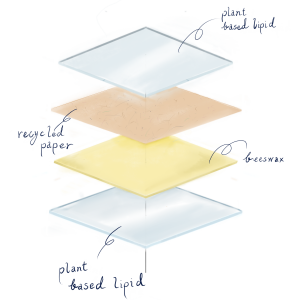


ECOPA Wrap

ECOPA (69.The Unlimited)

1.Motive/ Issues behind plastic waste

One of the biggest problems the world is facing is the excess use of plastic packaging. The amount of disposable packaging used per person in Japan is placed second in the world [1]. This leads to environmental harm ranging from the depletion of marine animals to the collapse of the food chain, and negatively affecting human-beings in the long run. Moreover, there are toxic gases that are emitted when waste is incinerated, resulting in environmental pollution.



2. Product Description and Strategy

“ECOPA Wrap” is an eco-friendly packaging, consisting of four layers. The outer layer is a coating made of waterproof plant lipids. The next layer is made of recycled paper and can be handled easily. The middle layer is made of cruelty-free beeswax [2] which is considered a sustainable resource [3] that would help sustain the shape of the packaging. The layer closest to the food product is made of lipids, extracted from non-standard vegetables and fruits that would otherwise be thrown away. The wrap can preserve food freshly while keeping them hygienic at the same time. Not only will “ECOPA Wrap” combat plastic waste problems, but it would also provide solutions for food waste. By using these biodegradable and sustainable materials in creating our packaging, we aim to replace plastic individual wrapping which is one of the factors that increases plastic waste today.

3. Target market

Our target market is packaging departments in Japanese confectionary companies that sell their products in multiple packages such as *Glico*, *Meiji*, etc. By getting influential companies to use our product, we can begin to normalize these environmentally-friendly packages. The COVID-19 pandemic has also affected plastic-free movements. Since sanitation is prioritised, plastic packaging is being used more often. With “ECOPA Wrap” being a better alternative for plastic packages, the target market would expand as well.

4. Technology and social contribution

1. **Cruelty-free beeswax:**
 - a. molds the shape of the wrapper and protects the food inside
2. **Layer of plant lipids:**
 - a. repels oxygen and water
 - b. slows down oxidation and prevents soggyiness
 - c. when burned after disposal, negative ions released, help neutralize pollutants such as dust, mold, and odors by binding with toxins [2]
3. **Biodegradable packaging style:**
 - a. layers are combined through the use of heat seal laminating
 - b. the beeswax in between melts and fastens the layers together
→ no need for artificial glue to hold them together



Contributes to
4 goals of the SDGs

5. Competitor

“ECOPA Wrap” is a new material for packaging. *Toppan Printing* offers several "Sustainable Flexible Packaging" products that we could consider our competitor. Their packaging which focuses on the use of recycled materials, has the same aim as our product. Their “packages use mechanically recycled PET plastic from PET bottles” and “reduces CO₂ emissions”. However, “ECOPA Wrap” uses absolutely no plastic materials and can be considered more environmentally friendly. The current existing “eco-friendly” packaging isn’t as eco-friendly as it claims to be. The inner layers of their packages are made of plastic in order to preserve food. Our product aims to solve these problems by providing reusable and biodegradable packaging, while maintaining characteristics that are necessary to keep the food edible and long-lasting (oxidation prevention, water resistance, light blocking, etc.) It also uses recycled paper which accounts for our sustainability purpose. [5]

