綠林報

ANNUAL JOURNAL OF GREENWOODS

GREENWOODS, HKU SESSION 2022-2023

香港大學常綠林 二零二二至二零二三年度

Table of Contents

Greenwoods, HKU
香港大學常綠林

Our Mission

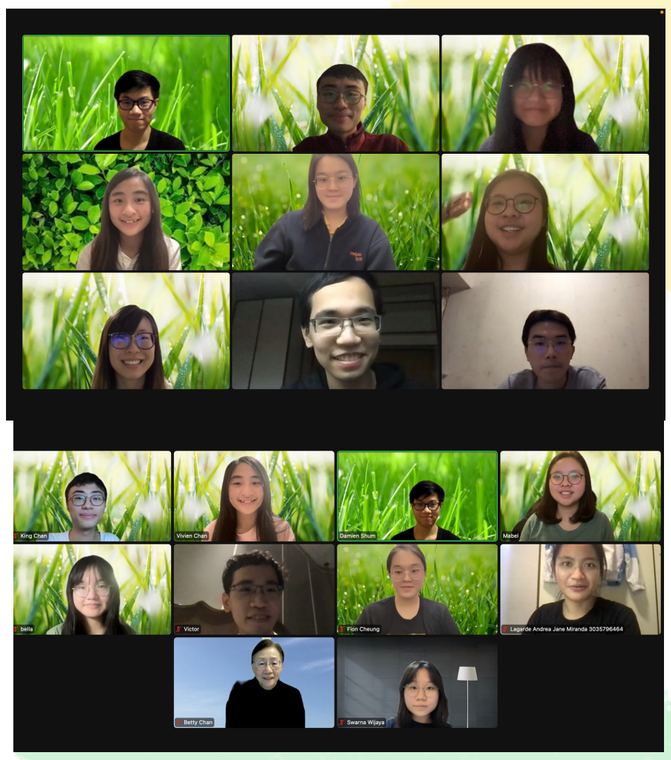
Founded in 1993, we are one of the very first green societies among tertiary institutes in Hong Kong. We believe that every single one of us can contribute and make the world a greener and better place. Therefore, we endeavor to raise the awareness of environmental issues among our fellow students as well as to promote green lifestyle. In addition to organizing activities, we work continuously with the university body to ensure its operation is in line with our green and sustainable concepts.

我們的宗旨

成立於1993年，常綠林為香港最早成立的大專綠色組織之一，二十多年來致力提高港大同學的環保意識及宣揚綠色生活的重要性。除了舉辦不同的綠色活動，我們亦會與校方商討與環保有關的校政，令環保校園的理念得以實踐。

推動保護大自然，和維持人與人和諧共存的關係，就是常綠林的目標。最重要的是，我們相信每個人在環保踏出的每一步，都會令地球變得更美好。

Activities Review
活動回顧



Sub-committee Recruitment Tea Gathering
招攬附屬委員茶聚
7.3.2022 / 25.3.2022

Urban Oasis (Building Tour)
城市綠洲（建築導賞團）
7.6.2022

Workplace Visits to Ocean Park
海洋公園工作實錄
18.6.2022

Beach Cleaning Day
淨灘守碧海
26.6.2022

Joint University Environmental Conference
聯校環保會議
10.7.2022

Farm Visit
農場智多fun
23.7.2022

Upcoming Events
活動展望

September

ICA Carnival
學社聯會嘉年華

Orientation Day
「環環相扣」迎新日

Green Stall
綠色士多

October

Ex-co Recruitment
招莊茶聚

November

Community Planting Day
社區種植日

More activities TBC!

Green Campus
A survey to understand student's recycling habits

Written by Chan Chun Hei, King

0 – Abstract

At HKU, the recycling rate is low and student's awareness on green living is less than ideal. Hence, Greenwoods would like to understand students' recycling habit and help make recycling more convenient and popular at HKU in the attempt to promote the idea of green campus.

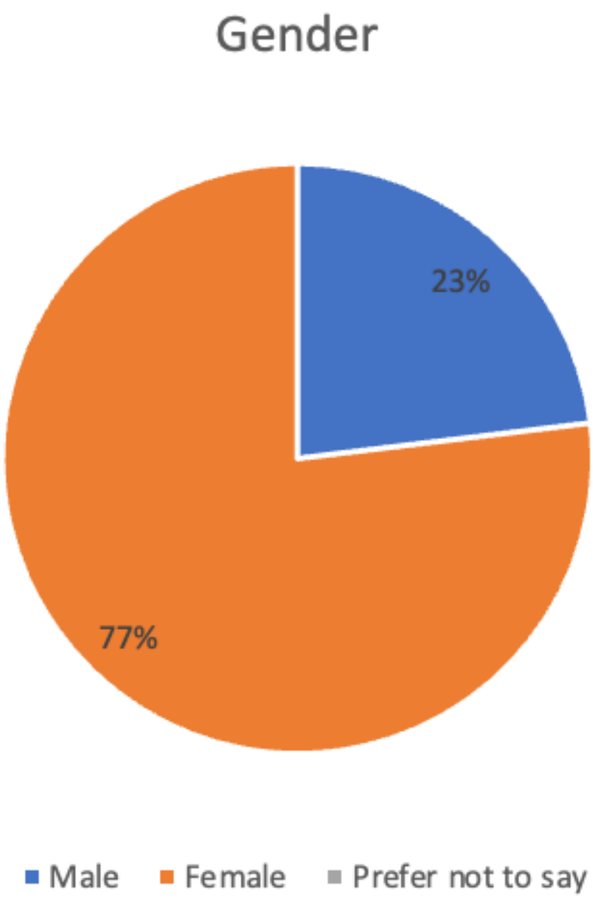
1 – Introduction

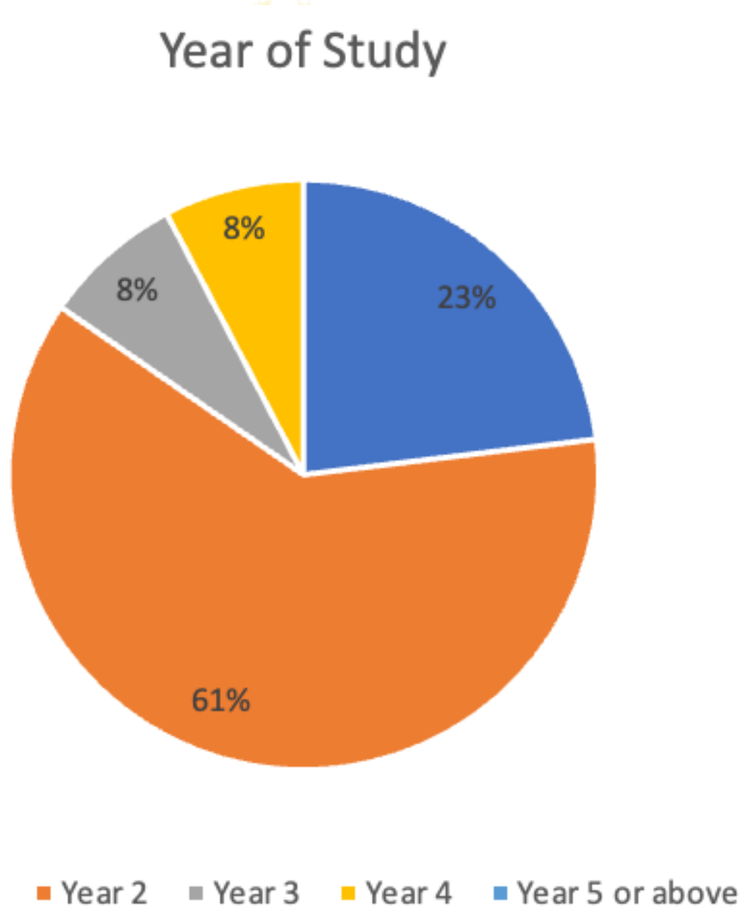
According to statistics from the Environmental Protection Department, only 28% of Municipal Solid Waste (MSW) were recovered for recycling in 2020. The remaining 72% were disposed of at landfills. Among those, 24% were paper, 21% were plastics. There is a huge room of improvement in terms of the recycling rate in Hong Kong.

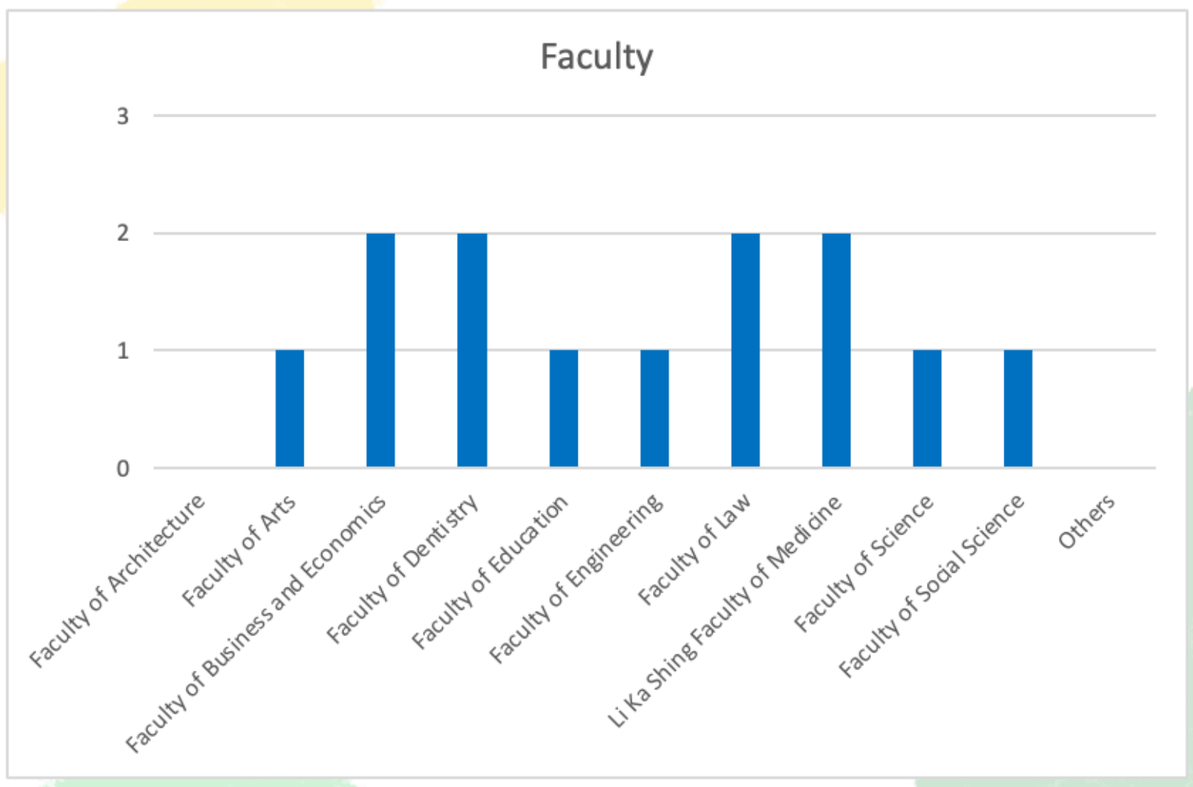
Greenwoods will share the findings with the Sustainability Unit and explore on how to make HKU greener.

2 – Research Methodology

An online survey was designed to understand students' recycling habits and opinion on recycling. The primary data is collected by sharing the online survey link with students on our social media and by inviting them directly. Therefore, this belonged to non-probability sampling. The sampling period started from May 2022 to July 2022. In total, 12 responses were collected from students from various faculties.







