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Actions	KPI	Comments
Level: Easy		
1. 外出時關掉電器	Assume on average 3-8 hours Per type of common appliance; power off duration HKElectric = 0.71 kg/unit CO2-e for the year 2020 CLP = 0.51kg/KWh CO2-e for the year of 2018 Ex. TV, Game console, AC, Dehumidifier	This is viable, we can just look at common household appliances and calculate carbon emissions avoided in the power off period. We would likely take into account the source of the energy and use the amount to determine carbon emissions.
2. 外帶餐具	Assume on average: 3-4 meals per week Number of spoons/forks/chopsticks/straws avoided *carbon footprint (kgCO2e/item) 3.17g CO2e = 1 g PLA Plastic Spoon = 13.31 g CO2e (1 PLA Spoon = 4.2g) Fork = 12.05 g CO2e (1 PLA Fork = 3.8g) Knife = 12.05 g CO2e (1 PLA Knife = 3.8g) Pair of Chopsticks = 0.46g CO2e Straw = 1.46g CO2e	This is viable, we can look at the number of PP (and other materials) cutlery commonly used and look at the amount avoided.
3. 開風扇+空調（**25**度）	Assumed maximum power HKElectric = 0.71 kg/unit CO2-e for the year 2020 CLP = 0.51kg/KWh CO2-e for the year of 2018 **AC: Ex. An AC of 2kW (CLP) = 1.02kg CO2e/h**	We would have to assume maximum temperature and then use the energy mix to determine the amount of carbon emissions from the energy usage per hour. User would input the wattage (W) and location, then we could calculate the carbon footprint

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4. 回收塑料瓶**10**個	Number of type 1, 2, 5 bottles (500ml) recycled Production GHG avoided (kgCO2e/500ml) compared with bottles made with virgin plastics. **Recycled plastics** Type 1 bottle = 0.0828kg CO2e Type 2 bottle = 0.06145kg CO2e Type 5 bottle = 0.06145kg CO2e **Virgin plastics** Type 1 bottle = 1.075kg CO2e Type 2 bottle = 0.8kg CO2e Type 5 bottle = 0.7 kg CO2e (1.4kg CO2e/ kg-PP)	We can look at the most commonly recycled plastics in HK (types 1,2, sometimes 5). We can look at the production footprint change compared with bottles made with virgin plastics. We can actually balance it to either be 10 bottles, or a set amount of GHG avoided, based on which type of bottle they are recycling.
5. 使用公共交通工具	Distance travelled (km), mode of transport for each trip Carbon footprint for each trip *Compared with fossil-fueled private cars Car = 180gCO2/pkm Bus = 82g CO2e/pkm Train = 35.1g CO2e/pkm Tram = 54 g CO2e/pkm	We would like to clarify with you whether it's the use of public transportation in place of driving? Using public transport for each trip, we need data on the mode of transport, distance travelled, and then compare the number with fossil fuel private cars. However, we would have to divide the footprint for each trip amongst the average amount of passengers per vehicle.
6. 購物時自備可重複使用的購物袋	Number of bag avoided Carbon footprint (kgCO2e/bag) Plastic bag: 33g CO2e	Looking at the number of bags avoided, then calculating the production footprint for each bag produced.
7. 外出時帶上自己的水瓶 **Bring your own bottle**	Number of PET bottles (750ml) avoided/Number of refills (750ml) *carbon footprint (kgCO2e/500ml) Each time you bring your own bottle to non-reusable plastic bottle saved 750ml = 100g CO2e 500ml = 82.8g CO2e	The number of plastic bottles avoided (we will assume PET bottles) in using a reusable bottle, regarding the production footprint of each plastic bottle (assumed made with virgin plastics). We can do this to different sizes.
8. 自備手巾	Pieces of tissue paper (8”x8”, 2-ply)	Considering the actual amount of

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	Carbon footprint (kgCO2e/pc) *production and/or landfill footprint Assuming 13.5GSM for tissue paper 1200 kg CO2/tonne for conventional tissue paper 1 pc Tissue Paper (8”x8”, 2-ply) = 4.8gCO2e	tissue paper that can be avoided (assuming 1 person will only carry 1 towel), the impacts may be quite small.
9. 重複利用水，如用洗米水洗碗、噴花	TBD	While this activity will be beneficial to the environment, there may be no change in direct carbon footprint as a result of this, we will take a more in-depth look to determine.
10. 購買當地食品	Food mileage for an imported item (usually purchased by the user) e.g. 9,779km from France by air (assume by air) Food mileage for a local product: assuming zero (the logistical footprint is negligible) Produce from a list of countries; By sea: 23g CO2e/tonne-km By air: 1,130g CO2e/tonne-km	To achieve this, we would need to know the source country, the weight, the distance. This may be more troublesome for the user. They may have to input the weight and select from a list of countries.
11. 素食日每月一次	Need input of daily average meat consumption and type of meat. Assuming an average of around 0.25kg of meat per person per meal. 0.25kg Beef = 6.75kg CO2e 0.25kg Pork = 3.025kg CO2e 0.25kg Chicken = 1.725kg CO2e 0.25kg Lamb = 9.8kg CO2e	We would need to know the baseline of meat consumption daily to be able to calculate carbon footprint, then separate by meat type.
Level: Medium		
12. 素食日每週一次	Need input of daily average meat consumption and type of meat. Assuming an average of around 0.25kg	We would need to know the baseline of meat consumption daily to be able to calculate carbon

