrual pad & cloth pads)

Material type	Quantity (count)	Weight (grams)	Percentage (%)
	Use the total number of items	Use the total weight	Amount / Total x 100%
Inorganic - Solid			
Organic			
Liquid			
Recyclable			
Hazardous			
TOTAL			100%

paper & pen

[6] Here's a waste diary template you can use from our Wira Zero Waste program! Scan to get the full module.

WHY

Waste Diary is a record of the amount and the types of waste that we produce daily and can help us to determine the amount that can be recycled instead.

This is the type of home audit that can help reduce our reliance on those materials and of course save money and the environment.

This technique not only applies for a large scale cleaning spree but also for something as small as your bedroom trash can.

TL;DR

Understanding which items you throw away the most to help you find alternatives and reduce your overall waste.



Janice



Daily Lifestyle



SHOP TODAY, I CHOOSE SUSTAINABLE

1 Buy only what I need: 'Do I really need this?'

WHAT I THOUGHT...

I live a boring, restrictive life for not shopping.





I want this

I also want this

How about this



WHAT REALITY IS

Ok, I will shop but not impulsively.

It gives me a chance to reflect on my purchasing decisions.

Because if I regret buying something that I don't really need, returning the item is an additional carbon footprint generated.

“ Do I really need this ? ”

2 Choose Local: I'm not shy to ask about what I'm buying

WHAT I THOUGHT...

Purchasing local products are low quality ...





Low

Very low

So low



WHAT REALITY IS

There is a sprout of quality homegrown goods from growing talents.

Local products often have a low carbon footprint (emissions from import shipping have been cut out).

Directly boost the local economy.

Where is it sourced from? How is it produced? As a consumer, I have the right to know - based on the CONSUMER PROTECTION ACT 1999 (Act 599)

3 Shop Wisely: make an informed decision

WHAT I THOUGHT...

Quantity over quality !
Having more is always better !





more

so cheap

buy more



WHAT REALITY IS

Sticking to a quality item will be better in the long run. It may be cheaper to invest in quality product given its shelf life.

eg:

 1 year 5 shoes Total : RM 200 TRUE VALUE : RM 200/year	 5 years 1 shoe Total : RM 200 TRUE VALUE : RM 40/year
---	---

Working out the TRUE VALUE of a product



SHOP TODAY, I CHOOSE SUSTAINABLE

4 Buy Second-Hand / Swap / Rent

Refer to 2ND Hand: #swap #rent #borrow on page 12

IMAGINE THEIR JOURNEY

Give us a second life



I don't want to be incinerated



I am ready for you



5 Support Small Businesses : handcrafted products

WHAT I THOUGHT...

Handcraft items look cheap / not worth the price



Kek Lapis
Sarawak Aunty



Soy Milk
Uncle



Lip Balm
Lady

put so much effort and thought into crafting their products.



WHAT REALITY IS

Growing consumption has pushed industries to make goods faster & cheaper which will often leave you with poor quality goods.

Buying handcraft breaks the chain of mass production & cultivates creativity among the society.

Each product I buy will be unique.
Now, isn't that worth something?

6 Read & Look for sustainable packaging and labels

WHAT I THOUGHT...

It's hard to find sustainable products



FSC



MSPO
RSPO



VIVE



WHAT REALITY IS

The truth is that many industries have taken initiatives to make recycled and sustainable products. It just takes an extra effort from a consumer to make the right purchase.

At times plastics are unavoidable, but I try to ensure that it will be reused or recycled after.

I also filter the products I buy by its packaging type - whether I can refill, return the containers to be refilled or recycled, reuse, compost, recycle, etc. If my budget allows, I would also buy long-term, reusable items like rechargeable batteries, reusable feminine pads, etc.

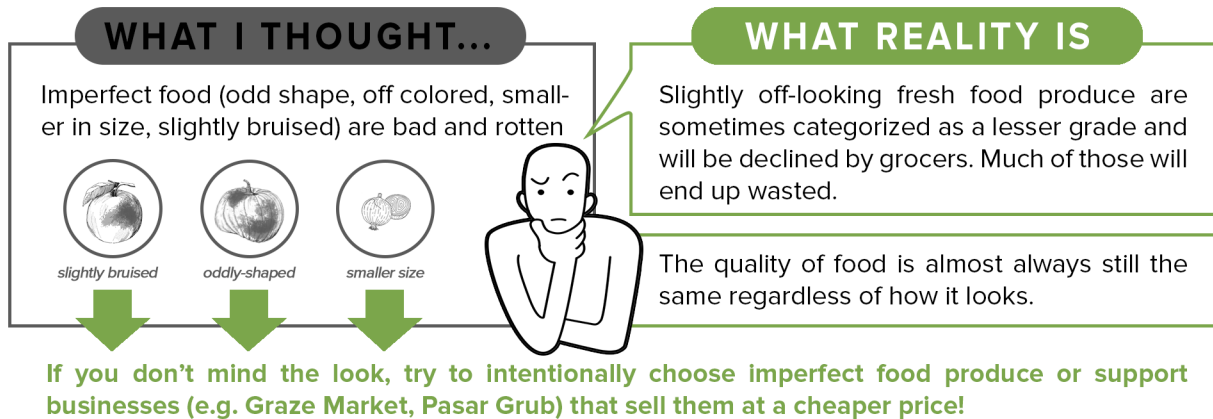
read more on "Reusable Personal Hygiene" on page 19 & "Ecolabel Index" [\[7\]](#)



SHOP

TODAY, I CHOOSE SUSTAINABLE

7 Normalize Imperfections: choose ugly produce !



FACT

Consumerism is growing at an unprecedented rate. Mass production which started in the 20th century has led to an oversupply of goods, leading manufacturers to invest in marketing to manipulate consumer spending.

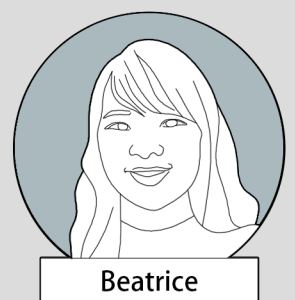
As a consumer, we are blessed with the overwhelming choice of products, ranging from different brands and different price points. However, it has also led us to purchase things we don't actually need.

With the market getting extremely competitive, businesses have spent so much on consumer marketing, convincing us (the customers) to sometimes purchase unnecessary things. The problem continues when one does their annual house spring cleaning and realises they have all these things that they rarely use or have stopped using and starts labelling them as trash.

Overconsumption can lead to plastic waste, food waste and increased production of greenhouse gases. A simple change of habit can put you on the track to reducing your waste.

TL;DR

Realizing that you have the power to shift our market by starting your journey as a conscious consumer



WATCH & LEARN LEISURELY

notepad - selfthought*.txt

I make reading, watching, listening and learning about green issues part of my daily pastime!
The world is truly our oyster, so I am providing a few pearls you may check out !



I love listening to podcasts, so I also add green or sustainability-themed podcasts into my feed.
If I'm scrolling through YouTube, I look up random sustainability topics that may tickle my fancy.