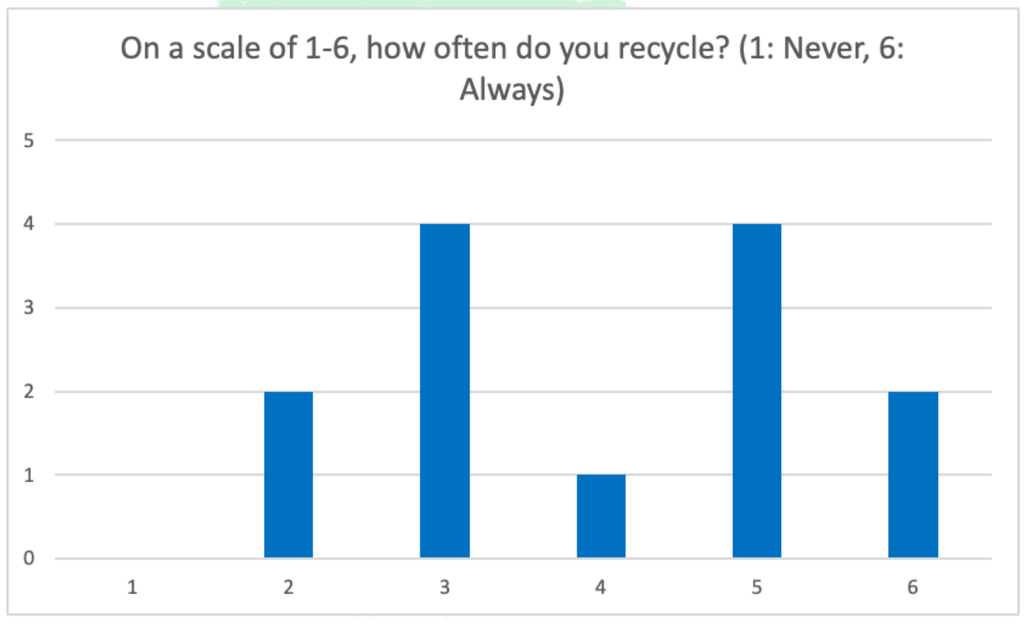
Curriculum (E.g. BBA)

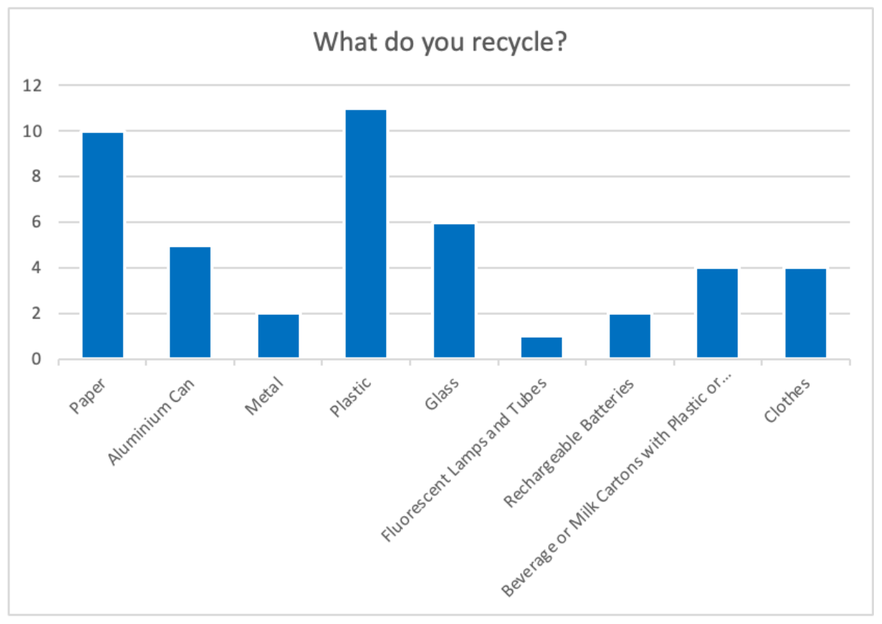
-BASc
-BBA(Acc&Fin)
-BBA(Law) & LLB
-BDS
-BNurs
-BSc
-BSc(Sp&HearSc)
-LLM(Arb&DR)
-MSc(EnvE)

3 – Research Finding

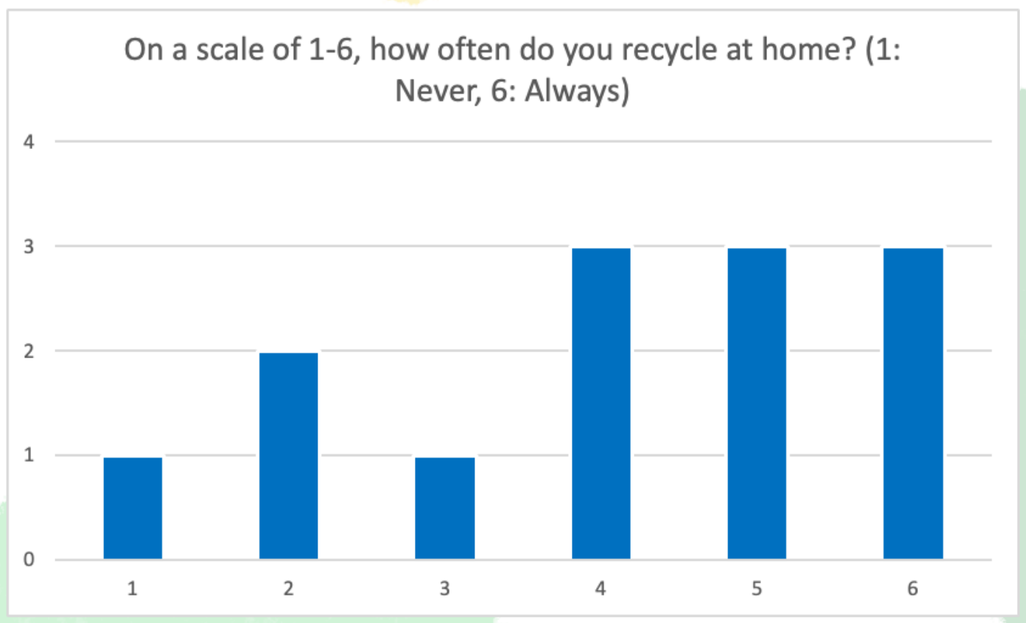
3.1 – Recycling Habit

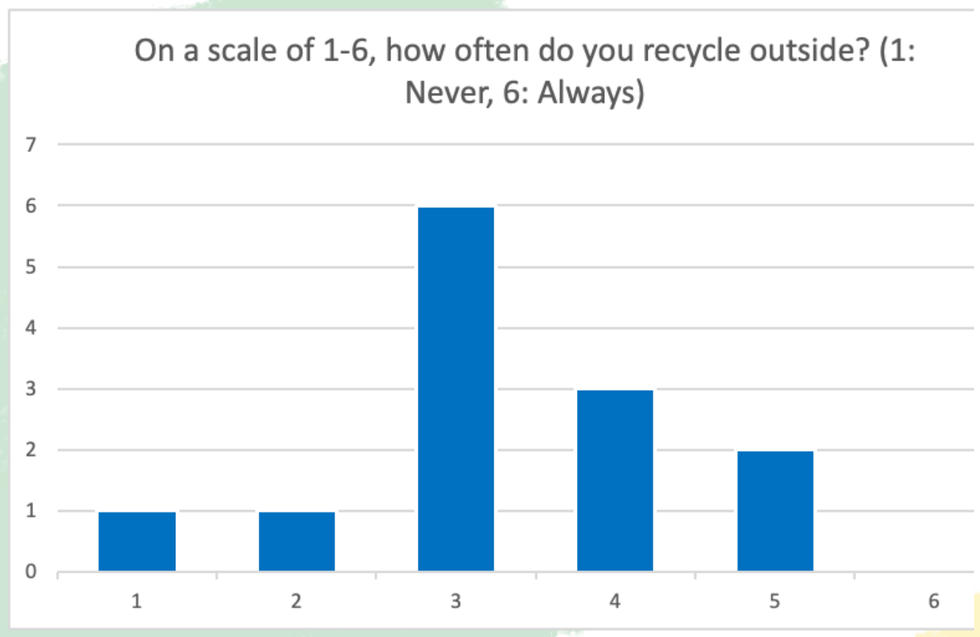
Some students at HKU are accustomed to recycling while some are not. On a scale of 1-6 showing the frequency of recycling, 46% of respondents give a score of 1-3 and 54% of respondents give a score of 4-6. They usually recycle paper (91.7%), plastic (83.3%), following by glass (50%) and aluminum can (41.6%). Some of them recycle beverage or milk cartons, and fabric (33.3%).





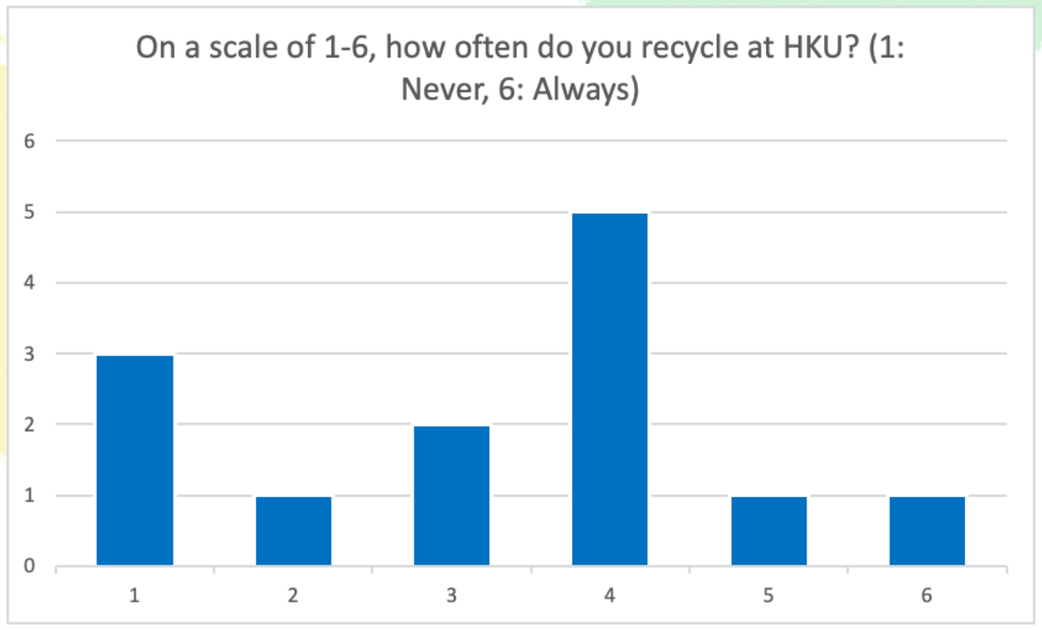
It is also worth mentioning that students recycle more at home than outside (e.g., while on the streets), as it is hard to clean recyclables and find recycling bins outside. On a scale of 1-6 showing the frequency of recycling at home, 31% of respondents give a score of 1-3 while 69% of respondents give a score of 4-6. On a scale of 1-6 showing the frequency of recycling outside, 62% of respondents give a score of 1-3 while 38% of respondents give a score of 4-6.

