

7/2021 - 7/2022

# LETTER

FROM OUR

# EXECUTIVE DIRECTOR



Today's industrialized food system subsidizes practices that degrade soil, release carbon, deplete nutrients, and mistreat animals and resources. Coupled with post-pandemic shocks, and the fragility of our global food system has now been fully exposed. Having founded and operated one of Hong Kong's most recognized 'green' restaurants 10 years ago, we know that setting targets such as halving food waste and shifting to more plant-rich diets are just the beginning of what we can be doing to help combat climate change. The decisions we make in our day-to-day businesses now require us to go beyond just certifying best practices but to actually make changes where changes need to be made - **economic and agriculture policy reform.** 

We know that starting a conversation around this topic is important, especially here in Asia where we account for up to 50% of the world's carbon emissions. HK itself with the highest density of restaurants in the world per capita, an industry worth HKD100 billion annually demands that we play a leadership role in helping solve some of the biggest crises of our time - food insecurity, nutrition and climate change. Using and leveraging this power is integral to the longevity and sustainability of not only the food and hospitality sector we love, but our planet.

At its core, Zero Foodprint is about uniting the hospitality sector around agricultural climate solutions. Because restaurants are not only places to enjoy good meals with loved ones, nor are chefs and FOH staff merely there to serve customers. As an industry that generates so much excitement, our collective belief is that on top of turning a monetary profit, restaurants can be a force for environmental and social good.

The science around regenerative agriculture as a vital solution to combatting climate change is ripe and well underway. But for us, the real science happens in the actual doing - where food businesses actively participate to help shift dollars on acres of farmland across China and South East Asia in order to rapidly restore mother earth's almighty natural carbon sinks.

Peggy



Zero Foodprint Asia (ZFPA), an extension of Zero Foodprint (ZFP) in California, is a nonprofit organization mobilizing the food world around agricultural climate solutions. ZFPA hosts a crowdfunding program that gathers funds from member food businesses such as restaurants, cafes, bars and food retailers. Members pledge 1% of every restaurant purchase to ZFPA to fund regenerative farming practices that draw down carbon from the atmosphere and help combat global warming.

Licensed and managed by Grassroots Initiatives Consultancy, ZFPA operates as a registered non-profit (charitable status in process), but in the spirit of a start-up social enterprise. ZFPA aligns itself to globally approved, science-backed carbon reduction and carbon removal strategies and goals. Simultaneously, our organization allocates manpower and resources to prioritize projects that would result in generating the most social and environmental impact.

### **MISSION**

Mobilising the food world around agricultural climate solutions and to promote regenerative agricultural practices to help undo the damage that extractive agriculture has done to our planet, our health, our food, and our people. ZFPA program is designed to help restaurants act against climate change by addressing greenhouse gas emissions through investments in carbon farming.