1 - Podcasts



Atmospheric Tales
by Shahzad Gani



Sustainable Asia
by Sustainable Asia



Climate Rising
by Harvard Business
School Environment
initiative



**Sustainability
Defined**
by Jay Siegel
& Scott Breen



Sustainababble
by Sustainababble:
comedy, nature, climate
change



**Getting in the
Loop**
by Katherine Whelan

*Scan the image code & listen on Spotify :)

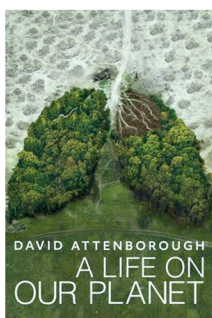


Whenever I feel like watching films, I would pick an environmental film to watch once in a while.

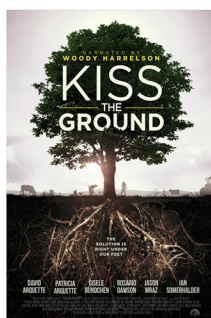
2 - Movies



**Minimalism:
A Documentary
About the
Important Things
(2015)**



**A Life on Our
Planet (2020)**
ft. David Attenborough



**Kiss the Ground
(2020)**



Cowsspiracy (2014)
by Kip Andersen



**An Inconvenient
Truth (2006)**
ft. Al Gore



**The Island
President (2011)**
ft. Maldives President
Mohamed Nasheed

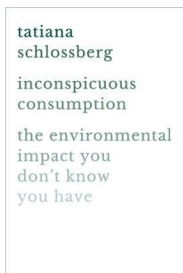


Daily Lifestyle

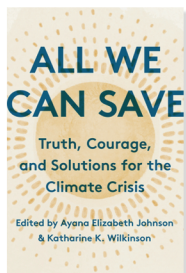


WATCH & LEARN LEISURELY

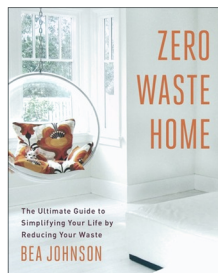
3 - Books



Inconspicuous Consumption
by Tatiana Schlossberg



All We Can Save
by Ayana Elizabeth Johnson



Zero Waste Home: The Ultimate Guide to Simplifying Your Life by Reducing Your Waste
by Bea Johnson



Sea Monkey Project comics
(free e-book available on website)



On Instagram, I select a few green warriors to follow that I can emulate and learn from. I also occasionally search for free courses to take to learn more on environment and sustainability topics.

4 - Free Course



Ellen MacArthur Learning Resources [8]



Wira Zero Waste Online Course [9]
by Zero Waste Malaysia

“

My name is Greta Thunberg. I have not come to offer prepared remarks at this hearing. I am instead attaching my testimony. It is the IPCC Special Report on Global Warming of 1.5°C [SR1.5] which was released on October 8, 2018. I am submitting this report as my testimony because I don't want you to listen to me. I want you to listen to the scientists. & I want you to unite behind the science. & then I want you to take action.

Climate activist Greta Thunberg delivered one of the shortest testimonies at US Capitol Hill at a hearing on climate change



WHY

As they say...Knowledge is Power! The more we learn, the more empowered we are to make a positive impact for our families, friends and our home.

The science and evidence on why we need to change is incredibly clear. Don't take our word for it, dig into the numerous interesting, nuanced, and knowledgeable sources about the climate and waste crisis to lend purpose to your actions.

TL;DR

“Unite behind the science!” Understand what is really going on by increasing your knowledge on planet Earth and the human activities that are impacting the planet.



Tze Ni



Daily Lifestyle



2ND

1 Buy pre-loved

WHAT I THOUGHT...

I am a cheap person for buying second-hand
Second-hand things are old and outdated

WHAT REALITY IS

Nowadays, I will actually be part of the crowd when I choose to shop second-hand, and yes, I can usually get items at a cheaper price & some can even be a vintage, luxury item.

Trends always repeat themselves, and some pieces are timeless!

local buy-and-sell platforms like:



Carousell



Lelong.my



e-bay (MY)

[BooksNBobs \(online bookstore\)](#)

[Wonder Bundle \(PJ store\)](#)

[Refash \(SG store / online\)](#)

"I find it thrilling and interesting when I am able to find cool stuff from other peoples' unwanted treasure. It's like having my own treasure hunt."

2 Swap

WHAT I THOUGHT...

Swapping is old school ...
Barter System ? 6000 BC ?

WHAT REALITY IS

I joined the **Zero Waste Clothes Swapping** event in December 2019. It was definitely fun meeting new people as well as gaining new fashionable items. All the class with little cash!

Malaysian initiative of a swap bazaar
[#tukartangan](#)



[The Swap Project \(regular event\)](#)

"I can also plan events or parties where people trade clothes, shoes, and other things I won't use by giving it a new life with someone else — while also obtaining some great new items for myself."

3 Rent / Borrow

WHAT I THOUGHT...

It's more expensive to rent than buy

WHAT REALITY IS

Depending on the item, this isn't always true as rental of an item/equipment for a short amount of time may be better for my pocket than buying a new one!

E.g. I can't rent quality furniture when I can't afford or don't want to commit.

"Another way to save my pocket and the environment. Renting or borrowing is much less expensive than buying, particularly over time, because it prevents me from purchasing items that I would only use a few times."



"Posting my own products for rent allows me to earn extra money or even start my own side business with little investment and no hidden fees."



"I remember borrowing my neighbour's CDs or board games when I was a kid. Little did I know I was helping the environment and creating a really meaningful memory."

[Rent Something KL \(private group\)](#)

*More swap & secondhand stores, refer [ZWM Map - Thrift Shops & Swap](#) [\[map\]](#)

WHY

One of the ways to dampen overconsumption is a change in consumption behaviour. We have to opt for a more sustainable alternative because it not only benefits the environment but also the local community.

It is important to know where your goods will end up in the future & how reusing will help you contribute to a circular economy.



TL;DR

Supporting the resale/rental market to extend the lifespan of a product and save an extra dollar!



Beatrice



Daily Lifestyle



REPAIR

TODAY, I **FIX** MY

Buy things that last longer

Even if they may require a larger initial investment, any good quality item will last me a long time without the need to constantly be replaced.

Buy things that provide warranty coverage

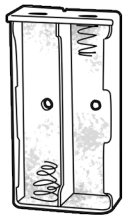
When buying an item, it is also a good idea to make sure the shop I buy it from provides warranty coverage for more expensive items, or that they are able to repair the item for me.

If Not I can always go for the repair option :)

 **KakiRepair by KakiDIY** (public group)

A crowdsourced DIY repair movement to get tips or help with repairing items. e.g.:

- Anonymous asked a question.
Any ways to fix the corroded battery holders ?



Take out the rusted parts and let it soak in vinegar overnight ! 

Replace broken spring with aluminium foil that has been rolled into ball 

- Anonymous asked a question.
Ceiling is stripping off & other parts have air bubbles...