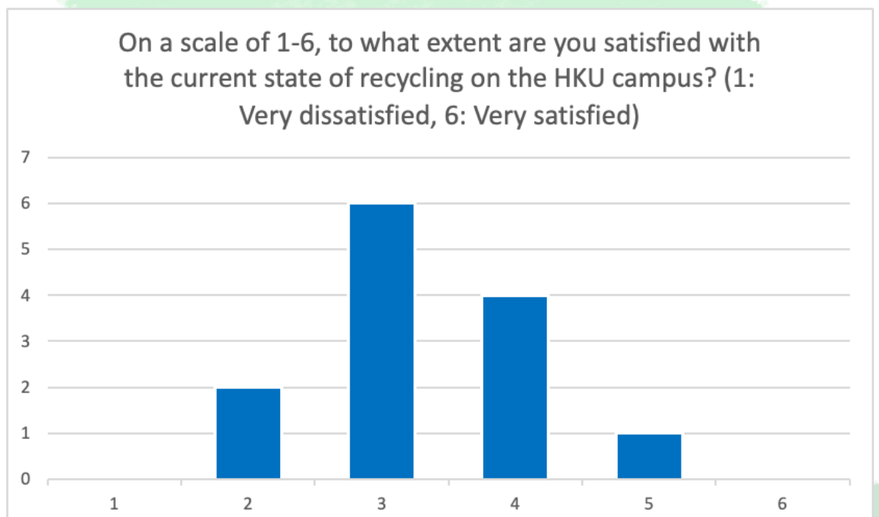




3.2 – Recycling at HKU

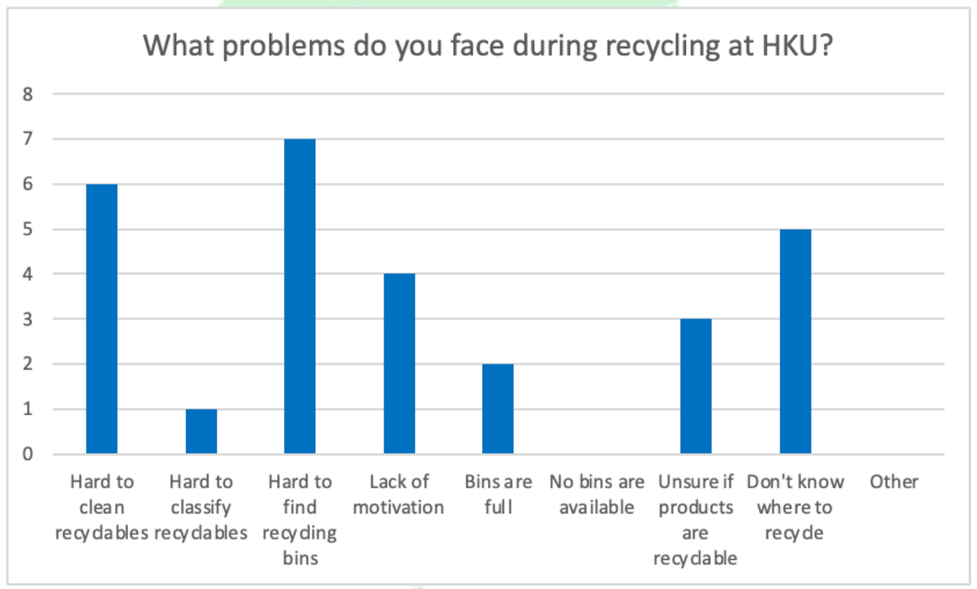
The likelihood that students recycle at HKU is between recycling at home and outside. On a scale of 1-6 showing the frequency of recycling at HKU, 46% of respondents give a score of 1-3 while 54% of respondents give a score of 4-6. This shows that recycling at HKU is more convenient than recycling outside. However, it is less convenient than recycling at home. Therefore, HKU shall improve student's experience on recycling in campus.

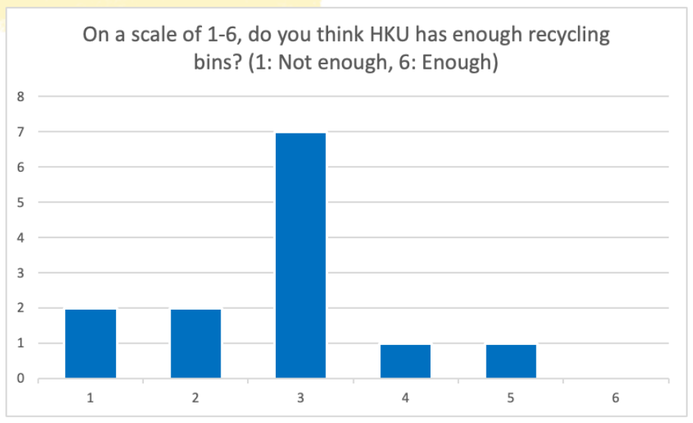


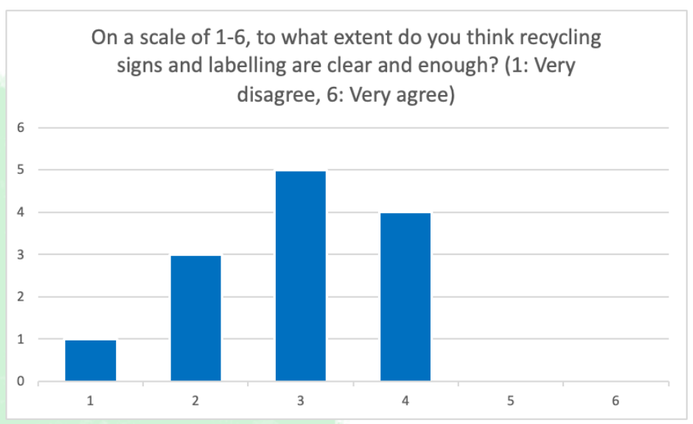


Students generally are not satisfied with the recycling experience at HKU. On a scale of 1-6 to show the level of satisfaction of the current status of recycling at HKU, 61% of respondents are dissatisfied while 39% of respondents are satisfied.

Students face various problems when recycling at HKU. 58.3% of respondents think that it is hard to find recycling bins, 50% of respondents think that it is hard to clean recyclables. 41.6% of respondents do not know where to recycle.

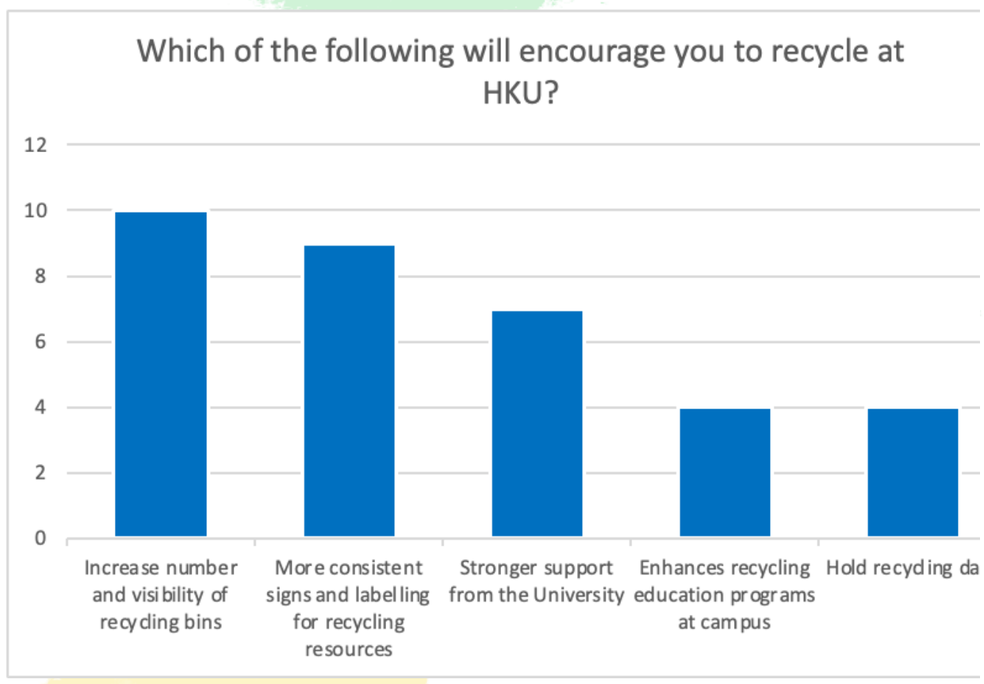


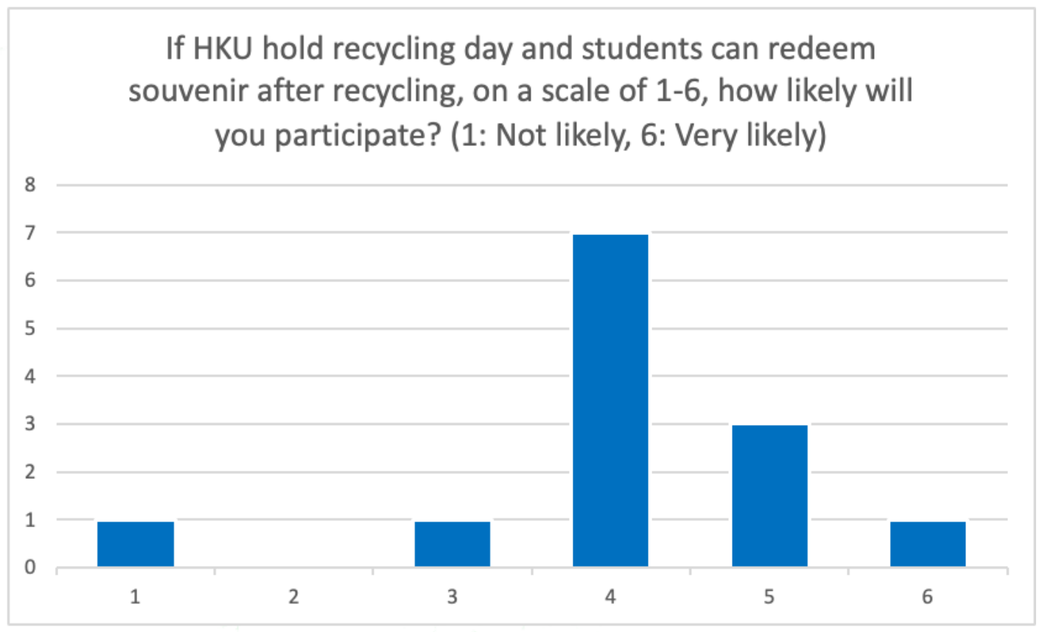




In general, students think that there are not enough recycling bins at HKU. Only 16.6% of respondents think there are enough. Also, the recycling signs and labeling are not clear and enough. Only 16% of respondents think there are clear and enough recycling signs and labeling.

In order to encourage recycling, 83.3% of respondents think that HKU should increase the number and visibility of recycling bins. 75% of respondents think that more consistent signs and labelling for recycling resources are needed. 58.3% of respondents also hope that there is stronger support on recycling from the University. HKU can also make the cleaning of recyclables more convenient by increasing the number of water tap for this purpose. Students also point out that if HKU holds recycling day and students can redeem souvenir after recycling, they are likely to participate. On a scale of 1-6 to show the likelihood of participation, 85% of respondents give a score of 4-6. These souvenirs could be coupon, stationaries or folders. Coupon is the most attractive kind of souvenir, 83.3% of respondents are attracted by coupon. 41.6% of respondents think folders or stationaries are attractive. It is also worth mentioning that the usability of souvenir shall be considered when choosing souvenir. HKU should avoid giving out souvenirs that might be deemed impractical. Otherwise, this will generate more waste. A respondent also suggests that recycling seminar could be included in orientation camps for incoming students.





4 – Further Discussion

In recent years, the Hong Kong Government has put effort in promoting recycling. Green Community (綠在區區) is set up in different districts. Citizens can redeem daily necessities by gaining point for recycling. The Government has also endeavored to improve citizen's recycling experience. For example, Reverse Vending Machines (RVM) are set up, allowing citizens to get back $0.1 for each recycled plastic bottle.

The recycling rate at HKU has a huge room for improvement. According to the statistics from the Sustainability Unit, 3,319,000 kg of waste was sent to landfill in school year 2020/2021. Only 220,046 kg of waste was recycled. The waste diversion rate (recycling rate) was only 6.63%. In comparison, 28% of Municipal Solid Waste (MSW) was recycled in Hong Kong according to statistics from the Environmental Protection Department. The recycling rate at HKU is lower than the average of Hong Kong in general.

To put the low recycling rate into better context, HKUST has adopted an aggressive recycling programme. The waste diversion rate (recycling rate) was 42% in HKUST in school year 2020/2021. They have more than 15 types of materials for recycling ranging from common paper, plastic containers, metal to polyfoam, animal bedding and landscape. Food waste was the biggest part in the recycling program, occupied 38% among all the recyclables. Compostables (landscape and animal bedding) was the second highest recycled material, representing 22% of total materials diverted from the landfill.

HKU should put more effort in waste reduction. Other than raising the awareness on recycling, HKU can also explore less common types of recyclables such as food waste, animal bedding, landscape and wood.

Moreover, the amount of waste disposed of at landfill has increased 10.6% in school year 2020/2021 if we compare with 2019/2020. However, the recycled waste has only increased by 9.4% in school year 2020/2021 if we compare with 2019/2020. We can see that the recycling amount does not catch up with the amount of waste disposed of at landfills in HKU.

