

# **SUSTAINABILITY DURING A PANDEMIC**

Emiri Vithoontien

# The Year 2020

4 months into the new decade, 2020, and the whole world is under quarantine. In order to help slow the spread of the novel coronavirus, COVID-19, almost every country has declared nationwide lockdowns and stay-at-home orders. People are advised to leave their houses as little as possible and leave only for essential services. Although necessary, these restrictions have changed the way we go about our daily lives.

In Thailand, there are concerns that the lockdown is increasing waste due to the increase in reliance on delivery food services, take-outs and having to stock up on food to limit supermarket runs. Even in 2020, Thailand does not have a strong recycling system, making it difficult to minimize the amount of waste going straight to the landfill. Therefore, I will look at a way to increase awareness of this problem and look at creative ways in making people take part in this issue from inside their house.

# Thailand's Plastic Waste Management Road Map (2019)

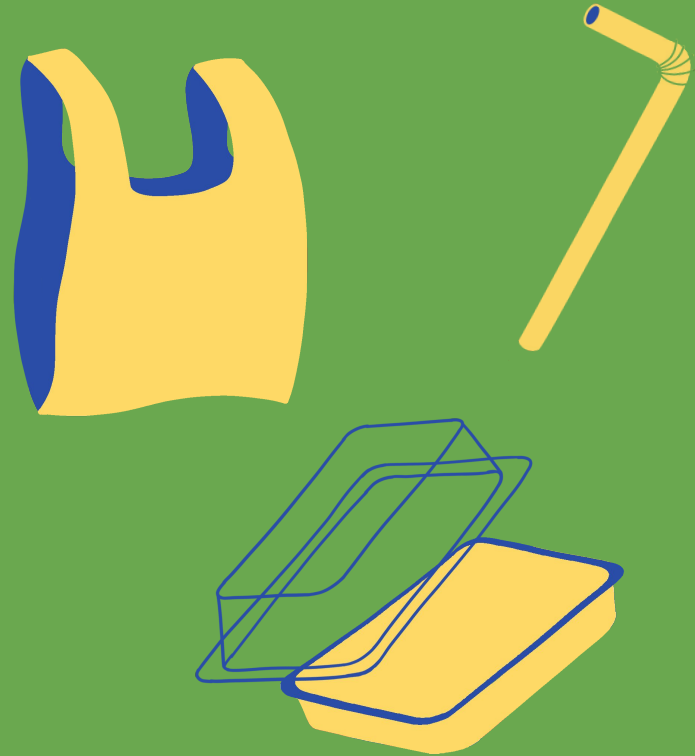


# Thailand's plastic problem

150 million tonnes of plastic waste has built up since the 1950s, and all that waste is currently circulating in oceans, seas, and other water sources.

Thailand ranks sixth in the whole world for the most plastics dumped into the ocean by a country.

**The biggest contributors to Thailand's plastic waste are plastic bags (13%), straws (10%), and food containers (8%).**



# Thailand's plastic problem

Trash produced per year

**27 million tones**



Plastic waste produced per year

**2-3 million tones**



Amount of plastic reused/recycled per year

**0.5 million tones**

# Thailand's waste management problem

Thailand currently does not have a recycling system implemented, therefore we see almost all households combine all of their waste together.

Many Thai people don't understand the effects of recycling or don't know the correct way of sorting and recycling their waste.

The lack of proper hygienic waste management has resulted in problems such as germ contamination, intrusive odor, leachate contaminating surface and groundwater, as well as environmental impact on the surrounding areas of landfills.

# BOOM in food delivery services

With the stay-at-home orders, demand for food delivery services has increased in Thailand. The 3 food delivery services, GrabFood, Food Panda, and Lalamove are even hiring more drivers to help cope with all their orders.

However, this means that there are many more plastic containers, bags, cutleries, cups, sauce packets, and cardboard food containers being used. All of these, at the end of the day, will be dumped into the same trash bag making it very hard to recycle the materials because it will be difficult to sort and there will be cross-contamination.