Scrap out the loose paint. Use detergent to clean the surface. After dry, paint with primer ! 

Air bubbles & paint stripping could be indication of water leakage... 

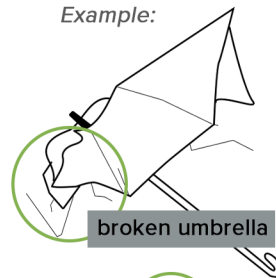
Or, I can easily find shops that provide repair services

 **ZWM Map - repair service**

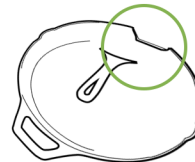
[\[map\]](#)



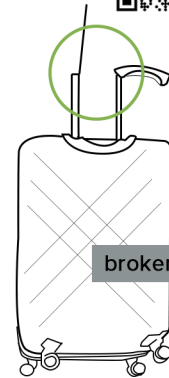
Example:



broken umbrella



broken cooking pot



broken luggage

Not only will I be saving money, I will be helping my local community as well by supporting their business.

WHY

Too many times, items are thrown away simply because we don't know how to fix them, it's too expensive to fix, or they have been designed to become obsolete.

As mentioned above, many wastes, including repairable waste will just end up in landfills with dire consequences.

TL;DR

Owning things that will last and are repairable — if something breaks, chances are there will be someone who can help you to fix it even if you can't!



Marylyn



Daily Lifestyle



FOOD

I WANT TO BE A **GREEN** FOODIE

EATING IN

Pre: Planning

I plan my meals and grocery purchase carefully so I don't waste ingredients.

Tips: Cook items that are more perishable, and save the ones that last longer for the end of the week (e.g. cook leafy vegetables first, and then root vegetables).

eg: **Mon** Breakfast : oatmeal, ... **Fridge Track**
Lunch : salmon, ... **Shopping List**
Dinner: potato salad, ...

Preparation

I extend the life of my perishables with some of these tips, e.g. :



Wrap leafy veggies in a damp towel



Submerge certain veges like asparagus and celery bottoms down in water



Dip banana stems into a small bowl of water.



Dry or freeze chopped up herbs (in olive oil or melted butter)

Start an edible garden :)

EATING OUTSIDE

I order only what I can eat !

IF I cannot finish the meal, I have a **container** to 'tapau' for my next meal.



Post: Compost

I compost my food residues and scraps

**For more tips, see the section on Learn Composting (pg22)*

Cooking

I practice consuming all parts of the ingredient e.g.: vegetables, I find my inspiration here :)

🔍 **Cooking Scrappy: 100 Recipes** (book by Joel Gamoran)

🔍 **Cooking with Scraps** (online recipe by FOOD52)



Tips: One of my personal favourite ways is to make broth with leftover bones or vegetable scraps (mushroom stem, onion skin, peeled carrot skin, etc.)

More tips: watch Zero Waste Fridge with Elena [\[10\]](#)

FACT

According to Malaysia's Solid Waste Management and Public Cleansing Corporation (SWCorp), [\[11\]](#)



per day

Malaysians waste **16,688 tonnes** of food

2.2 M

that can easily feed **2.2 million people** **3 meals**

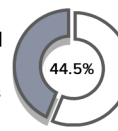
by 2020

16 x

total amount of food waste can fill up **16** of the twin towers.



household sector
= Me, You, Us



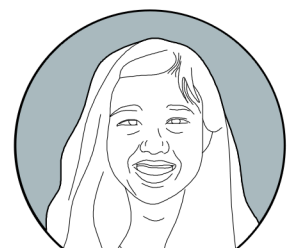
of these

Food waste is among the **highest waste** approximately **31% to 45%** of the total volume waste/day.

When food goes to the landfill and rots, it produces **methane**—a greenhouse gas **28 times more potent than carbon dioxide**. About **11%** of all the greenhouse gas emissions that come from the food system could be reduced if we stop wasting food. [\[12\]](#)

TL;DR

Learning tips and tricks to extend the lifespan of food and not waste any ! Be a foodie, not a food-waster !



Tze Ni



Daily Lifestyle



NUDE

JOM! LET'S GO **PACKAGE FREE**

Where should i go shopping today ?

Wet Market



I love going to the market whenever I can, the market is the place I love most. All the fresh fruits and vegetables piled on one another **without any plastic wrap** really fill my eyes with beauty 😊 I don't need **plastic** to enjoy a bag of tomatoes 🍅 eggplants 🍆 fish 🐟.



Supermarket with bulk options



When I don't have time to go to the market, I choose the nearest supermarket with more bulk options, especially in terms of fruits 🍌 🍇 🥥 and vegetables 🥦 🌿 !

For me here in Klang Valley, I like **BIG (Ben Independent Grocery)** as they offer a variety of package-free fresh produce and are showing concern over our excessive use of single-use plastics.

Zero-waste, bulk shops



Luckily, more zero-waste, bulk shops started to open in Malaysia to satisfy the demand of conscious customers : like **The Hive, Nude, Single Step, etc.** I can find food stocks like nuts 🥜, flour, rice, seaweed, soy sauce, and cleaning products! They will tare the container and I will only need to pay for the amount of food or detergent I purchase.

For cleaning products my favourite place is **BYOB** they have different locations around Malaysia. I have recently discovered **NULL zero waste Factory** I love them because during the pandemic they delivered the cleaning goods I ordered right to my doorstep. **I just had to pay a deposit in exchange for the containers that we will swap every order.*

[\[map\]](#)

Or, you can easily find more zero waste stores

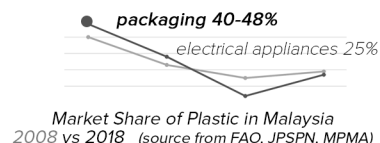


ZWM Map - Traditional Wet Market / Bulk Food

FACT

More than **40% of plastic** produced in Malaysia is **packaging**, used once and then discarded.

In particular, **food packaging** is often manufactured by **mixed-plastic material** which rarely can be recycled.



Generally there are 7 categories of plastic produced in the market. Our local recycling facilities usually recycle 3 out of those 7 categories (**Category 1-PET/PETE, 2-HDPE, and 5-PP**). This means that we should shift the focus on reducing the use of plastic we consume daily in order to minimise the amount of plastic waste rather than recycling.



PET
Polyethylene Terephthalate
eg: bottles & containers



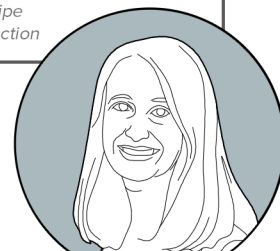
HDPE
High-density polyethylene
eg: pipe construction



PP
polypropylene
eg: ketchup bottle

TL;DR

Diverting trash away from landfills and saving cost (usually the cost of a product includes the packaging cost too!) by opting for packaging-free options



Alice



Daily Lifestyle



COMMUTE CARE TO SHARE

Public Transport

LIGHT-RAIL TRANSIT (LRT) /
monorail / express rail link

rapidKL



Keretapi Tanah Melayu (KTM) commuter rail
/ Electric Train Service (ETS)



buses / bus rapid transit (BRT)

One of the greenest method of traveling is via electric trains - as a resident of Klang Valley I am spoiled for options.