Now is the time for every stakeholder at HKU to promote recycling and green living together. Recycling Kiosk (re Kiosk) has been set up by the Sustainability Unit outside Runme Shaw Building. Students can recycle various types of materials including paper, plastic, metal, aluminum can, tetra pak (beverage and milk cartons), glass bottles, rechargeable batteries. In the future, re Kiosk may include more recyclables and be expanded to other areas of the University. However, we observe that the water tap is rarely opened at the re Kiosk. The Sustainability Unit can consider opening the water tap more.

5 – Conclusion

To sum up, there is huge room for improvement in recycling at HKU. Greenwoods suggests that HKU can offer clearer recycling signs and labeling that shows the location of recycling bins and what can be recycled. The Sustainability Unit has designed posters teaching students what part of coffee cup can be recycled. This is a good way to go and HKU can consider expanding it. It is suggested to put such information next to rubbish bins so students are reminded to think twice before using the rubbish bins rather than recycling bins. On top of this, HKU can also explore other less common types of recyclables and consider holding recycling campaign periodically and give out souvenirs upon successful recycle.

Together we hope to make HKU a greener university, and Hong Kong a more sustainable and livable city.

Foodsaver
A survey to understand student's dining habits

Written by Chan Chun Hei, King

0 – Abstract

Greenwoods suggests that catering outlets at HKU can provide an option to select food serving size and proportion. A survey is designed to understand student's dining habits at HKU and consult students' opinions on our proposal. This paper will summarize the survey results, analyze the findings, and suggest proposals to the University.

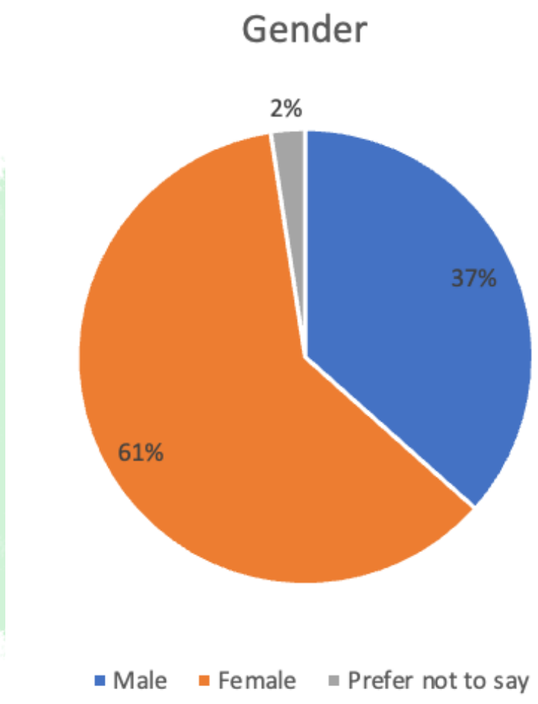
1 – Introduction

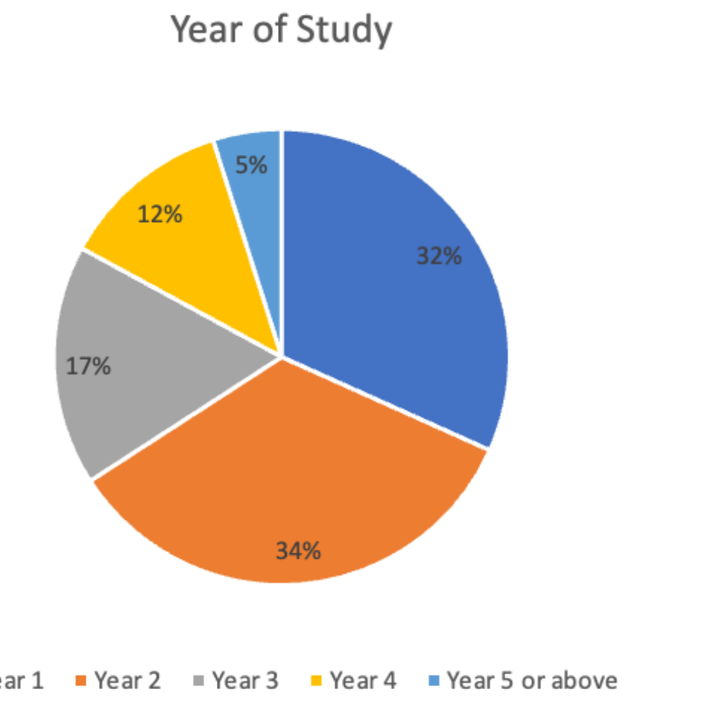
According to statistics from the Environmental Protection Department, most of Hong Kong's food waste is disposed at landfills together with other municipal solid waste (MSW). In 2019, 11,057 tonnes of MSW were disposed at landfills each day. Of these, about 3,353 tonnes (30%) were food waste, constituting the largest MSW category being landfilled. Among the food waste disposed of daily, 1,067 tonnes were generated from commercial and industrial (C&I) sources such as restaurants, hotels, wet markets, food production and processing industries.

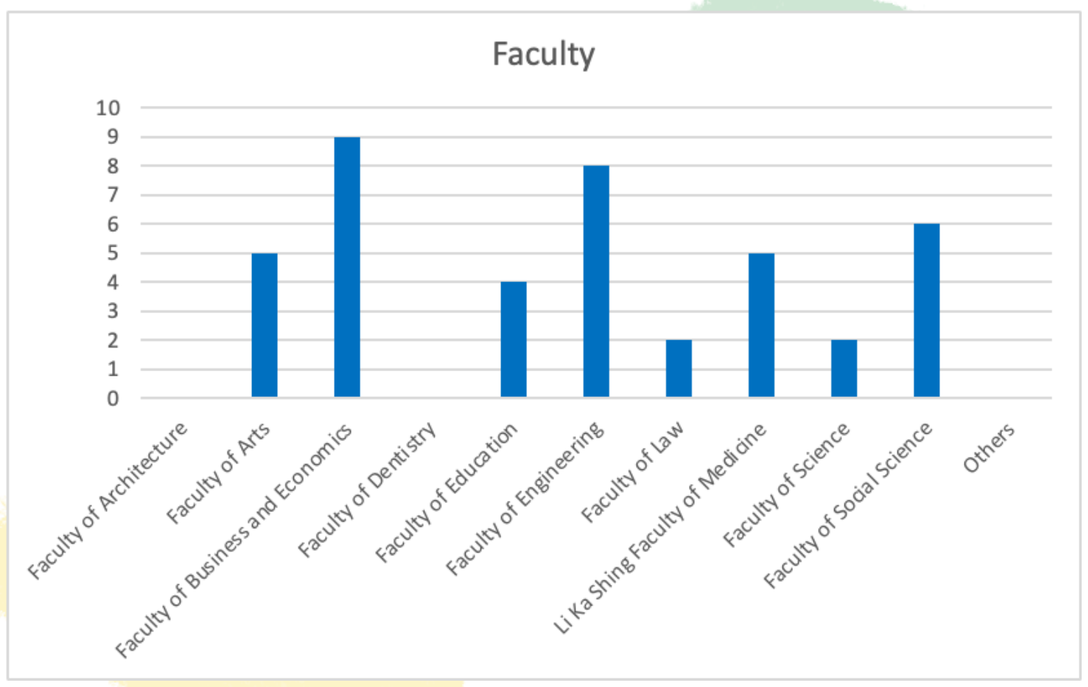
To promote the idea of green campus, Greenwoods proposes that catering outlets at HKU could provide more personalized options to customers when they order (e.g. Less Rice/ Smaller Serving Size). We would like to consult students' opinion on this Proposal. Students at HKU were invited to participate in this online survey on dining habits and food wastage. In this report, we would analyze our findings and explore the feasibility and the implementation method of this Proposal with Cedars.

2 – Research Methodology

An online survey was designed to understand students' dining habits and opinion on the Proposal. The primary data is collected via sharing the survey link with students on our social media and by inviting them directly. Therefore, this belongs to non-probability sampling. The sampling period started from March 2022 to July 2022. In total, 41 responses were collected from students of various faculties.







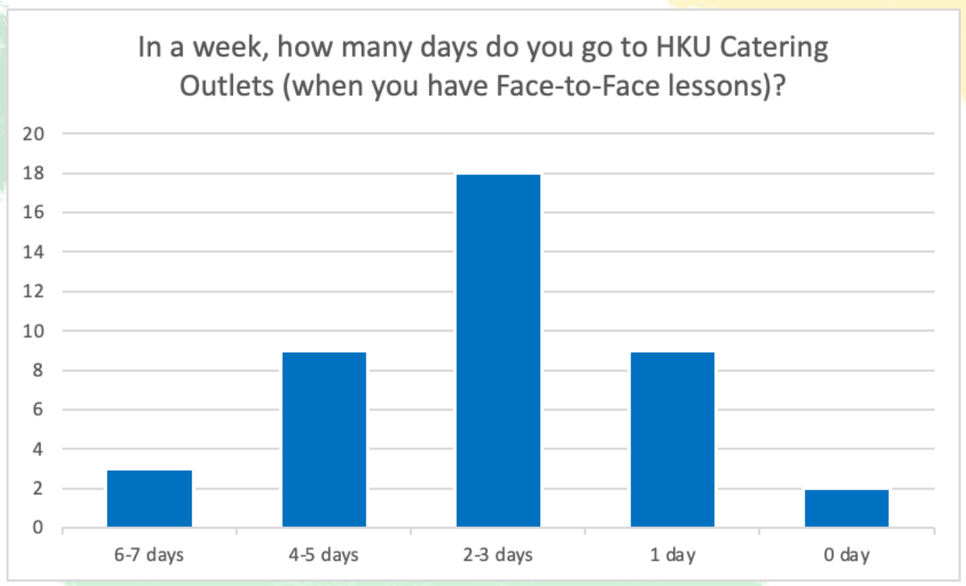
Curriculum (E.g. BBA)

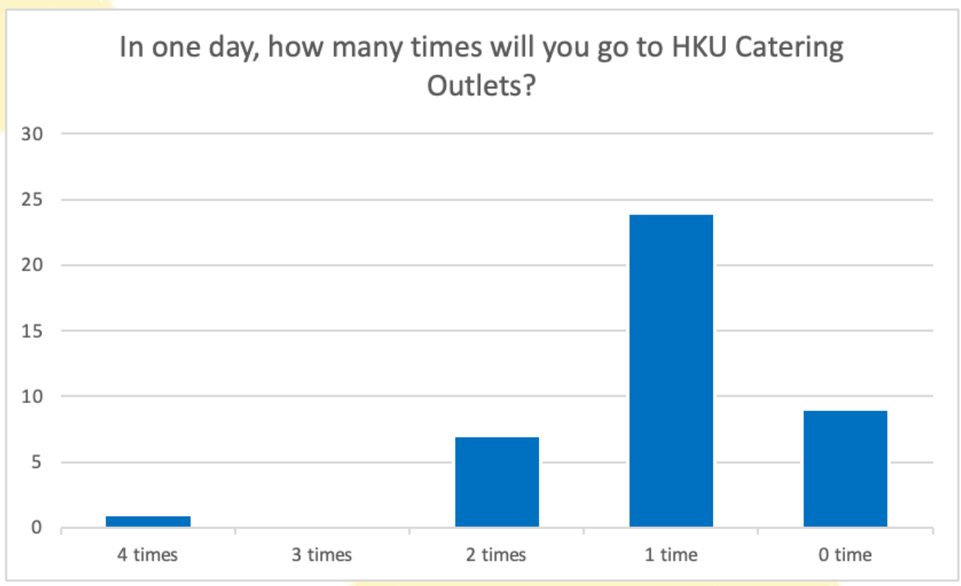
-BA
-BASc
-BASc(FinTech)
-BBA
-BBA(Acc&Fin)
-BBA(Law)&LLB
-BEcon&Fin
-BEng(CompSc)
-BEng(EngSc)
-BNurs
-BPharm
-BSc
-BSc(Sp&HrSc)
-BSocSc
-BSocSc(Govt&Laws)&LLB
-LLB
-LLM(Arb&DR)
-MBS
-MPH
-PhD
-SLGP