# Why should we recycle?

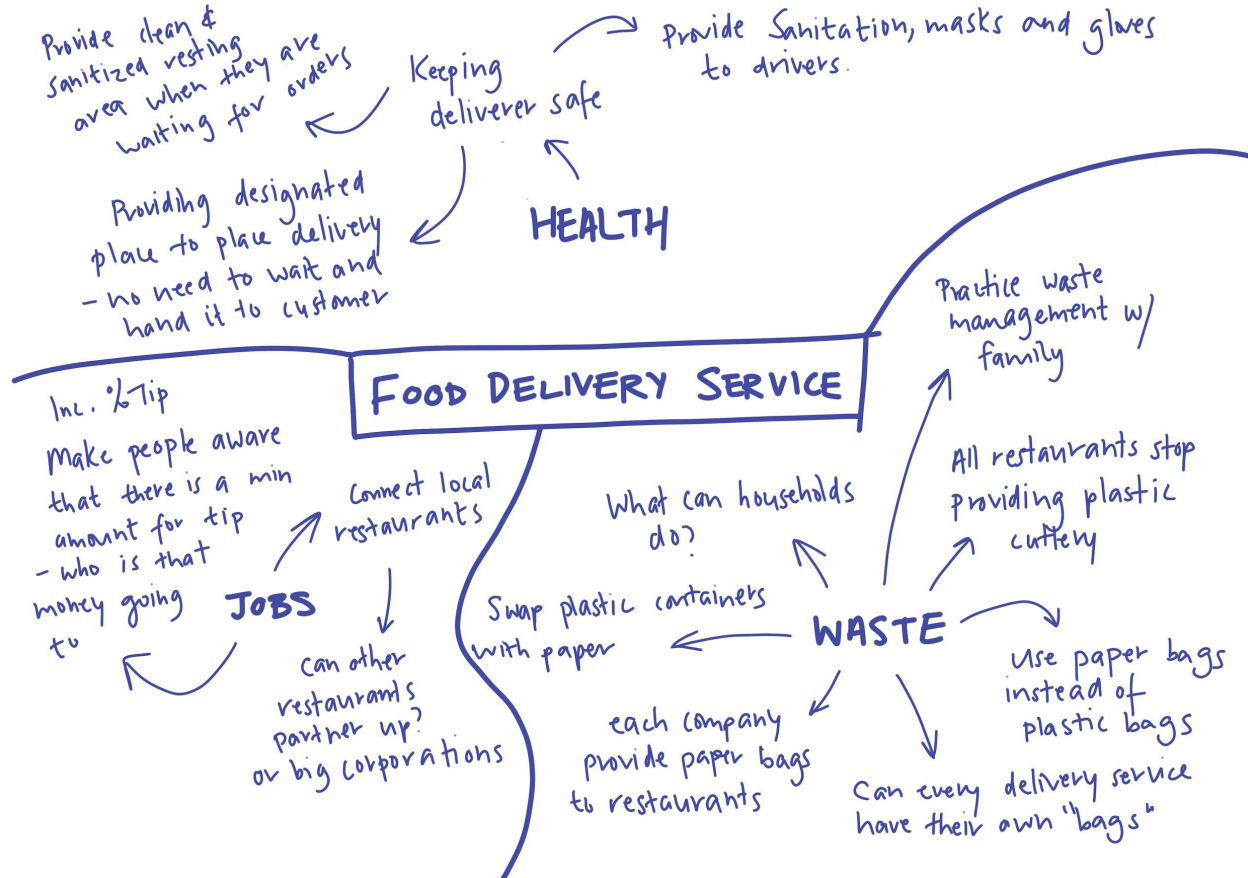
- To prevent millions of tons of material from entering **landfills** and further damaging the environment.
- To reduce **air and water pollution**, and to **save energy**. Recycled materials require less energy in the manufacturing process compared to virgin raw materials. *“A single light bulb can be powered for up to four hours with the energy saved from one recycled glass bottle.”*
- To **conserve natural resources** like raw materials, minerals, trees, etc.
- **TO SAVE THE EARTH.**



# Why we need to sort our waste

- **IMPORTANT:** To prevent cross-contamination within each recyclable material.
  - Glass shards, food remnants, toxic contents from things like batteries spoil the recyclability of materials.
- Reduce waste going straight to landfills.
- Identify and become aware of your waste consumption.

# Brainstorming



Brainstorming

# Practicing waste management during quarantine

I am going to focus on this idea because I think it is a great time to learn and understand how to separate waste when you spend all day at home. This can also be implemented rather quickly, everyone can participate, and doesn't require any additional materials or cost.

If not now then when?

# Japan's waste management systems

They have infographics to help identify and teach you how to sort household products. It also highlights the importance of recycling those specific materials and how it is done. They have a weekly calendar that shows when you should take out the trash.

**Materials that can be recycled are streamed into its respective recycling factors and those that cannot are disposed of properly, reducing waste going to the landfill.**



# Identification in recycling

Japan uses identification symbols to help consumers identify the product's materials, making it easier to sort their waste. The symbols also motivate companies to produce products that are recyclable and less harmful to the environment, in effect attracting customers. With this system people become more conscious about their consumption choices, companies are more conscious about their manufacturing and distribution choices, and there will be an increasing demand for research in new materials and investment in recycling technologies.