Aside from that, I would also **carpool**. I just need to plan my rides ahead of time, especially for trips that are recurring such as work ⇄ home / school ⇄ home. I will reach out to my colleagues / other parents of my children's classmates to take turns driving.

Car Pool

ok !



CarpoolWorld



Droupr



SOCAR
(car rent)



GrabShare



MyCar



MULA

There are also carpooling services and alternative ride-hailing apps. Not only will I be able to share the cost, but I'll be able to make a new friend too!

Also check out the fresh-in-town
shared electric scooters and
bikes!

Cycling

TRYKE



BEAM



Neuron Mobility



Dacsee



EzCab



Cycling is another green and healthy option! RapidKL recently promoted Bike N' Ride for long distance transit and KL has provided bike lanes on the road. *scan to get cycling map >>*

[13]



I am a sad earth

FACT

Almost 1 single adult owns 1 car



Malaysians own
1 car : 2.3 people
(433/1000 vehicles per capita)

TOP 20%

39th / 191

rank in the world =
3rd : US; 17th : Japan; 34th : UK

4.6 ton

amount of CO₂
emitted per year
from a typical car

In total

64 million
ton

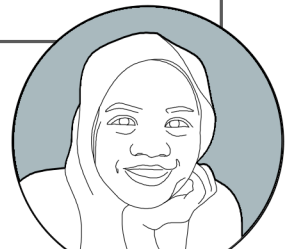
produced from 14 million cars in
Malaysia each year.

[14]

Not only is owning a car by a single occupant polluting the environment, it is also so expensive.

TL;DR

Lessening the amount of cars on the road, as it is one of the biggest greenhouse gas emitters in cities !



Hajar



Daily Lifestyle



DIET

EAT, GROW, PRACTICE GREEN DIET

ALTERNATIVE SOURCE OF PROTEIN

I learn to understand my daily diet. The same proteins from meat can also be found in plants, so I made the switch! How about you?

Still cannot resist the flavour of meat? Then why not opt for a plant-based meat, which you can easily purchase at the grocery store.



protein value / 100g



10g

Dairy

A good source of protein, calcium, Vitamins B & D. Fermented dairy such as **yoghurt** contains gut bacteria that can benefit digestive health.

[15]



22g

Nuts

While most people snack on it, little did we know, nuts like **almond** are sources of healthy fat, protein and other nutrients. Toss it in salad for the extra benefits.

[16]



5g

Veggies & Fruits

They have high protein content. Some common ones include **broccoli**, spinach, asparagus & potatoes. Some fruits eg: guava, tomatoes & bananas.

[17]

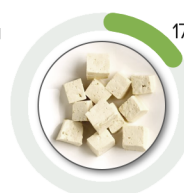


8.8g

Cereals & Grains

Wholegrain breads, rice and pasta have more protein, fiber and iron than white versions.

[18]



17g

Soy

Protein from soy is considered complete protein, containing all 9 essential amino acids, fiber, iron and low in fat. Soy foods like **tofu**, edamame, tempeh, etc.

[19]



9g

Pulses / Legumes

They are inexpensive sources of good protein, with additional vitamins, complex carbohydrates & fiber, eg: lentils, **chickpeas** & any beans.

[20]



MEAT =

ref: chicken breast = 25g

nut butter
wheat bread

tofu
brown rice

~~bacon~~
banana peel

~~egg~~
tempeh

~~milk~~
soy/oat milk

~~minced meat~~
scramble tofu

*optional plant-meat : Impossible Burger and Beyond Meat which you can easily purchase at the grocery store.

GROW EDIBLE GARDEN AT HOME

Additionally we can also plant our own greens! I used to have a vertical garden as I was living in a small apartment on the third floor without a balcony before moving to Malaysia.

Now, I have the privilege to enjoy a little balcony and decided to start a new challenge **urban farming**. On the 28th floor of my condo, I managed to grow and eat a Meter 0 salad grown in a small balcony.



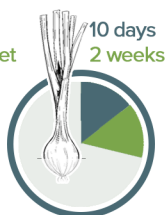
timeline / almost 3 months

plants can regrow - soak the stem in water

plants can grow from seed



Mint Basil



Spring Onion



Lemon Grass



Coriander



Spinach



Tomatoes

You can also seek assistance from expert :)



Eats, Shoots & Roots



Ground Control



Daily Lifestyle



MY Zero Waste Life - Summarized

DIET

EAT, GROW, PRACTICE GREEN DIET

SUPPORT LOCAL ORGANIZATION

If we don't have any possibility to grow plants or sometimes just lazy, others can do it for us! For example: Use **Ecosia** as a search engine!



Search the web to plant trees...



It's a search engine whose main objective is to reforest the planet. They are using part of their revenues to plant trees!



Locally, you can support organisations on their reforestation efforts!



Global Environmental Centre



Free Tree Society



EcoKnights



Regrow Borneo supported by Cardiff University

FACT

It is widely known that **farming plants** is a lot more efficient than **farming animals**. A high meat diet requires extensive resources; water, land and energy. These livestock also produce waste which has shown to contribute a large percentage to water pollutants. [\[21\]](#)

GREENHOUSE GAS EMISSION

97.7%

unit : kilograms of carbon dioxide equivalents (kgCO₂eq) per kilogram of food (Land use change, Farm, Animal feed, Processing, Transport, Retail, Packaging)

59.6 kgCO₂eq

2.3%

LAND USE

4.13 billion ha

82.9%

2.89 billion ha

70% PASTURE

30% CROPLAND

animal feed

human food

17.1%

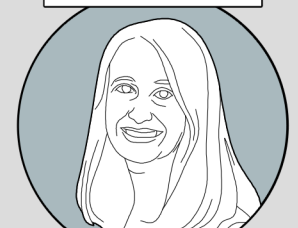
global land use for agriculture across different diets. source: ourworldindata.org

TL;DR

While we are not saying that you should only eat vegetables from now on, we are merely saying that you can do your part by eating less meat. Not to mention, you will also help to reduce greenhouse gases at the same time, helping to fight climate change. It's a bonus, don't you think?



Beatrice



Alice



Daily Lifestyle



REUSABLE VS DISPOSABLE



10 kilolitre of **WATER** = **1** person for **7.4** years
produce amount that can feed
1 kg of **COTTON** accounts for 24% of the world's insecticide sales and 11% of global pesticide consumption, one of the dirtiest crops.
(mostly non-organic)

Organic cotton has slightly lower impact on the environment in terms of pesticides but it requires over **twice as much water** than conventional cotton.

Before buying any alternatives for my facial-related disposables, I may already have the solution at home - **muslin cloths** ! They are perfect to be used for daily routine and are considered to be highly hygienic because they dry very fast to prevent growth of bad bacteria.

If I feel that muslin cloths are too rough, **reusable cotton rounds** can be easily found in the market made of bamboo or other eco friendly alternatives.