### **VISION**

A renewable food economy that restores our climate

### **VALUES**

- Regenerative
- Collective Action
- Justice
- Prosperity
- Transparency

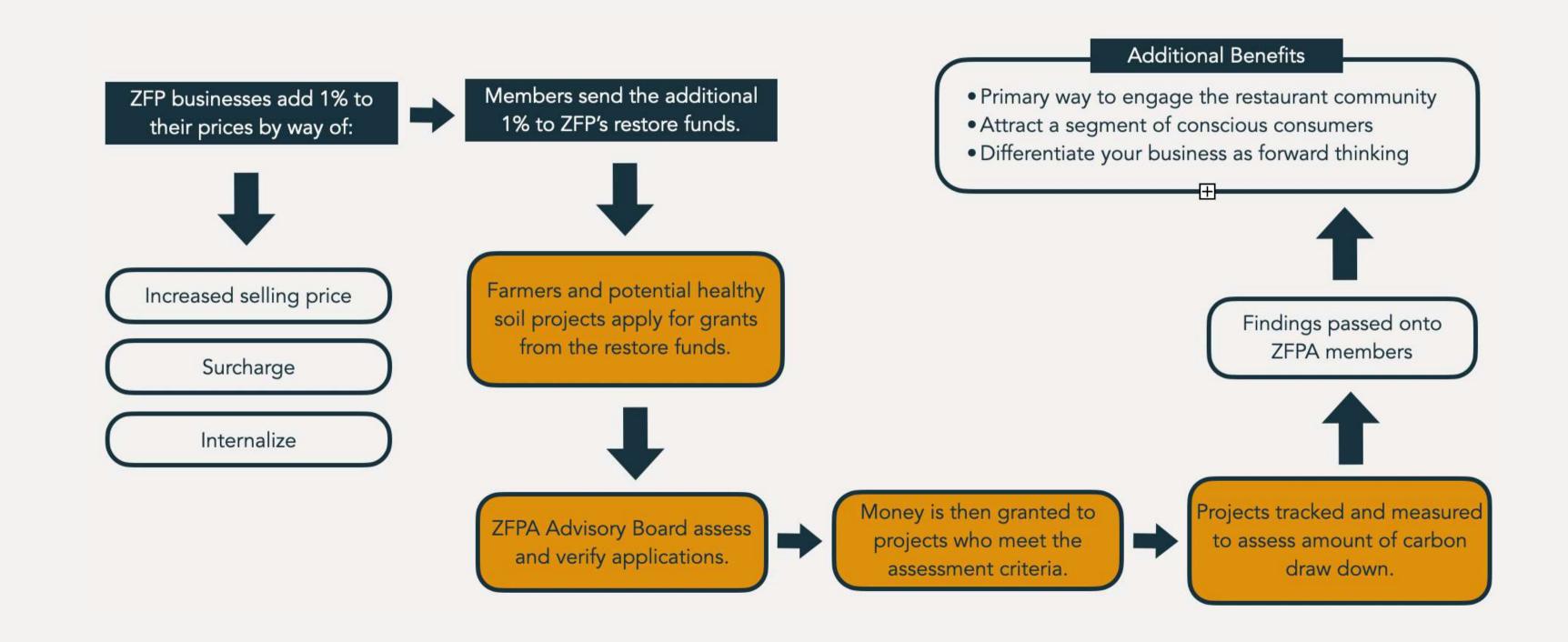
### **SUCCESS MEASURES**

- Restaurant Memberships
- Funds raised/disbursed
- Acreage under regenerative management
- Number of participating farmers
- Estimated CO2e sequestered

### MAIN ZFPA PROGRAM

# PHASE 1: 1% PLEDGE

Members pledge 1% of every restaurant purchase to ZFPA to fund regenerative farming practices that draw down carbon from the atmosphere and help combat climate change





# WHY 1%?

Zero Foodprint has been analyzing restaurants' carbon footprints since 2015, and findings suggest that adding a charge of 1% towards carbon farming would accomplish as much environmental benefit as offsetting the estimated impact from the restaurant's operation.

But 1% makes a lot of sense on a global scale as well: According to the scientists and climate experts who analyzed 80 climate solutions for <u>Project Drawdown</u> (2017), implementing drawdown projects around the world would cost between <u>USD 22.5-28.4 trillion by 2050</u>. Which when based on 2019's global GDP trajectory (USD87.6 trillion), is about 0.91-1.2% of the global economy; which we have rounded to 1% as a general guide.

# ZFPA RESTAURANT PARTNERS

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### **SPONSORS & SUPPORTERS**