3 – Research Findings

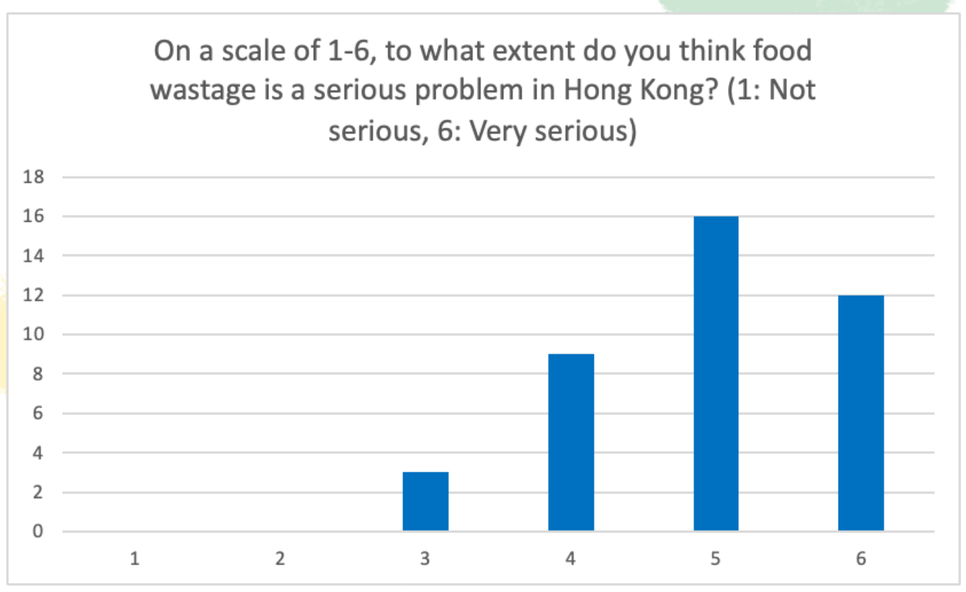
3.1 - Dining Habit

Most students (44%) go to Catering Outlets 2-3 days weekly. Most students (59%) go to Catering Outlets once per day only. They usually have lunch at Catering Outlets.





92.5% of respondents agree that food wastage is a serious problem in Hong Kong. The most common reason why students do not finish all food on plate is due to the large serving size (45%) and the bad taste of food (29%).



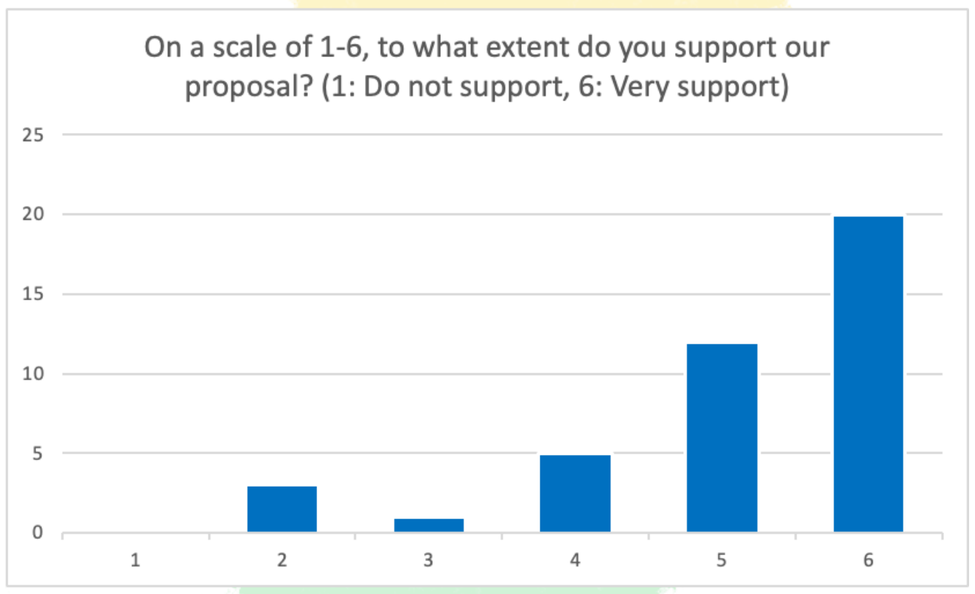
3.2 – The Proposal

Greenwoods suggests that catering outlets at HKU provide more personalized options when ordering food at cashier and kiosk. These options may include:

- Smaller/larger serving size
- Less/more rice
- Less/more meat
- Less/more vegetables

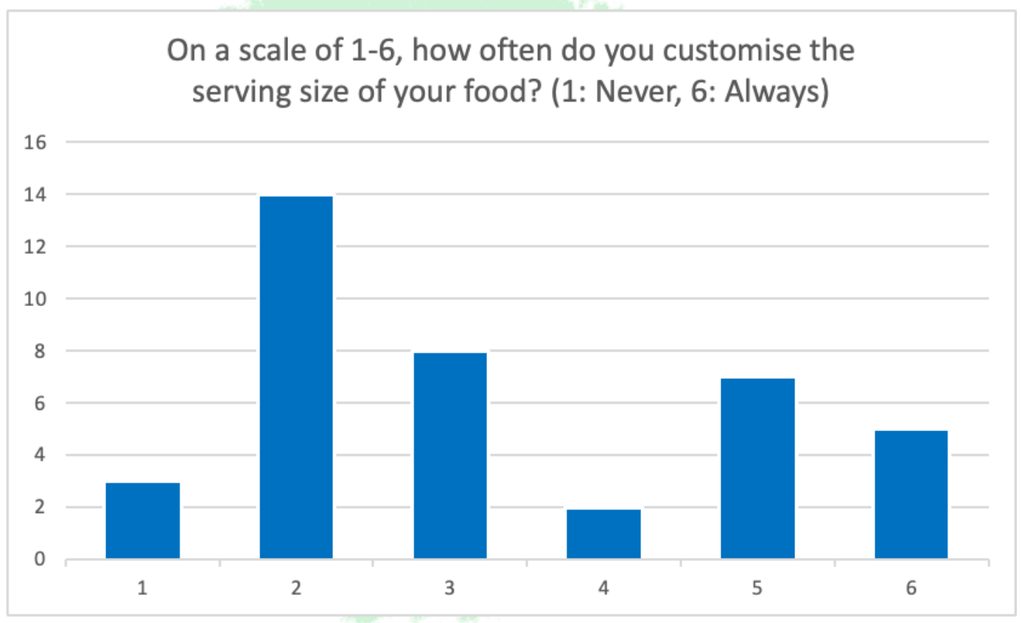
Other than providing more personalized options, Catering Outlets can also increase transparency by adding serving amount and calories of food in the menu or on a website. This allows student to plan the serving size of their food wisely.

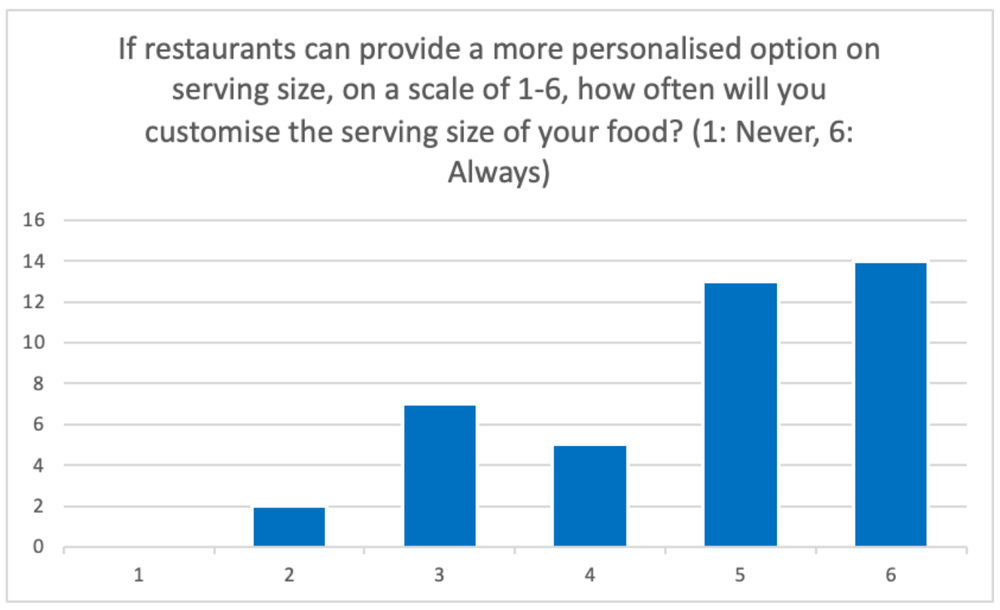
In general, students support our proposal. On a scale of 1-6 to measure their degree of support, 49% of respondents fully support us by giving a score of 6. 29% of respondents give a score of 5.



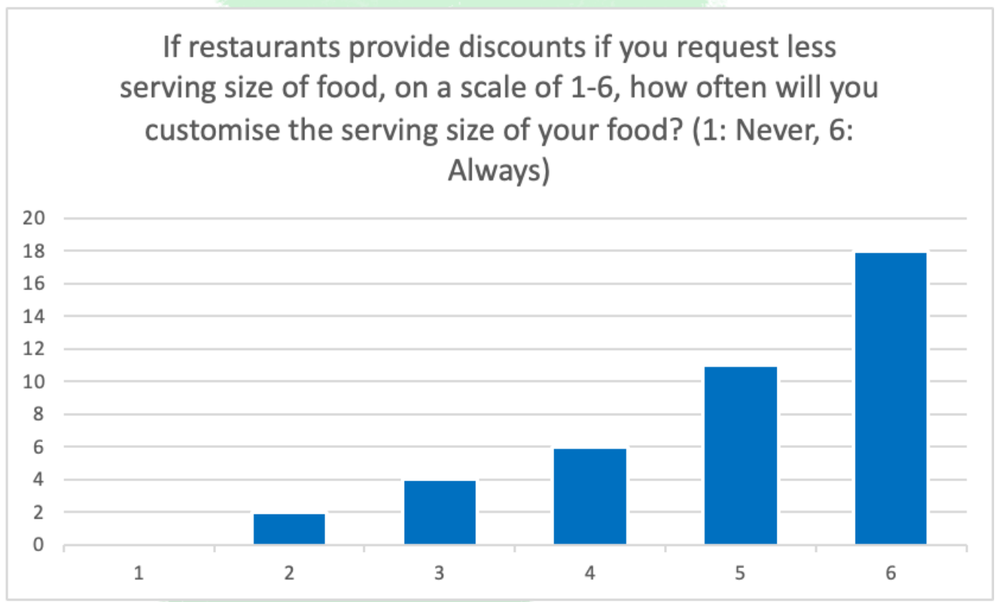
Students think the potential problems they face when customizing the serving size are inconvenience and that fact that staff in restaurants might forget their requests. If Cater Outlets allow students to customize the serving sizes of food at the cashier and ordering kiosks, and the order records contain this information, it will be more convenient for both students and kitchen staff. This will also minimize the chance of making any mistake.

Currently, most students seldom customize the serving size of food as restaurants do not have a mature system for it. On a scale of 1-6 to show the frequency of food customization, 65% of respondents give a score of 1-3. However, if Catering Outlets can provide a user-friendly option to customize serving size, most students will be willing to utilize the function. On a scale of 1-6 to show their likelihood to customize serving size after Catering Outlets provide such option, 78% of respondents give a score of 4-6, in which 34%, 32% and 12% of respondents give a score of 6, 5 and 4 respectively.





Furthermore, if Catering Outlets can provide discounts when students request smaller serving size, the incentive for students to treasure food will be higher. On a scale of 1-6 to show their likelihood to customize serving size if restaurants provide discount, 86% of respondents give a score of 4-6, in which 44%, 27% and 15% of respondents give a score of 6, 5 and 4 respectively.



The type of discount that students prefer most is direct discount on food price. Catering Outlets may consider giving discount to students requesting smaller serving size and charging extra money if students request larger serving size. This discount model is used in restaurants in HKUST.