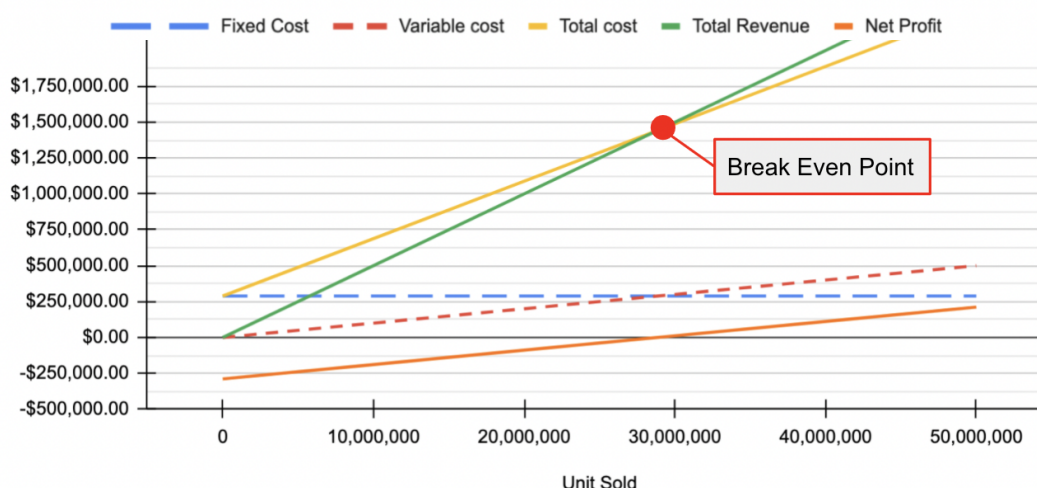
6. Promotion Strategy

Because our product is aimed towards confectionary companies, we are planning to attend business events. By advertising towards an appropriate audience, we can effectively interact with companies

who are willing to engage in business partnerships. The target company would gain a positive reputation for its plastic-free movement while we would receive societal feedback for future improvements of our product.

7. Financial Plan -Pricing Strategy how to raise funds at startup

	2022	2023	2024	2025	2026
Revenue (US\$)	500,000	1,000,000	1,500,000	2,000,000	2,500,000
COGS	300,000	600,000	900,000	1,200,000	1,500,000
Gross Margin	200,000	400,000	600,000	800,000	1,000,000
Fixed cost					
Office Rental	5,400	5,400	5,400	5,400	5,400
Human Resource	1,900	1,900	1,900	1,900	1,900
Utility	2,400	2,400	2,400	2,400	2,400
Factory Rental	180,000	180,000	180,000	180,000	180,000
Machine for shaping	64,000	64,000	64,000	64,000	64,000
Machine for glueing	20,000	20,000	20,000	20,000	20,000
Machine for package	15,000	15,000	15,000	15,000	15,000
TOTAL Fixed Cost	288,700	288,700	288,700	288,700	288,700
Variable cost					
Marketing	75,000	150,000	225,000	300,000	375,000
Sales	25,000	50,000	75,000	100,000	125,000
TOTAL Variable Cost	100,000	200,000	300,000	400,000	500,000
TOTAL Cost	388,700	488,700	588,700	688,700	788,700
Net profit before interest and tax	-188,700	-88,700	11,300	111,300	211,300
Tax (Corporate tax 23.2%)	-43,778	-20,578	2,621	2,621	54,821
Net profit after interest and tax	-232,478	-109,278	8,679	108,679	156,479
Net profit to percentage of revenue			0.5786	5.43395	6.25916



At the point of startup, we plan to raise money through crowdfunding from climate-aware organizations. We intend to raise our funds through borrowing from banks and asking large enterprises to support us.

8. Measurement of success and future timeline

We are planning the first release of “ECOPA Wrap” in Japan. However, as this wrapper becomes well-known and widely used, we plan to expand our target market to a **global scale**. Starting with snack wrappers and confectionery packaging, we aim to broaden our target to packages for delivery services. When this is achieved, we would proudly be able to claim our product as successful. Adding on, we aim to **replace all plastic packaging to “ECOPA Wrap” over the range of 20 years**. By then, we plan to set up a **disposal system** for “ECOPA Wrap” that would allow us to collect and reuse the material.

9. References

- [1] R. Tanaka, "Packaging occupies 70% of plastic waste Stop excess packaging for less waste", *New Sphere*, 31 Jan. 2019, <https://newsphere.jp/sustainability/20190131-1/>.
- [2] Naturma. "Cruelty Free Beeswax." *Naturma*, naturma.in/blogs/life-at-naturma/cruelty-free-bees-wax.
- [3] "Beeswax." *Econation*, 19 Dec. 2020, www.econation.co.nz/beeswax/.
- [4] "Sustainable Development Goals." *UNDP*, www.undp.org/content/undp/en/home/sustainable-development-goals.html.
- [5] "Sustainable Flexible Packaging: Living & Industry Division_Packaging." *TOPPAN PRINTING*, www.toppan.co.jp/living-industry/packaging/english/products/sustainable_flexible_packaging/.