There are also **reusable cotton swabs** that I can wash after each use, or **bamboo based swabs** that can biodegrade.

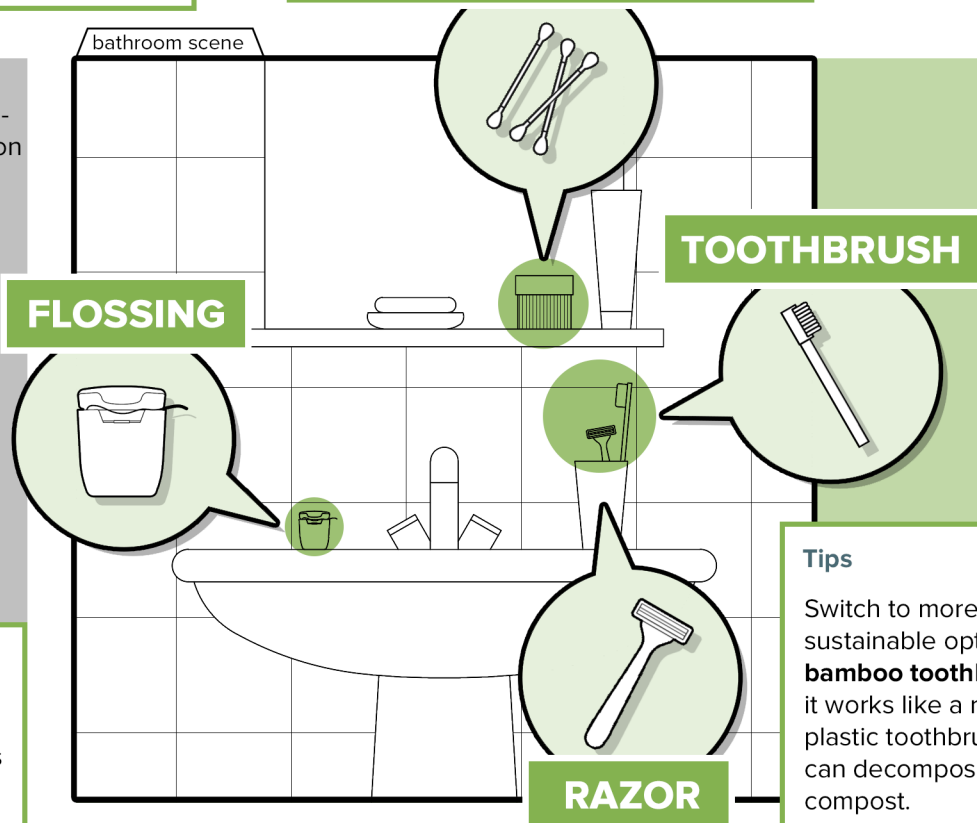
COTTON ROUND / SWAB

Dental floss is made out of non-biodegradable material like nylon and waxes.

The wax makes the floss resistant to move easier between teeth and provides a pleasant flavor, on the other hand it uses dangerous chemicals like PFCs that can be dangerous for our health.

Tips

Luckily, in the market now there are more eco-friendly solutions like **bamboo based floss** coming in little reusable glass containers so once I finish my spindle of floss I can order a new one. Very common is also **silk floss** or **plant based floss**.



Tips

I switched out of the disposable plastic razors to the **hardy metal safety razors**. They usually have double-edged blades so that the razors can be used on both sides. The metal blades can be recycled with other metals.

Tips

Switch to more sustainable options like **bamboo toothbrushes** it works like a regular plastic toothbrush and it can decompose in my compost.

**When I first made the switch, the bamboo toothbrushes sometimes irritated the sides of my mouth during brushing, but after the first few attempts it wasn't an issue anymore for me.*



REUSABLE VS DISPOSABLE

 1 tampon / pad takes more than **500** years to decompose

 1 woman uses  x **12,000** tampons / pads in her lifetime [22]

Though unpopular, switching out of disposable menstrual products to reusable and **washable feminine pads** or **menstrual cups** is not as cumbersome once I got used to it.

Washing Tips

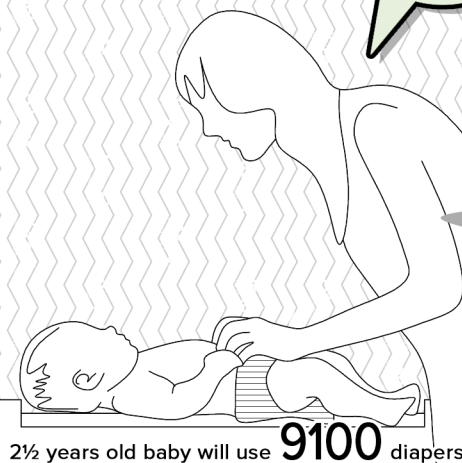


It will need a bit of sacrifice in terms of washing time. Hot water is my best friend. Soaking in hot water always helps to clean better as it disinfects and washes stains away.

MENSTRUAL PRODUCT

nursery room scene

 you can save - RM4,560



2½ years old baby will use **9100** diapers

In Malaysia, there is no regulation to recycle diapers. This means that 1.5 million tonnes of diapers are thrown to the landfills.

12% **3rd major** household waste composition [23]

DIAPER

 you can save - RM5,460

switching to **reusable and washable diapers**

Washing Tips refer to menstrual product above

WIPE

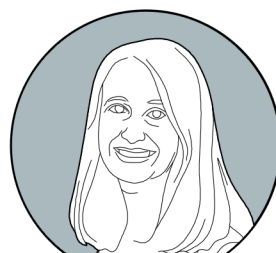
home solution as easy as **water and soap**

on the go I repurpose **clean and soft washcloths**. I use an old spray bottle to wet the washcloth.

makeup remover Cleanse with **oil** (olive oil / other natural oil) and wash off straight with water or wipe off with a **washable makeup remover cloth**.

TL;DR

Taking care of our personal hygiene doesn't have to be wasteful! Try switching to reusable alternatives that suit you. It also helps you save a lot of money in the long run.