# Sorting at home is the first step to recycling

Thailand's recycling technology is lacking compared to more advanced countries like Germany and Japan, therefore Thailand needs to start tackling this through consumers even before expanding on recycling technologies. Increasing recycling technologies won't be effective if most of the waste is getting sent to landfills.

- Can they create symbols that are universal and easy to identify for everyone in Thailand?
- Can Thailand partner with other countries in Asia to create symbols that would be understood in other countries (expanding this system in other countries)?
- How do we connect consumers, companies and recycling factories?

Through research and concept development I have created a collection called **“It’s 2020, Know Your Recyclables.”** It aims to increase awareness and educate to the Thai community about recycling.



IT'S 2020,

**KNOW YOUR  
RECYCLABLES**



IT'S 2020,

# I STILL DON'T REALLY KNOW MY RECYCLABLES

The biggest problem when it comes to recycling is not knowing what goes where. This causes cross-contamination and a mix match of recyclable and non-recyclable materials, spoiling the recyclability of materials and making waste go straight to landfills.

This graphical pamphlet/guide identifies the different categories and simplifies it by highlighting common household goods that are used and thrown away daily. The goal is to have users practice this every day and become aware of their choices, and in the long run, help them identify better alternatives for the current products they use.

**This does not solve all of our environmental issues, but a small change that can and should be easily fixed. You can start today!**

IT'S 2020

# KNOW YOUR RECYCLABLES

IT'S 2020

## LET'S START TODAY

As we look at the world around us we see the environment around us deteriorate; rising sea levels, harsh weather conditions, wildfire, extinction of animals etc. Although we as a society start becoming aware of how companies are tackling ethics and sustainability there is a huge contributor that can make a big difference, US. Our consumer choices and our daily habits have a huge external effect, therefore we as consumers also need to start understanding the ethical and sustainable impact of our choices.

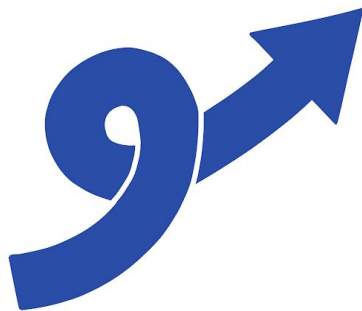
**Let's all take part in this new system to create and sustain a better society.**

For more information please visit [www.knowyour.org](http://www.knowyour.org)

## Why we need to recycle.

Prevent millions of tons of material from entering **landfills** and **further damaging the environment**.

Reduce **air and water pollution**, and **saves energy** – recycled materials require less energy in the manufacturing process compared to virgin raw materials.



## Why we need to be sorting our waste.

**Prevent cross contamination** within each recyclable materials, reducing waste going straight to landfills – glass shards, food remnants, toxic contents from things like batteries spoil the recyclability of materials.

Identify and become aware of our **waste consumption**.

# Know Your PET

Remove labels and caps. Wash with water to remove any remaining residues.



## PET Bottles

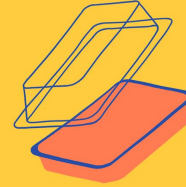
Look for PET symbol on the bottle.



Remove labels and caps.

# Know Your PLASTIC

Wash with water to remove any remaining residues.



**Plastic Container**  
(Yoghurt cups, Sour cream, Pudding, Margarine, Take out/Ready-made, Egg Carton, etc.)



## Plastic Tubes

(Food Paste, Face wash, Lotion, Toothpaste, Hair & Body Products etc.)



**Chips bag, Candy wrapper, Bottle Labels**

## Plastic Bottles

(Milk jugs, Soap pumps, Disinfectant sprays, Hair & Body Products etc.)



**Bottle Caps & Drink Lids**

# Know Your PAPERS

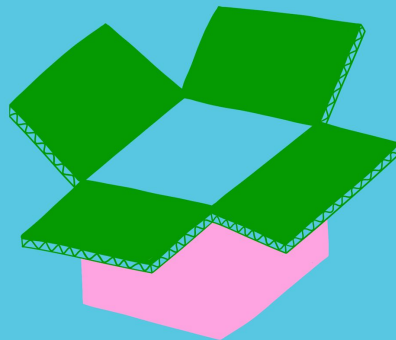
Flatten all paper products to save space.