4 – Conclusion

To sum up, food wastage is a serious problem in Hong Kong and this problem exists in HKU Catering Outlets. Some students do not finish all their food. Therefore, Greenwoods suggests that Catering Outlets provide a premise and user-friendly system to facilitate customization of serving size in the ordering system at kiosks and the cashier. Discounts can also motivate students to reduce food waste. We believe that this is a win-win-win proposal for the University, the Catering Outlets and students.

Some universities such as HKUST already have the option to customize serving size and provide discounts accordingly. We hope that this win-win-win proposal can be implemented in HKU. Catering Outlets can also use the University as a place to test out this sustainable food ordering model. Other than in the University, Greenwoods hopes that more restaurants in Hong Kong can implement a similar model. Together we can make Hong Kong a more livable and sustainable city.

Life is not chill in Po Toi

Written and photographed by Abe Wong
Edited by Kamakshi Gupta

On the 17th of July, another Very Hot Day signal is issued by the Hong Kong Observatory. People queuing at the Stanley Market bus stop are trying to squeeze into the narrow shade of the covering, bending away from the sunlight as a sunflower does. While folks here are only a few steps away from coolness, residents in Po Toi have to move their houses to downtown for the air-con.

Po Toi restaurant without aircon.

The wide view of Po Toi.

Generator room in Po Toi.

Po Toi is a small island lying in the south-east side of Hong Kong Island, known for no water supply and power grid among the locals. Life seemingly go back to the basics: collect rainwater, drink from the stream, and generate electricity from diesel. During winter when precipitation dries up, they have to call the Home Affairs Department to deliver water from Hong Kong Island. However, when it comes to electricity outages, they have no other way but to tolerate them.

The current electricity in Po Toi relies heavily on the diesel sponsorship from PCCW. “Many years ago, Kai-Shing Lee visited our island. He found out his phone has no signal here,” says Mui-Tse, an elder who grew up in Po Toi. “He set up a signal station here and gave us diesel for its operation.”

Po Toi residents are storing barrels of diesel.

PCCW has been granting seven barrels of diesel to Po Toi every month for decades now, according to Mui-Tse. The oil price soared from around 1000HKD in 1998 to over 3500HKD (Knoema, 2016; Global Petrol Price, 2022), equating seven barrels of diesel to the value of one and a half bars of gold today. PCCW decided to call off this oil supply at the end of this year.

One of the major local electricity providers, The Hongkong Electric Co., Limited (HK Electric), pitched the idea of installing solar panels as a supplementary source of electricity to the residents of Po Toi back in 2017. "I have been following up this case, but then it is not making progress," says the founder of Po Toi Concern group, Shing Law.

Founder of the Po Tai Concern Group, Shing Law.

However, technical challenges hampered this idea. According to Environment Bureau's reply (July, 2021), HK Electric is still seeking new technology and suitable parties to manage the distribution of resources and residents' involvement.

The government vowed to develop green energy, the Environmental Bureau leaflet says (October, 2021), to achieve 7.5% to 10% of renewable energy from less than 1% current share by 2035. Feed- in Tariff (FiT) scheme was implemented in 2018 (GovHK, 2022) to embrace private impetus. As of 2022, individuals or organizations, can sell the renewable energy they have generated to the power companies at $2.5-4kWh as of 2022.

Lack of talent holds back the development of solar energy, according to Dr William Yu Yuen-ping, the founder and chief executive officer of the World Green Organisation, as reported by HKFP (December, 2018). When Law is asked if he will consider setting up a solar power system by themselves, he expresses a similar concern. “Self-financing is sensible, but the problem is, is there anyone here to help on construction and management?"

The revised FiT rate has been adjusted downward by nearly 20% starting from April 2022. Large- scale open car park applicants are allowed to use up the full area (GovHK, 2022). However, the legal usage of roof area remained at half for the village house applicants, but with reduced rates as well. HK Electric proposes an area limit due to space and cost concerns, and hence, ensures a reliable, safe, and stable power supply, according to government press releases.

“It is more like a token,” says Priscilla Lin, one of the founders of the solar power lobbying group, Solmunity. She points out that the current policy is more of a business concern and discouraged the investor.

Members of Solmunity.
(Source: Priscilla Lin)

Lin criticizes the openness and community engagement of the current policies. “Have they ever asked if they (the citizens) prefer solar energy or nuclear energy?” says Lin. She adds that the government should make the grid open for the other power suppliers if the two electricity companies are not enticed to develop green energy.

A survey done by HKPOP (January, 2022) shows that over half of the citizens think that governments around the globe are more responsible for climate change. Followed industries with high carbon emissions for 46 percent of the citizens have chosen it as the second responsible party.

Hong Kongers have been experiencing record-breaking numbers of Very Hot Day signals issued in the past few years (Hong Kong Observatory, 2022). When Law is asked whether he will consider setting up a solar power system by themselves, he says “fare paid by their users, this is the ruler of heaven."

References

Eldridge. (2016). Hong Kong - Pump price for diesel fuel. Knoema. https://knoema.com/atlas/ Hong-Kong/Diesel-price

Environmental Bureau. (2021). Hong Kong’s CLIMATE ACTION PLAN 2050 [Pamphlet]. Environmental Bureau. https://www.climateready.gov.hk/files/pdf/CAP2050_leaflet_en.pdf
Global Petrol Prices. (2022, July 18). Hong Kong Diesel prices, 18-Jul-2022. GlobalPetrolPrices.com. https://www.globalpetrolprices.com/Hong-Kong/diesel_prices/

HKPOP. (2022, January). Survey title [Data set]. https://www.pori.hk/wp-content/uploads/2022/02/
Panel_report125_eng_2022feb04_PORI.pdf

Hong Kong Observatory. (2022). Number of Very Hot Days. Hong Kong Observatory. https://
www.hko.gov.hk/en/cis/statistic/vhotday_statistic.htm

The Government of the HKSAR. (2022, June). Feed-in Tariff. GovHK. https://www.gov.hk/en/
residents/environment/sustainable/renewable/feedintariff.htm

The Government of the HKSAR. (2022, April 26). Government announces new Feed-in Tariff rates
and introduces facilitation measures on installation of solar photovoltaic systems in open car parks by private sector [Press release]. https://www.info.gov.hk/gia/general/202204/26/P2022042600448.htm

Varsity. (2018, December 25. A bright future? Why solar energy in Hong Kong still has a long way to go. HKFP. https://hongkongfp.com/2018/12/25/bright-future-solar-energy-hong-kong-still-long-way-go/

Which Ways Do the Tides Turn – Will Heat Waves Engulf Mankind or Will We Stay Afloat in Coolness?

Written by Shum Hou Zit, Damien

The summer of 2022 seems particularly unforgiving, even while this article was being written, the whole world burned. From the fabled raining city of London, to the Chinese metropolis of Shanghai, the scorching heat spared none as new temperature highs were detected. Wildfires sprang up across Europe, rendering thousands evacuees and acres after acres of land crisped (Davies, 2022). In our home city of Hong Kong, the hottest ever "Great Heat" day in traditional Chinese calendar was recorded this year, shattering all previous accounts (RTHK, 2022). In occident, the sudden rise came as a shock with people caught completely off guard while in orient the continuous torment made even the veterans against heat struggle. We must bear in mind, however, that the heat waves' malignity goes beyond mild displeasure; it brings actual damage to our economy, environment and even personal safety. Studies have shown that the rise in temperatures, leading to heat stress, reduced water availability as well as unnatural accelerated life cycles, can result in a lowered productivity in our workforce and a reduced crop yield across the globe. Apart from a threatened economy, Mother Nature herself may be forced to accept a more polarized environment with droughts and floods becoming ever more common (Nugent, 2022, Gray, 2021). To take the menace to a more personal level, the damages done can be so visible such that over a thousand perish from the heat, as shown tragically in Spain and Portugal (Deutsche Welle, 2022). Sad as it might appear, but most seem to have already been accustomed to the new records, new tragedies and perhaps a new world. Yet, must that be the path we take? Are there no ways we could extricate our cities and of course ourselves from the unwelcome warmth?

Where one door closes, another opens. It is true that the challenges we face today are herculean, but it would be unfair to say all options have been exhausted. If we take this opportunity to discuss only the rising temperature and leaving the broader global warming subject for another time, for it deserves its own lengthy deliberation, we can consider one major solution – the changes our urban designs could adopt.

In terms of what roles urban designs could play, it boils down to one point – cooling. An infamous process that traps and raises the temperatures in a city known as the urban heat island effect is perhaps nothing unfamiliar for those that reside in Hong Kong, but with revised city designs, it can be eased and the environment could become more livable. With this in mind, we can in turn establish two suitable solutions, one being the affordable and swift actions we could take; and two, the complex and strategic redesigns that would require government backing. Beginning with the simpler actions, planting trees could be a good start. When done along the streets, not only does the vegetation provide much-appreciated shades for the pedestrians, the carbon dioxide and other pollutants emitted from cars and other city functions can also be absorbed and filtered, thus lending an extra hand to cooling the planet. Further, via transpiration, whereby the trees release water into the air in the form of vapor, the air nearby, which is to say the streets will experience a cooling effect (EPA, 2022). The same method could be replicated elsewhere as well; on the rooftops of high-rises or in fact any structurally safe buildings, plants of different kinds could be raised, strengthening the cooling effect across a city.

In terms of what structural redesigns a city can be expected to undertake, one fundamental natural element may be of assistance: water. Properly utilized, simply having water flow through a city can bring forth surprising differences. To illustrate this point more vividly, we shall look at one of the most prominent examples in recent years. In the South Korean capital of Seoul, there used to be a tiny stream buried under tons of concrete after the city expanded in size and population. However, in 2003, the authorities endeavored to restore that stream; thousands of tons of water had to be pumped from a nearby river, concrete banks had to be installed, highways that originally ran above the stream were to be redirected, suffice to say, tremendous government support was needed, but tremendous success it yielded. That stream is called the Cheonggyechon. Records show that the revitalized stream brought down the surrounding temperature by as much as 9.6 degree Celsius in the heart of the city. Moreover, with trees now planted around it, the heat island effect is further eased (The Dong-a Ilbo, 2005). While different cities shall require vastly diverse procedures and execution methods, it is not inconceivable that similar plans could be implemented. In urban areas where the heat in summer is only going to upsurge, it would be wise for governments around the world to begin formulating their own Cheonggyechon.

All in all, the fact that our planet, and to our great displeasure, our cities and population centers are threatened by rising heat is undeniable. Apart from any larger, strategic scheme to halt the global warming's march, we still have steps to take to stop the heat waves like this year's from incinerating us in the cities. The aforementioned trees and rivers are no doubt only the tip of an iceberg; many more options remain undiscovered and unused, if we wish to safeguard of living standards, then more efforts must be input.