Alice



Daily Lifestyle



RECYCLING

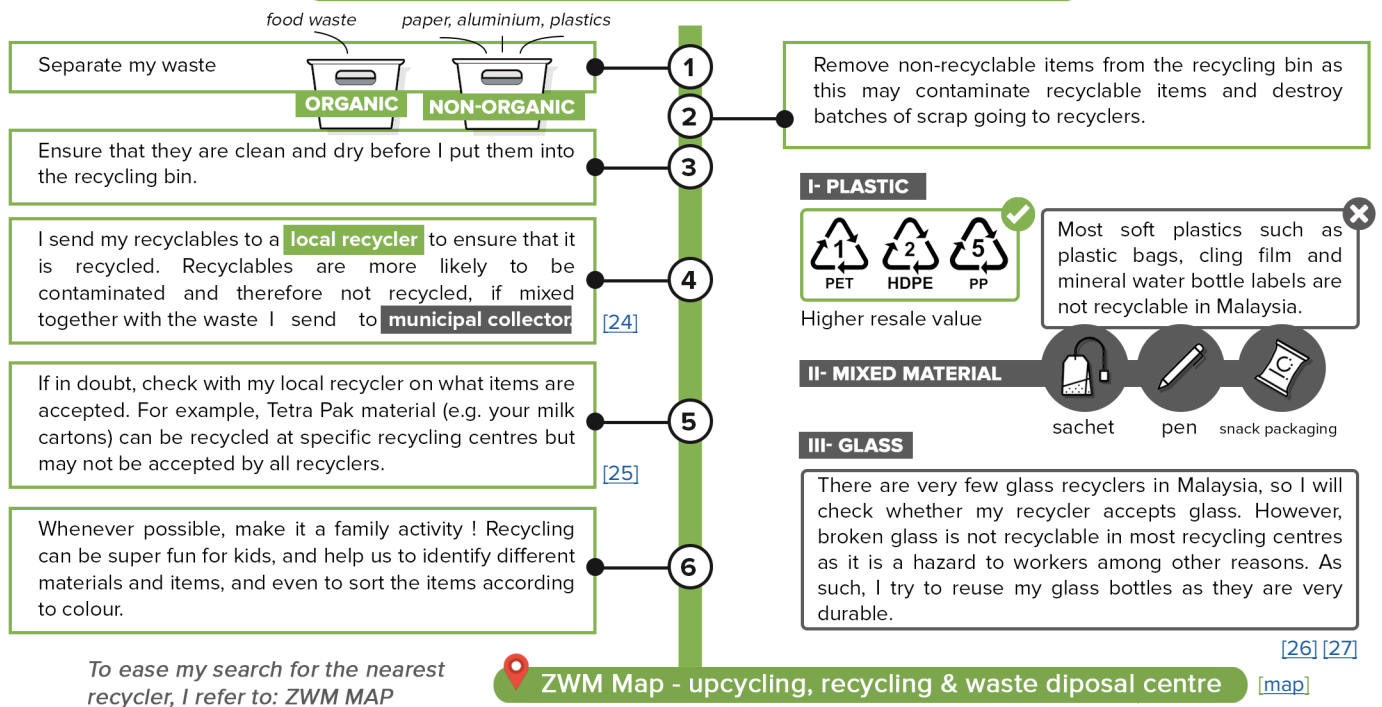
DISMAL RATE OF RECYCLING

Not enough people separate their waste into recyclables (therefore, not recycling).



Recycling poorly or 'wish-cycling' by not understanding which items can or cannot be recycled.

STEPS TO RECYCLE



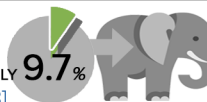
To ease my search for the nearest recycler, I refer to: **ZWM MAP**

ZWM Map - upcycling, recycling & waste diposal centre [map]

*Fun fact: The key organisations that collect recyclables in Malaysia are often charities, like **Tzu Chi foundation**. Hence, our efforts are compounded as they are not only sustainable but can help underserved communities.*

FACT

The overall household recycling rate for Malaysian households is very low → ONLY 9.7% [28]

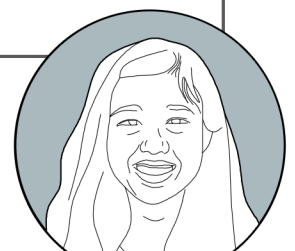


Malaysians discard almost **38,000 tonnes** per day into landfill = **6,700 elephants**

As one of the three musketeers of the 3Rs, making recycling a habit is truly one of the best things I can do for the Earth. Recycling not only saves energy and resources that are needed to make new items, but provides essential jobs and opportunities for the community, from creative entrepreneurs to hardworking waste pickers and recyclers that turn our trash into treasure.

TL;DR

Minimising the risk of throwing away valuable resources that can be recycled because we don't know how to or through accidental contamination. Or best, go zero waste!



Tze Ni



Daily Lifestyle



COMPOST

ORGANIC
WASTE



Don't Know Where to Start ? QUICK TEST ▼

Can you compost at home ?

YES

NO

Community Composting

Collect daily food scraps



Store in freezer



Send to the nearest community composting drop off point [\[map\]](#)

ZWM Map - community composting & surplus food

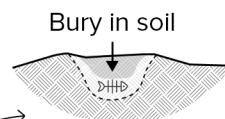
Where?

INDOOR

OUTDOOR

How do you feel about worms?

Do you prefer low maintenance?



Min depth: 30cm

NO

NO

YES

BOKASHI COMPOSTING

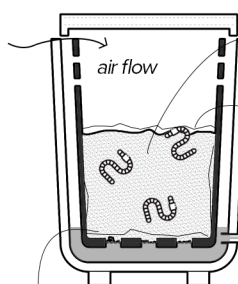
VERMICOMPOSTING

Let's have a compost area

HOT COMPOSTING

Worm Bin

* Repeat step 4 - 6 after food waste has been completely consumed by the worms.



④ Chop all organic waste into smaller pieces. The smaller the better.

⑤ Ensure all organic waste is covered with shredded newspaper / cardboard.

⑥ Drain liquid off. (Dilute 1 : 10 worm tea : water as to use as fertiliser)

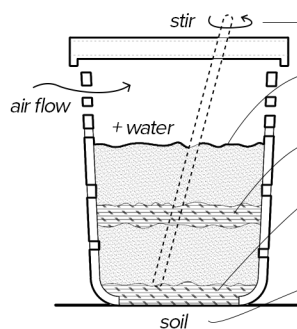
① Prepare an opaque container (worms like privacy :) with holes on the bin cover.

② Shred newspaper / cardboard and some soil as bedding material.

③ Place red wigglers worm.

BSF COMPOSTING

⑦ Compost is ready to harvest after 2-3 months.



⑥ Stir once a week to allow airflow.

⑤ Repeat step 3-4 as you add more organic waste. Ensure top layer is always the brown material.

④ Add a layer of brown material.

③ Chop all organic waste into smaller pieces. The smaller the better. Then add into the container.

② Put a layer of soil as base material.

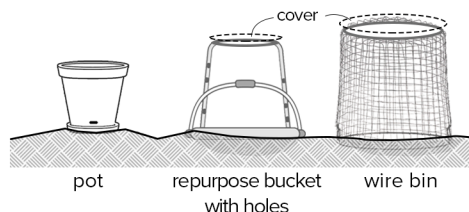
① Prepare any size of container. Drill plenty of holes for airflow.

Rule of thumb 1 : 3 = GREEN : BROWN

1 GREEN | grass clippings, vegetable waste, fruit scraps, & coffee grounds.

3 BROWN | dead leaves, branches, and twigs

Hot composting can be done with various size of container:



pot

repurpose bucket with holes

wire bin

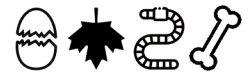


Daily Lifestyle



COMPOST

ORGANIC
WASTE



	YES	NO		HOT COMPOST	BOKASHI	VERMICOMPOST	BSF COMPOST
Vegetable							
Fruit scraps							
Egg shells							
Coffee grounds							
Nail clippings							
Hair clippings							
Greasy or oily food							
Citrus							
Garlic & Onion peels							
Fish							
Dairy							
Pet droppings							
Meat							
Bones (small)							
Diseased plants							

FACT

Composting is essentially turning our food waste, which comprises important nutrition, as food for organisms, plants and soil! To put it simply, the nutrition we take from food (like potassium from bananas, calcium from egg shells) can also be returned back to earth to grow more nutritious food.