**Paper, Card, Cardboard Paper, Wrapping Paper, Newspaper, Magazine**  
(Should not be spoiled)



**Tetra Packs**  
(Clean the inside with water to remove any residues)



**Cardboard Boxes**  
(Should not be spoiled, and tapes should be removed)

# Know Your METALS

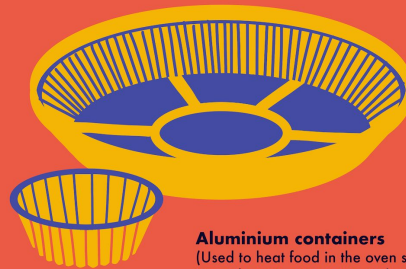
Wash with water to remove any residues.



**Aluminium cans**  
(Soft drink cans, beer cans etc.)



**Steel and Tin cans**  
(Soft drink cans, Canned Foods: Soup containers, Vegetable cans, Canned fish etc.)



**Aluminium containers**  
(Used to heat food in the oven such as, Cupcakes, Pies, Lasagna etc.)



**Metal Lids**  
(Typically used as lids for glass jars: Salsa, Spaghetti Sauce, Condiments etc.)



**Aerosol Cans**  
(Bug Spray, Whipped Cream, Cooking Gas, Non-stick Oil, Spray Paint etc.)  
\*Puncture a whole in the canister to remove any remaining air.

# Know Your GLASS

Wash with water to remove any remaining residues.

## Beverages

(Energy Drinks, Soda, Alcohol, Water, Milk, etc.)



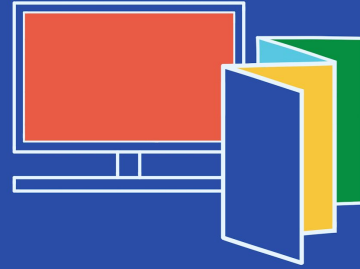
## Sauces & Spices

## Jars & Containers



## How do I start?

1. Designate 5 containers for your recycling. Doesn't have to be anything fancy.

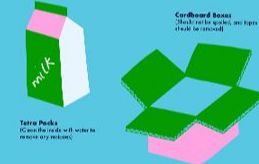


2. Use the booklet and website to understand what goes where.

3. Throw out the trash when needed. You can also find places that exchange recyclables with cash - you can find more information on the website.



Remove labels and caps. Wash with water to remove any remaining residues.



**Tetra Packs**  
(Fill with ice or water to  
remove any rickles.)

Wash with water to remove any residues.



2 Puncture a whole in the canister to remove any remaining air.

Wash with water to remove any remaining residues.



1. Designate 5 containers for your recycling. Doesn't have to be anything fancy.



2. Use the booklet and website to understand what goes where.



3. Throw out the trash when needed. You can also find places that exchange recyclables with cash - you can find more information on the website.



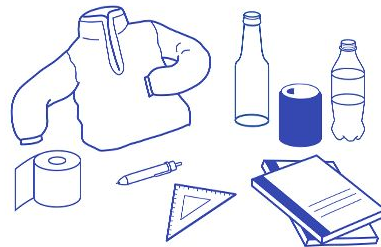
IT'S 2020

## KNOW YOUR RECYCLABLES

### Why we need to recycle.

Prevent millions of tons of material from entering **landfills** and **further damaging the environment**.

Reduce **air and water pollution**, and **saves energy** - recycled materials require less energy in the manufacturing process compared to virgin raw materials.



### Why we need to be sorting our waste.

**Prevent cross contamination** within each recyclable materials, reducing waste going straight to landfills - glass shards, food remnants, toxic contents from things like batteries spoil the recyclability of materials.

Identify and become aware of our **waste consumption**.

IT'S 2020

### LET'S START TODAY

As we look at the world around us we see the environment around us deteriorate: rising sea levels, harsh weather conditions, wildlife, extinction of animals etc. Although we as a society start becoming aware of how companies are tackling ethics and sustainability there is a huge contributor that can make a big difference - US. Our consumer choices and our daily habits have a huge external effect, therefore we as consumers also need to start understanding the ethical and sustainable impact of our choices.

Let's all take part in this new system to create and sustain a better society.

For more information please visit [www.knowyour.org](http://www.knowyour.org)



IT'S 2020,

# LET'S START TODAY

In order to catch people's attention, I decided to create poster-like illustrations for the pamphlet. The use of illustration makes it easy for people to identify an object and doesn't require lots of reading, which is intended so that it doesn't lose people's interest. This would be distributed to houses as an educational guide in which they can learn more about recycling and services that they can use. This solution seems somewhat simple and manageable yet we, in Thailand, still throw all our waste out in one bag.

**If not now then when?**