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	of meat per person per meal. 0.25kg Beef = 6.75kg CO2e 0.25kg Pork = 3.025kg CO2e 0.25kg Chicken = 1.725kg CO2e 0.25kg Lamb = 9.8kg CO2e	footprint, then separate by meat type. Can then mut
13. 了解購物選擇對自然生態的影響	TBD	While this activity will be beneficial to the education of the environment, there may be no change in direct carbon footprint as a result of this, we will take a more in-depth look to determine.
14. 垃圾清理活動	Avoided carbon when using recycled materials in production (virgin vs recycled materials) Glass/g = 0.67g CO2e Metal/g = 4.3g CO2e Plastic/g = 0.002kg CO2e Paper/g = 0.0043kg CO2e	Will need to consider the type of waste recovered and if they will be recycled or disposed, so may be difficult, but doable if separated by waste stream. We would have to clarify what exactly you would like to measure.
15. 使用環保電器	TBD	Due to the large variety of models of appliances, efficiency levels, and labels and standards, there is a huge it would be difficult to measure without picking a set standard. If the carbon footprint is clearly written, we can have an input option.
16. 捐贈二手衣物/玩具/書	New clothing item's production footprint (kgCO2e/pc) saved: Cotton shirt: 2.1kg CO2 Polyester shirt: 5.5kg CO2	Please note that this may be tricky; there's no way of telling if the donated items will result in another person not purchasing new products (thereby reducing carbon footprint), rather than just the person getting something they would not originally have purchased. If we were to use this as a goal, we would take the amount of carbon emissions per clothing item. If we can guarantee this, we

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		can either do 16 or 17, otherwise there will be a double-counting issue.
17. 買二手衣服，翻新/修理家具	New clothing item's production footprint (kgCO2e/pc) saved: Cotton shirt: 2.1kg CO2 Polyester shirt: 5.5kg CO2 **GHG emissions resulting from disposal are not considered here as the item may be an addition.*	Should restrict the list to a selection of items. For repair, may also consider footprint resulting from the disposal of old items. There are too many varieties of items/furniture/materials which present too big of a possible range. For purchase, we would likely just look at production footprint rather than just landfill GHG emissions. For repair, it should consider both.
18. 電子信件	Would need the user to input amount of A4 paper (sheet) they got per letter 1 A4 sheet = 60g CO2e **limit to bank statements and utility bills.*	We are working under the assumption that this would be saving paper from letters such as bank statements and utility bills, as most office or personal communications are already electronic.
19. 購買有機或再生纖維服裝，如棉、麻、絲	TBD Ref: Cotton shirt: 2.1kg CO2 Polyester shirt: 5.5kg CO2	While this does benefit the environmental area in regards to microplastics, this particular goal/action would require measuring the lifecycle GHG of different fibres. Microplastic is a pollution issue, rather than a GHG issue.
20. 減少出行次數，每年一次	Total distance flown (air miles) in base year Flight= 11g CO2e/passenger/km	Would need a baseline and see total distance traveled (flown). Due to the global pandemic situation, it would not be too impressive of a reduction, so would need to take a normal/average year's travel data.
Level: Difficult		
21.種植活動	Number of trees planted Carbon sequestered (kgCO2/tree) 1 tree = 21 kgCO2 per year	Quite straightforward, direct carbon sequestration can be calculated. We would still recommend trees, as they are a long-term sequester.
22. 一周無垃圾行動	TBD	On both the user and back-end, we would suggest against this as a goal/action to take. For users, it is

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		almost impossible to achieve zero waste for one week, as we do not have comprehensive recycling and composting in Hong Kong. For the calculation, there are a wide range of varieties of waste, with each waste producing different emissions.
23. 野外生活 - 體驗**48**小時（與生態海洋合作） - 體驗餵魚、換籠等	TBD	While this activity will be beneficial to the education of the environment, there may be no change in direct carbon footprint as a result of this, we will take a more in-depth look to determine.
24. 野外生活 - 體驗 **120** 小時 **Wildlife-120 hours of experience**	TBD	While this activity will be beneficial to the education of the environment, there may be no change in direct carbon footprint as a result of this, we will take a more in-depth look to determine.
25. 魚類和海藻養殖 -了解珊瑚礁、岩礁、紅樹林、沙子的生態系統 - 主要基質——沙子、珊瑚、海草、岩石等。 - 物種	User input: Total seaweed planted (kg) Carbon sequestered (kgCO2e/kg) TBD	While this activity will be beneficial to the education of the environment, fish-farming produces negligible direct GHG impacts. The impacts would have to come from consumption (i.e. replacing meat with a higher footprint with fish). However, the seaweed would follow the same logic as the planting activity above.