TL;DR

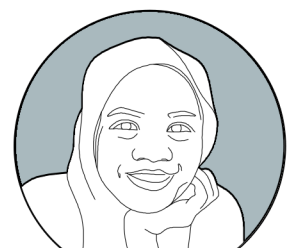
Composting our own organic waste prevents the waste from going into landfills and generating greenhouse gas.



Sue Yee



Marylyn



Hajar



Daily Lifestyle

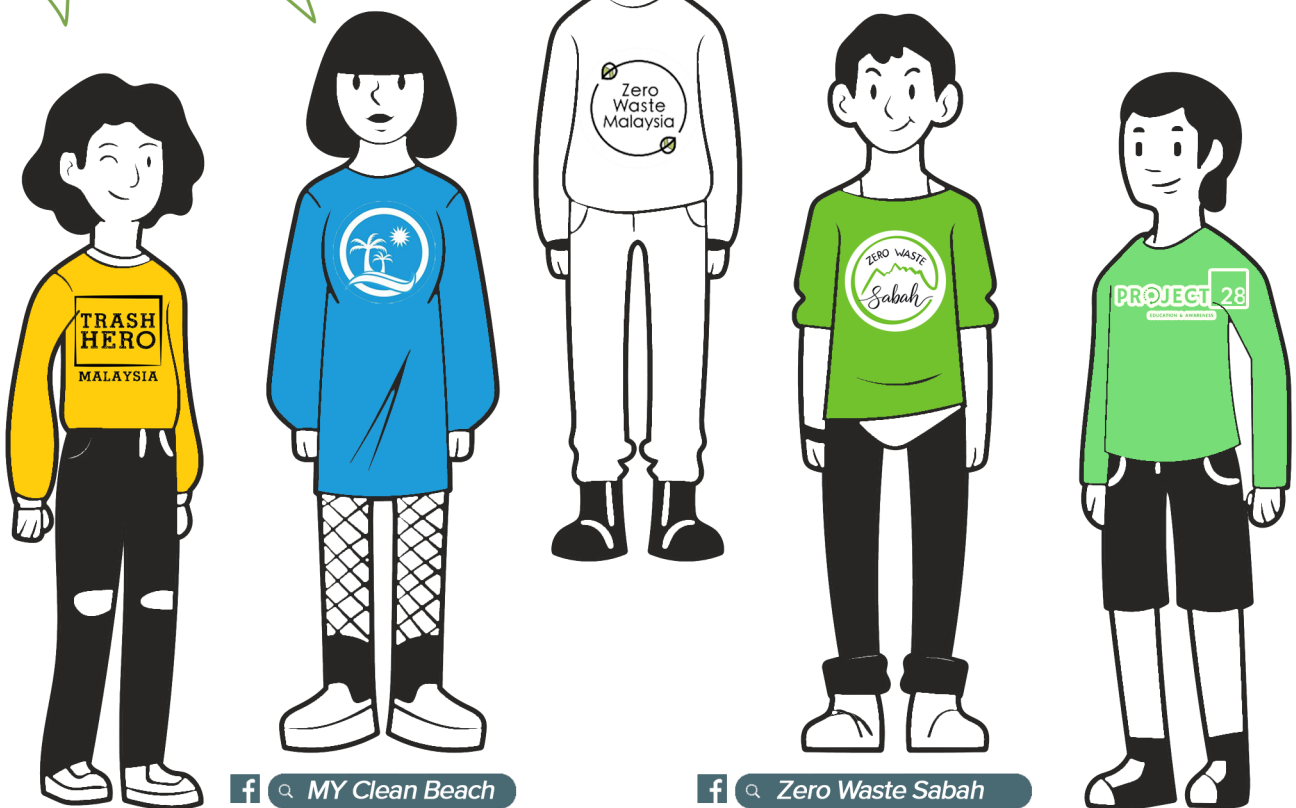


COMMUNITY

There are always NGOs that need your help or community groups that will love to hear your ideas and experience sharing. Personally, I volunteer with  **Zero Waste Malaysia**. I also follow their Facebook group.

Need a good start ? Try clearing up waste from the environment with us :D

A simple Google search to look for online or offline environmental advocacy groups will help! It doesn't always mean that you have to get your hands dirty. Many of these societies need admin volunteers and funds, so you may be able to enjoy the liberty of helping out in your own time and space.



 **Trash Hero Malaysia**

 **MY Clean Beach**
(West Malaysia)

 **Zero Waste Sabah**
(East Malaysia)

 **Project28.MY**
(Southern Peninsular Malaysia)

“Alone, we can do so little; Together, we can do so much.” – Helen Keller

WHY

More often than not, the cause that you're passionate about is also supported by other local individual advocates or advocacy groups. NGOs are almost always lacking in resources too. So, reach out !

TL;DR

Joining a community of like-minded people to expand the awareness and urgency of actions we should take to better care for our planet

*human illustration from canva.com



Janice

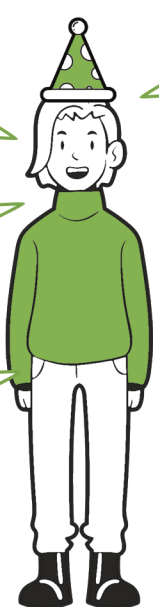


Community Support



EVENT

LET'S HOST IT WASTE-FREE



 I love to host house parties or makan-makan celebration during Christmas or Hari Raya for family and friends. But... How do I go Waste-free?

For office events, we would cater from restaurants that are able to serve their food in trays & use our own kitchenware from pantry.

For intimate events, I would get food takeouts in my own container and serve them in my own plates, cups, and cutleries.

Sometimes, I would even DIY some drinks like iced pandan water or homemade ginger beer to avoid serving boxed or bottled drinks. The same rule applies for potluck!

ZERO WASTE EVENT
HANDBOOK



A step by step guide to a zero waste event by Zero Waste Malaysia

For bigger events that require more planning and organisation, the **Zero Waste [29] Event Handbook** is always a good reference !

Preparation

Ensure the team are on the same page: go zero waste !

Select a venue that is accessible to public transport, eg: Slate@The Row, Jaya One Shopping Mall and etc.

Marketing

Make sure attendees aware of **BYOC** rule

Go Digital !

- QR code entry tix
- Online document sharing (Google Form / Google Drive)



Setup

- Drinking water refill stations
- Set up food waste collection
- Cutleries and containers rental stations

DIY decoration materials, eg: unwanted scraps such as egg cartons/cardboard /fabric scraps

FACT

Events often create so much trash at the end of the day. A gathering or party of less than 24 hours can create 2 huge bags of trash sometimes. Sure we had fun, but at the expense of creating that much trash that would lead to pollution and global warming? YIKES!