References

Davies, A. (2022, July 18). Heatwave engulfs much of Europe as wildfires rage. BBC News. Retrieved July 24, 2022, from https://www.bbc.com/news/world-europe-62206006

Deutsche Welle. (2022, July 22). Who says heat-related deaths top 1,700 in Spain, Portugal. DW.COM. Retrieved July 24, 2022, from https://www.dw.com/en/who-says-heat-related-deaths-top-1700-in-spain-portugal/a-62569446

EPA. (2022, July 7). Using Trees and Vegetation to Reduce Heat Islands. EPA. Retrieved July 24, 2022, from https://www.epa.gov/heatislands/using-trees-and-vegetation-reduce-heat-islands

Gray, E. (2021, September 28). NASA at your table: Climate change and its environmental impacts on crop growth – climate change: Vital signs of the planet. NASA. Retrieved July 24, 2022, from https://climate.nasa.gov/news/3116/nasa-at-your-table-climate-change-and-its-environmental-impacts-on-crop-growth/

Nugent, H. (2022, July 19). Here's how heat waves can impact economies, as well as people and Wildlife. World Economic Forum. Retrieved July 24, 2022, from https://www.weforum.org/agenda/2022/07/heat-waves-economy-climate-crisis/

RTHK. (2022, July 23). Hong Kong swelters on Hottest "Great Heat" Day Ever. RTHK. Retrieved July 24, 2022, from https://news.rthk.hk/rthk/en/component/k2/1659047-20220723.htm

The Dong-a Ilbo. (2005, August 12). Stream Restoration will cool down Seoul. www.donga.com. Retrieved July 24, 2022, from https://www.donga.com/en/List/article/all/20050812/242916/1

疫情之後，如何延續綠色生活？

譚詩茵

隨著各國的疫情逐漸放緩，這場席捲全球將近三年的疫情似乎看到了結束後的曙光。疫情之下，我們的生活方式經歷了翻天覆地的轉變。疫情令空氣污染、噪音污染、水污染減少，降低溫室氣體排放。其中有什麼方式我們可以繼續保留，繼續延續綠色生活？

第一，疫情之後可以繼續鼓勵遠程辦公的工作模式。遠程辦公減少每日通勤的時間，地面上的交通自然就減少，使二氧化碳排放量減少。在美國，遠程辦公在疫情期間從5%大幅上升至37%，高達91%的員工表示希望延續遠程辦公或混合辦公的模式。雖然遠程辦公可能會造成電子產品的消耗，但實體辦公也會如此。因此在可預見的將來，企業也可以繼續實行遠程辦公，減少地面交通的使用率，從而減少碳足印。

第二，疫情之後可以繼續使用環保餐具。疫情下，香港海洋公園保育基金的調查顯示，疫情令香港市民日益依賴外賣和食物外送服務，更頻繁使用一次性塑膠飲管、餐具及容器，自2017年來首次回升。雖然一次性用品的使用率大增，但來自19個國家的近130名科學家、學者和醫生最近表示，只要採用基本的衛生措施，可重複使用的包裝與容器在疫情期間是更安全的，越來越多人也選擇使用環保餐具。根據綠色和平的數據，在英國每年 25 億個咖啡杯帶來的垃圾量，足以環繞地球 5.5 圈。因此環保組織City to Sea 於2020年發起了無接觸式購買咖啡的活動，呼籲消費者於疫情期間，繼續以環保杯外帶咖啡。因此，疫情之後，我們何不繼續使用環保餐具，不僅可以減少固體廢物使用量，還可以更加環保。

最後，疫情之後可以繼續專注本地旅行。疫情下不能去外國，許多人改為在本地遠足、旅行，讓許多人發現本地遊的可能性，令精煉油料和煤炭減少。故此，疫情後也可以大力推動本地旅遊和遠足，減少外地旅行所帶來的碳排放。

References

Shreedhar, G., Laffan, K. & Giurge, L. (March 7, 2022). Is Remote Work Actually Better for the Environment? Harvard Business Review Home. https://hbr.org/2022/03/is-remote-work-actually-better-for-the-environment

綠色和平（2021）。疫情有得有失，扭轉世界環境和氣候情況? https://www.greenpeace.org/hongkong/issues/health/update/29915/%E7%96%AB%E6%83%85%E6%9C%89%E5%BE%97%E6%9C%89%E5%A4%B1%EF%BC%8C%E6%89%AD%E8%BD%89%E4%B8%96%E7%95%8C%E7%92%B0%E5%A2%83%E5%92%8C%E6%B0%A3%E5%80%99%E6%83%85%E6%B3%81%EF%BC%9F/

綠色和平（2021）。後疫情時代的減塑生活? 循環經濟是關鍵 https://www.greenpeace.org/taiwan/update/26415/%E5%BE%8C%E7%96%AB%E6%83%85%E6%99%82%E4%BB%A3%E7%9A%84%E6%B8%9B%E5%A1%91%E7%94%9F%E6%B4%BB%EF%BC%9F%E5%BE%AA%E7%92%B0%E7%B6%93%E6%BF%9F%E6%98%AF%E9%97%9C%E9%8D%B5/

香港海洋公園保育基金（2021）。香港海洋公園保育基金最新調查結果顯示 新冠疫情令一次性塑膠製品使用量回升 https://www.opcf.org.hk/tc/press-release/opcfhk-survey-shows-increase-in-single-use-plastic-products-usage-during-covid-19

綠色和平（2020）。重複使用更安全：超過125位專家砲轟塑膠產業 https://www.greenpeace.org/taiwan/update/19430/%E9%87%8D%E8%A4%87%E4%BD%BF%E7%94%A8%E6%9B%B4%E5%AE%89%E5%85%A8%EF%BC%9A%E8%B6%85%E9%81%8E125%E4%BD%8D%E5%B0%88%E5%AE%B6%E7%A0%B2%E8%BD%9F%E5%A1%91%E8%86%A0%E7%94%A2%E6%A5%AD/

漁業補貼—救贖抑或是破壞

張芷晴

海洋佔整個地球的70%，是所有地球生命的源泉。然而這些資源卻不是用之不盡、取之不歇的。近數十年來，科技和遠洋捕撈技術進步飛快，但由於至今仍缺乏完善的政府和國際組織管制，珍貴的海洋資源將逐漸衰竭。這不僅對生態系統造成了嚴重的破壞，更加劇了貧富懸殊問題以及虐待漁工等人權問題。究竟有什麼是我們能夠做的？這一年國際社會的反響又是如何？現行的發展是否會對自然生態造成不可逆轉的影響？這些都值得我們深入討論。

根據聯合國糧食及農業組織（FAO）2016年發布的《世界漁業和水產養殖狀況》（SOFIA）報告，在過去的40年，海洋物種的的數目已經減少了39%。而現在全球有將近90%的魚類逼近或者已經低於可持續生存的數量，當中更有30%的魚類種類已經無法持續生存，代表在不久的將來，我們將無法再在海洋裡看到他們的身影。

事實上，早有跡象表明魚類資源正在被耗盡，全球漁業陷入一個惡性循環。有研究指出，自1990年代起，漁獲量沒有顯著的上升，然而漁船的數目卻增加了將近兩倍。捕魚越來越困難，漁業需要更多的資源、科技、資金去進行捕撈，並且需要前往更遠的海域作業。這不單大幅增加了燃油成本，以及加劇海洋污染，魚類資源的耗盡更是增加了非法捕撈的數目。在這個情況下，國際間有採取任何措施去抑制過度捕撈的情況嗎？很可惜，許多國家非但沒有立法禁止捕撈，更是選擇了提供漁業補貼給這些無法獲利的漁船，目前五成以上在公海航行的漁船得依靠政府資助獲利的，當中絕大部分的政府補貼更是流向了大型工業漁船，同時也有一部分政府資金被用於非法、未報告和無管制（"Illegal, unreported and unregulated (IUU) fishing"）捕魚。根據現行的研究，雖然沒有實際的研究報告指出漁業補貼是導致過度捕撈的主因，但卻間接證明了全球漁業管理的漏洞。正常情況下，如果過度捕撈導致漁類資源減少，漁民無利可圖，他們則會選擇離開相關行業。然而現在由於得到政府補貼，扭曲了市場供需制度，反而助長了過度捕撈，因此補貼是人為以及國際組織能夠共同努力解決的問題。

最值得關注的是世貿組織自2001年起便嘗試從漁業補貼限制入手，努力解決過度捕撈的問題，而在今年6月成功在日內瓦月在日內瓦舉行的第12屆部長級會議上取得了突破性進展（Earth. Org, 2022）。 在這次會議，《漁業協議》中引入了新的規則 (World Trade Organization, 2022)，禁止對非法、未報告和無管制（IUU）捕魚的補貼，並限制對已被過度捕撈的魚類的補貼。 此外，協議允許補貼為了將漁業資源重建到「生物可持續」的水平，並包括加強政府對其如何補貼該行業的透明度和問責制的措施。 這個條款成功對漁業補貼進行了規範，並禁止了非法捕撈的進一步擴張和惡化，同時也鼓勵政府補貼那些真的能夠重塑海洋環境，打造可持續生態的措施。

但是，這個協議只是打擊過度捕撈的第一步。首先，與許多國際協議一樣，《漁業協議》是世界貿易組織和各國代表經過長期交談協商達成的條款，當中經過多方妥協才達至相關協議的內容，故此，規範並不一定能夠涵蓋所有造成過度捕撈的補貼問題。其次，這次的協議僅僅禁止對捕撈已經過度捕撈的魚類的漁船進行補貼，但是卻未能針對漁業發展的長期管理進行詳細的計畫；仍有一些漁船申請補貼是為了增加捕魚能力以及減少相關開支，這個情況下政府依然會為他們提供資助，並擴張他們的船隊，研究顯示輪船增加對魚群減少有一定程度的影響（Weber, 1994），長遠依然會對海洋環境造成不可逆的危害，減少生物多樣性。最後，WTO的文件普遍缺乏法律約束性，究竟簽訂的160多個國家中有多少會真的按照協議約束漁業補貼，實在難以估算。

如果我們希望保護海洋物種，讓自己以及下一代仍然能在這片海域裡看到這些美麗的生物，我們必須在2030年前保護全球至少三成的海洋(Karen, 2022)。雖然《漁業協議》依然有許多箝制，但他依然為保護海洋生態做出了一大突破，希望在不久的將來，我們能夠看到各國主動承擔起責任，不僅為了經濟的發展，更為了人類的將來，海洋生物的生存提出實質的措施。

References

Environment -- Net Loss: Fish, Jobs and the Marine Environment by Peter Weber. (1994). National Journal, 26(32), 1884–. National Journal Group, LLC.

Food and Agriculture Organization of the United Nations. (2016). The State of World's Fisheries and Aquaculture.

Karen, M. V. (2022, March 10). Un ocean treaty is 'once in a lifetime' chance to protect the high seas. The Guardian.

Martina, I. (2022, June 22). WTO Bans Fishing Subsidies in Historic Deal to Reduce Global Overfishing. Earth.Org. Retrieved July 29, 2022, from https://earth.org/wto-bans-fishing-subsidies/

World Trade Organization. (2022, June). AGREEMENT ON FISHERIES SUBSIDIES.

Diversity at Home or Biodiversity?

Written by Chan Ching Tung, Vivien

According to ADM Capital Foundation (ADMCF), an environmental group contributing to climate change and biodiversity, exotic pets include small mammals, birds, reptiles, amphibians, and arthropods (Inglis et al., 2022). Are you an exotic pet keeper? If not, have you ever thought of keeping one?

In 2022, ADMCF published a report titled Wild, Threatened, Farmed: Hong Kong's Invisible Pets, pointing out the dark side of Hong Kong's last-scale exotic pet trade (Inglis et al., 2022). Based on this report, I would like to identify some effects of the excessive local exotic pet trade, as well as express my views on this striking issue.

Walking along the streets in Mong Kok, it is not uncommon to see a wide range of exotic pets like birds, turtles, rabbits, and rodents being 'displayed' in a multitude of shops. While being attracted by the endearing appearances of the hedgehogs and hamsters, have you ever thought of where they come from? From ADMCF's report, from 2015 to 2019, as many as 4 million exotic animals were imported to Hong Kong from 84 different countries for the pet trade. Among the 4 million animals, 2.8 million are at high risk of extinction as regulated by the Convention on International Trade in Endangered Species (CITES) (Inglis et al., 2022). When we are increasing the diversity of our home by welcoming a new tiny exotic pet, we may indeed be harming biodiversity by putting extreme pressure on hundreds of species worldwide (Cheung, 2022).

Looking at the price tags beside the cages of the exotic pets, it is not surprising to see that the cheapest animal only cost around HKD $10. Captivated by their low costs, some inexperienced pet owners may underestimate the amount of money needed for the facilities and treatments required for keeping their pets healthy. Together with the misconception that exotic pets that are smaller-sized entail cheaper costs of veterinary and home care, it is not hard to estimate the reason behind the abandonment of diseased exotic pets in Hong Kong (Wong, 2022).

Upon the abandonment, the pathogens carried by the foreign exotic pets may be introduced into the local ecosystem, resulting in the deaths and even extinction of local animals. To illustrate, in the ADMCF report, it is stated that devastating pathogens such as Chytrid fungus and ranaviruses from abandoned non-native amphibians could potentially eradicate the local amphibian population via importation (Inglis et al., 2022).