TL;DR

Hosting events does not have to be wasteful with a little bit of planning ahead of time!



Marylyn



Community Support

WRITE TO BRAND & REPRESENTATIVE

[BRAND] Contact Us



Name : Topic :

Description :

I would make an online search of the brand, find their website and leave them an email, text message, voicemail, or other channels of communication that they provide so I can let them know what are the things they should improve on. I would also provide a recommendation of other businesses that they can collaborate with, if I know any.

Email - New Message

To : Cc Bcc

Subject :



Scan to access sample letter

[\[30\]](#)

“... I hope you are doing well. By way of introduction, I am [your name], a voter in your constituency. I am writing to you today because I am deeply concerned about the persistent and frequent water disruptions in KL and Selangor that affect households and businesses...”

[A](#) [U](#) [G](#) [E](#) [D](#) [I](#) [M](#) [P](#) [S](#) [E](#) [N](#) [D](#)

[Send](#)



Similar to writing a letter to my favourite brand, I can also pass my suggestions, recommendations or complaints to my local representative, including the ketua kampung, mayor, MP, etc. Here's a sample of a letter you can write!

WHY

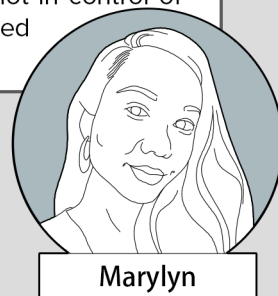
Oftentimes, brand owners will not adopt any radical change or innovation that will improve the business' sustainability unless there is an external push from their investors, the media or their customers — to name a few.

As a consumer, I recognise that if I want my favourite brand to be more responsible with their products' end-of-life, I have to let them know that.

It is entirely important to speak up, but there will be times when we are just not in control of making improvements. For a bigger, systemic change to actually happen, we need support from the government to realise a Malaysia we want to see.

TL;DR

Telling your favourite brands and local representatives that you care and want to see improvements.



Systemic Change



SPEAK UP

SPEAK OUT LOUD

Someone else will do it!



But if everyone thinks that way, no one would do anything. Why not be the "someone else"?

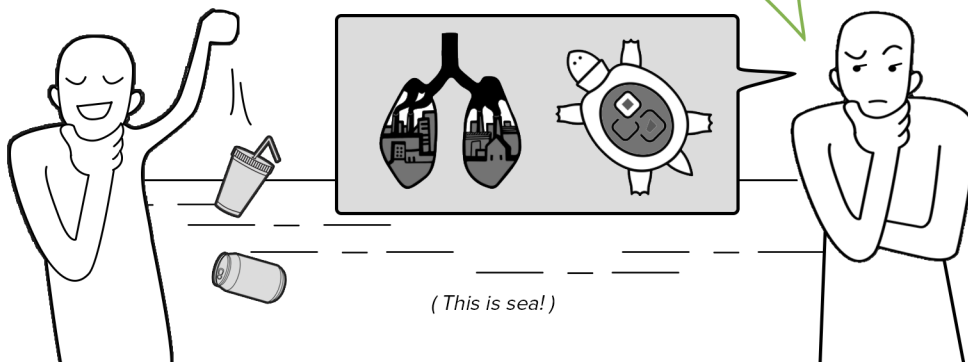
The difficulty in this is doing it cordially and being empathetic with the listener. Very often, most people just do not understand the impact of their action towards the environment. Attacking them verbally would just alienate them further from the cause.

There is also a perception that going zero waste is difficult and expensive, and many people choose to do it right or not do it at all. It's important to understand that being zero waste or environmental-friendly is having a conscious mindset and there is no finality to it.

“

The ultimate tragedy is NOT the oppression and cruelty by the bad people but the silence over that by the good people.” – Martin Luther King

If I meet an individual, group of individuals or entities that are knowingly polluting the environment, I know I must speak out LOUD against them.



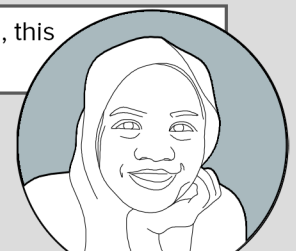
WHY

In today's age of social media and interconnectivity, silence is no longer an option. The biggest excuse people have for not living a greener lifestyle is ignorance. Our planet can no longer afford this level of ignorance.

It is important to not just speak out, but to speak out LOUD. And the best part is, this action is the easiest of all, and costs nothing to do.

TL;DR

Speaking up to raise awareness and educate others.



Hajar



Systemic Change



SUPPORT

BUSINESS THAT SHARE ENVIRONMENTAL VALUE

For places that I visit often, especially with small business owners, I would initiate conversation to get to know about them and their business better. Through my personal experience, small businesses are generally more willing to accept zero waste options from regular customers. To support and help sustain their business, I would also share about their business with other friends and family.



I would also encourage that we propose alternatives, rather than imposing. While my local vegetable seller is happy enough to accept my reusable bag, he will not suggest to his other customers to do so in fear of losing those who want that convenience, and continue to give out free plastic bags. And that's perfectly understandable.

However, if you do come across an unwilling seller who completely rejects using your reusable container or bag, you may want to switch to a local business that supports zero waste practices.

There are many ways in which we can initiate a zero waste lifestyle. It does not have to be daunting nor does it have to be perfect. In fact, some parties may argue that living zero waste may be more troublesome and resource intensive.

But in the end, all we want to do is to live better without compromising our planet. Here at Zero Waste Malaysia, we believe in taking One Step At A Time!



WHY

It is important to continue supporting the businesses that understand environmental value. It has become more prominent that profit should NOT be the only thing a business seeks for, rather they should also care for and operate in a way that does not harm people and the planet.

TL;DR

Supporting the businesses that share your environmental values to sustain their business.



Janice



Systemic Change



ACKNOWLEDGEMENT

Published by Zero Waste Malaysia in July 2021

Project Lead

Marylyn Poh

Assistant Project Lead

Siti Hajar Abdullah

Khor Sue Yee

Content creators

Alice Marchi

Beatrice Ting

Janice Yong

Tejal Jasani

Tze Ni Yeoh

Content Editors

Siti Hajar Abdullah (BM)

Khor Sue Yee (EN)

Marylyn Poh (EN)

Suseela Nagappan (Tamil)

Poh Phiak Kim (CN)

Tee Kam Chyi (CN)

Illustrator & Layout Design

Ho Kae Jing - [behance.net/hokjin](https://www.behance.net/hokjin)

Bahasa Malaysia Translators

Nurul Amiera Norazizan

Nistin Raihan Mohammad Zunaidi

Khadijah Ahmad Jais

Tina Yap

Mandarin Translators

Tee Kam Chyi

Poh Phiak Kim

Tamil Translator

Suseela Nagappan

Proofreaders

Khor Min Li

Lee May Sheng

The MY Zero Waste Life - Summarized Project is supported by
Korea SHE Foundation