Understanding the consequences of the detrimental exotic pet trade, it is of paramount importance for us to hand in hand to protect the valuable exotic animals in our nature. While the ADMCF report emphasizes how the government can act to save biodiversity worldwide, have you ever thought of how we, the general citizens, can help alleviate the burden posed on exotic pets?

To reduce the pressure, my suggestion is that exotic pet lovers should make sure that they fully understand the information about the animals before keeping them. To give more details, we should know thoroughly about the breeds, origins, as well as the daily and medical care required by the pets. By confirming the breeds and origins through a variety of reliable online resources, we can make sure that the pets we plan to buy are not at risk of extinction. Besides, checking the daily and medical needs can allow us to determine whether we are capable to support the healthy lives of our pets before keeping them. Consequently, abandonment and thus transmission of disease among local exotic pets can be prevented.

If possible, we may consider adopting instead of buying pets. By doing so, the demand for exotic pet importation can be decreased. Therefore, animals in nature can be protected.

In a summary, if we can use the above ways before or when keeping exotic pets, we can definitely keep a balance between diversity at home and biodiversity.

Diversity at home or biodiversity? They can coexist.

References

Buxton, A. (2022, May 19). Hong Kong exotic pet addiction is a travesty for biodiversity says New report. Green Queen. https://www.greenqueen.com.hk/hong-kongs-exotic-pet-trade-a-risk-to-biodiversity/

Cheung, E. (2022, May 19). Hong Kong 'complicit' in growing exotic pet trade with about 13,400 animals imported into city daily, environmental group warns. South China Morning Post. https://www.scmp.com/news/hong-kong/health-environment/article/3178241/hong-kong-complicit-growing-exotic-pet-trade

Inglis, S.J., Wong, E.T.C., le Clue, S. & Whitfort, A.S. (2022) Wild, Threatened, Farmed: Hong Kong's Invisible Pets. ADM Capital Foundation: Hong Kong SAR.

Zheng, M., & Leung, R. (2018, August 4). Why are more hongkongers going wild for Exotic Pets? South China Morning Post. https://www.scmp.com/news/hong-kong/community/article/2158232/why-are-more-hongkongers-going-wild-exotic-pets

Rethink Plastics Rescue Our Planet

Writtten by Li Mei Xian, Mabel

"It's just a plastic bottle. Throwing it near the ocean will not cause any serious consequences." Some of us may adopt the wrong methods for dealing with single-use plastics. Indeed, can the vast ocean swallow everything we dump?

As you all may be aware, the answer is a big "No". There is no denying that plastics bring convenience to our daily lives. However, they have become a perennial problem nowadays. Unlike other wastes, plastic waste takes thousands of years to decompose naturally. It can be broken, sliced, and burnt, but it merely will not disappear (The Green Earth, 2020). From Friends of the Earth (2016), plastic waste accounts for 21% of Hong Kong's municipal solid waste. Environmentally speaking, plastics harm animals' habitats, and they disrupt animals' food chains when the waste leak into oceans. Sea animals may entangle plastic bottles, risking the possibility of dying from suffocation and starvation. If the sea animals mistakenly treat microbeads as food, plastics will even remain in their bodies and harm their physical health.

Thorny as the situation may seem, it is crucial to tackle plastic pollution. For the sake of our mother earth, The Green Earth has adopted different initiatives to combat plastic pollution.

To begin with, talks related to the Seven Brothers of Plastic are introduced to raise the citizens' awareness of plastic pollution. What are PET plastics? How will the micro-plastic particles enter the food chain of animals? Why do we need to reduce the use of single-use plastics? As Green Earth (n.d.) indicates, participants can explore more about the magical material, PET plastic, from its birth to its usage in beverage bottles. Not only can they understand the negative impacts of plastic pollution on humans and the ecosystem environment, but they can also discover how everyday actions can lessen the pollution problem. In the end, the environmental awareness of participants will be enhanced with lower usage of single-use plastics.

In addition to the intriguing talks, a short-lived plastic brand audit campaign is launched with a focus on plastic bottles, to encourage the sustainable waste management of enterprises. Simply reducing the use of plastics or cleaning up the beaches or country parks are not the long-term solution to protect our Earth. Stopping the continuous production at the source is more crucial. To achieve this, Green Earth has introduced a Waste Brands campaign. PET plastic bottles from different brands are picked up at country parks and beaches, and the results are recorded. (The Green Earth, n.d.). There is a point echoed by Green Earth, the enterprises that use most plastic bottles are “China Resources Beverage”, “Coca Cola” and “Vita Vitasoy” (Lee, 2022). By doing so, the recorded numbers bring about a deterrent effect. It warms manufacturers for overusing short-lived plastics, notably those who ranked high in the research. Instead, the manufacturers can practice corporate social responsibility, and do more in waste reduction. It is also hoped that enterprises can regularly update recycling data for plastic products.

Last, alongside the public and the enterprises, it is suggested by Green Earth that the government can introduce Deposit-Refund System (DRS) to facilitate the recycling of plastic beverage bottles. For example, convenience stores can charge customers 50 cents for each PET bottle. Admittedly, some people may voice out the introduction of a rebate system, meaning that the manufacturers can provide economic incentives to consumers after receiving used PET bottles for recycling. This claim may seem reasonable on the surface. Nevertheless, the effectiveness of the rebate system is questionable. As Green Earth (n.d.) indicates, the amount of cash rebate is low. Instead, Deposit-Refund System (DRS) can be adopted with higher effectiveness. A deposit fee is charged at the location of purchase, and the fee is refunded back to the consumers after the PET bottles are returned. (Organization for Economic Co-operation and Development, n.d.). When there is a charging fee, customers will be more aware of how they deal with the bottles compared to a cash rebate. Indeed, the DRS scheme, successful in achieving behavioral change, helps to capture plastic bottles for recycling efficiently. Reloop (2020, as cited in the Green Earth, n.d.) estimated that the recycling rate can be increased drastically to 70%. After that, leakage of plastic bottles into landfills can then be minimized in the long term. Recycling of higher-quality plastics that are not contaminated can even be encouraged.

Next time, do you still want to see plastic bottles near the ocean? The answer is clear. To promote environmental sustainability and improve public health, different stakeholders can work hand in hand. Government can introduce charging schemes such as the DRS scheme to facilitate recycling. Encouraging enterprises to stop the indiscriminate use of plastics through a campaign is also essential. As for individuals, we can attempt to adopt an environmentally friendly lifestyle. Small actions can undeniably make a big difference!

References

Friends of the Earth. (2021). Plastics. Retrieved July 31, 2022, from https://www.foe.org.hk/en/Green%20Info/plastics

Green Earth. (n.d.). Talks and tours. Retrieved July 28, 2022, from https://greenearth.org.hk/en/activity/

Green Earth. (n.d.). Short-lived plastic campaign. Retrieved July 30, 2022, from https://greenearth.org.hk/plasticwaste/

Green Earth. (2020). Rethink Plastics. Retrieved July 30, 2022, from http://rethinkplastic.greenearth.org.hk/en/seawaste/cocacola

Organization for Economic Co-operation and Development. (n.d.). Deposit refund schemes. Retrieved July 29, 2022, from https://www.oecd.org/stories/ocean/deposit-refund-schemes-58baff8c

綠惜地球。（不詳）。環保署推飲品膠樽生產者責任法規公眾諮詢 綠惜地球促行按樽制 料回收率達七成。(2018年8月1日讀取) https://greenearth.org.hk/2021/03/20210313/

李榮忠。 (2022)。 【世界環境日】綠惜地球去年在全港灘撿4.3萬個廢膠樽繁簡包裝各佔半 - 香港經濟日報 - topick - 新聞 - 社會. (2018年8月1日讀取)

綠色政治：當環保進入政治議程

楊明軒

面對氣候變化的挑戰，近年來環保議題在愈來愈受世界各國關注，從最初的邊緣議題逐漸成為社會主流的焦點。而在其中起到重要作用的是很多活動家促進環保進入政治議程的努力。他們不滿足於以公民社會組織的形式在大眾間普及環保，而是選擇進入政治體系，在制度框架內推進“綠色議題”(Wall, 2010)。1972年，全世界第一個國家層級的環保政黨在新西蘭成立。在隨後的數十年內，各國的環保政黨如雨後春筍般出現，而他們往往會使用綠黨（Green Party）的黨名來代指他們的政治理念，在當代世界掀起一股綠色政治（Green Politics）的浪潮。迄今為止，全球範圍內的綠黨聯合組織Global Greens已有87個政黨和9個國際組織成員，在許多國家都是一股不可小覷的政治力量 (Wall, 2010)。

綠色政治的內涵在不同的時期也在不斷進化和演變。最初各國的綠黨主要倡導環保議題，而對於其他社會乃至內政外交問題著墨較少，而相應的支持者群體也較為小眾，以受過高等教育的城市年輕選民為主。但從上世紀末開始，很多國家的綠黨開始努力擴大自身的支持基本盤，以生態正義的價值為起點，進而倡導自由進步的社會價值，重視平等的經濟架構，以及和平主義的外交政策(Andrew, 2007) 。綠色政治也逐漸發展出了結合環境社會與國際公義的廣泛內涵，支持者不斷增加，光譜漸趨多元，影響力也日益加大。到了千禧年之際，芬蘭，德國以及義大利的綠黨都已經有了加入執政聯盟發揮國政影響力的機會。綠色政治的影響力甚至超出了綠黨的範圍，為了爭取支持，許多其他政黨也都相繼吸收綠黨的理念並將環境問題視為施政重點 (Wall, 2010)。時至今日，綠色政治已經可謂實現了從邊緣到主流的演變。

然而，綠色政治將環保引入政治議程的做法也面臨著很多爭議和隱憂。政治的攻防很容易模糊討論的焦點，將本來可能獲得全民共識的環保問題變為政黨對抗的手段。例如在美國，即使民調顯示將近三分之二的民眾認為氣候變化影響了他們的日常生活，而政府沒有採取足夠的措施來應對氣候挑戰，但如果問到由具體政黨推行的環境政策，公眾的意見往往根據支持不同黨派的立場分裂而難以達成共識 (Pew Research Center, 2021)。相近的情況還發生在台灣，在去年年末舉行的四項公投中有兩項與環境問題密切相關（保護藻礁；核電廠重啟運轉）。然而本應該基於科學和環境評估做出的決定迅速因為政治力量的介入產生了異變：選民紛紛選擇與支持政黨相同的立場，乃至將投票視為對執政黨的“信任公投”，而環保組織的聲音反而在討論中被邊緣化 (Blanchard, 2021)。

與此同時，一些加入政府運作的綠黨也面臨著持續的內部爭議。綠色政治的理念很多時候會與國家的能源，社會乃至外交政策無可避免的產生衝突，而究竟是選擇讓步以換取執政機會或者是堅持原則而遠離政治中心始終沒有一個兩全其美的答案。比如德國綠黨內部就因此分化成了“現實政治派”和“基要派”兩個派系（戴達衛，2021)。由此看來，綠色政治固然能夠促進環保議題的主流化，但在理想價值與政治角力之間仍要面臨難以逾越的鴻溝。

References

Blanchard, B. (2021). Taiwan referendums fail in major setback for opposition. Reuters. https://www.reuters.com/markets/commodities/taiwan-opposition-hopes-boost-contentious-referendums-2021-12-18/

Dobson, A. (2007). Green political thought (4th ed.). Routledge.

Pew Research Center. (2021). Americans are less concerned – but more divided – on climate change than people elsewhere. https://www.pewresearch.org/fact-tank/2021/09/14/americans-are-less-concerned-but-more-divided-on-climate-change-than-people-elsewhere/

Wall, Derek (2010). The No-Nonsense Guide to Green Politics. Oxford: New Internationalist Publications.

戴達衛, (2021). 綠黨旋風：德國政商全力封殺的「下一個德意志女總理」？ 轉角國際. https://global.udn.com/global_vision/story/8663/5550754

GREENWOODS
HKU

Greenwoods, HKU Session 2022-2023

Instagram: greenwoods_hku
Facebook: Greenwoods HKU