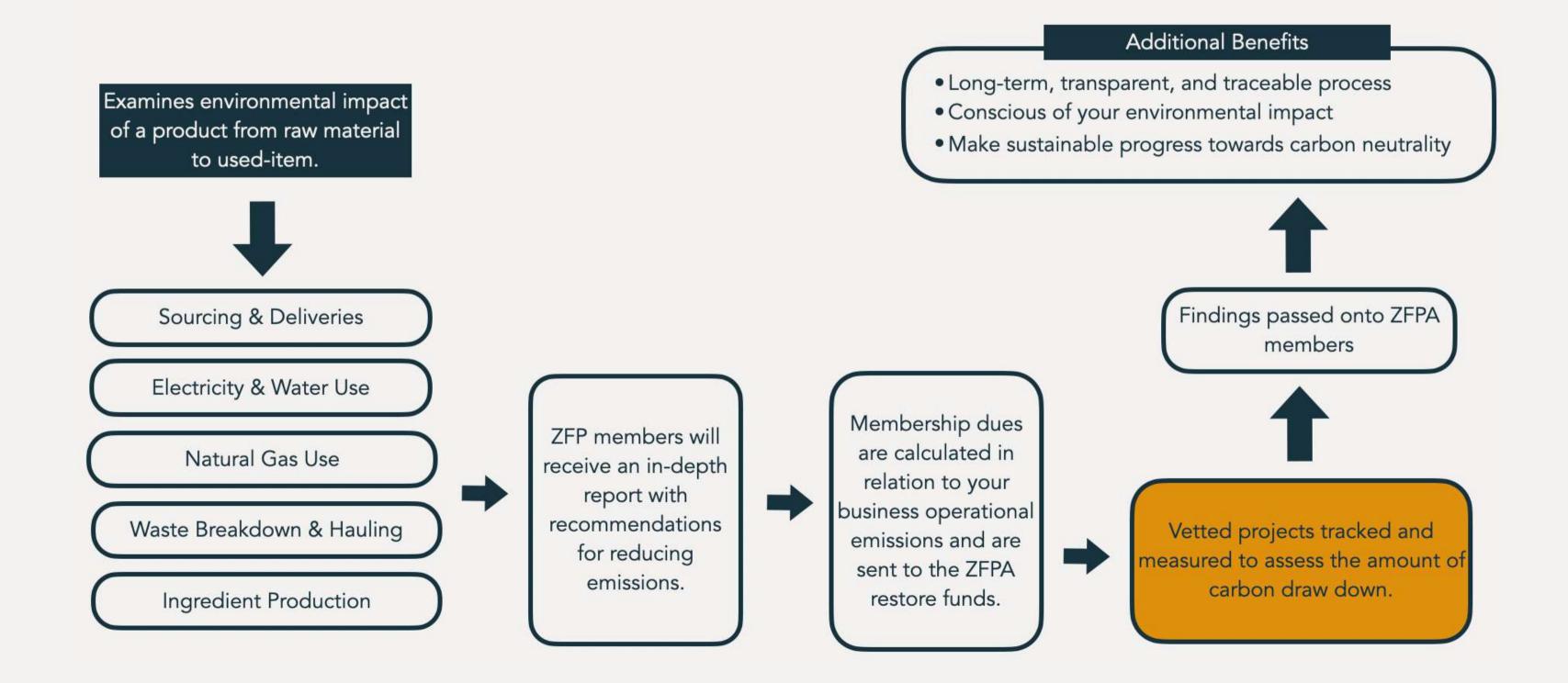




### MAIN ZFPA **PROGRAM**

# PHASE 2: CARBON NEUTRALITY PILOT (To Launch Q4 2022)

Aligning with global net zero targets and goals, the Carbon Neutrality Program equips food businesses with the tools to become increasingly aware of their environmental impact while generating measurable change for future operations.



# CARBON NEUTRALITY PROGRAM PILOT PARTNERS













## ZFPA X FOODSTEPS

LIFECYCLE ASSESSMENT TOOL

### Dashboard



### **Foodprint Results**

# Equivalent to ~50 passenger vehicles driven for one year

ANNUAL FOODPRINT: 232 metric tons CO₂e

- Coffee and rice are among the largest contributors to the Foodprint due to their high-impact production
- neasures. Does your local energy provider offer green power programs? Have you considered an energy efficiency audit of the kitchen? Have you considered investing in rooftop solar panels?
- Due to selective sourcing from suppliers around the world, transportation emissions are high relative to other ZEP participants, incorporating more local suppliers can reduce these emissions.
- By serving a vegetarian menu, the relative contributions and emissions on a per-cover basis are much low

### SUMMARY OF OTHER DATA INPUTS

- Estimated 1,250 covers per week, or 64,464 total covers per year
- Restaurants closed 3 days per year Weekly average usage of foods, where seasonal, is input as an average throughout the year

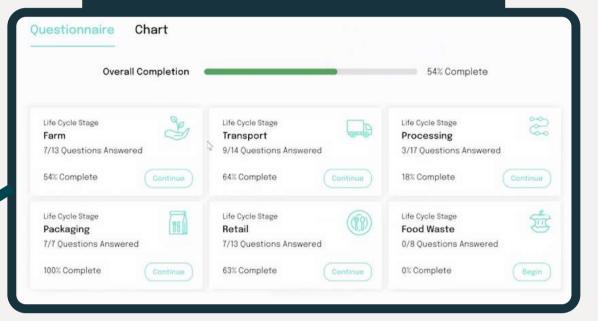
- Electricity Consumption: average of 17,274 kWh per month based on one month of utility data
- Laundering (Offsite Energy): approximately 10 pounds laundered per week Latest emission factor published by HEC was used (1,742 lb CO2/MWh)

- The supplier delivery emissions are not based on specified vendor shipments. As the local transport is not expected to be a large source of emissions, we estimate the average distance from food distribution purveyors as 8 miles based on a similar study, and WRI emission factors for light goods trucks on a per ton
- Micro greens are flown in from Japan,
- Edible flowers and coconut yogurt are flown in from New Zealand, Hedgehog Mushrooms are flown in from Talwan and Malaysia, and
- Liquor is flown in from the United States.
- The transportation from vendors and food distributors are estimated only on the final leg of transportation, whereas the remaining transportation emissions are embodied within the lifecycle

### WASTE

- Seven pickups per week for mixed garbage, being approximately one 20-gallon container,
- Four pickups per week for recycling, being approximately one 20-gallon container, and one pickup per week for compost, being approximately one 64-gallon container;
- Mixed garbage and recycling are driven approximately 16 miles to the closest transfer location.
- Fryer oil is picked up once every other week and delivered approximately 16 miles away to the Gov't

### Carbon Calculation Criteria



### LCA Report for Ingredients & Dishes



# RESTAURANT PARTNERS





99%+

POSITIVE DINER RESPONSE

100%

PILOT RESTAURANTS
TO REMAIN IN THE
PROGRAM FOR A
SECOND YEAR!

FUNDS RAISED

HKD 1,888,296.11



# ZFPA RESTORE FUND

## RESTORE FUND







Regional Soil Health & Conservation Advisors

Healthy soil is the building block for healthy ingredients and a balanced ecosystem. But to have farmers implement regenerative practices requires subsidies and a ripe consumer market that demands for regeneratively-grown foods.

The funds that are raised via our restaurant partners along with individual donations work for both of these fronts. The Restore Fund sets the trajectory for a renewable food future that honours the work of farmers not only as food producers, but as stewards to our planet's ecosystem.

Grants are awarded primarily on the basis of:

- the degree of soil improvement
- the opportunity for enhancing both below-ground and above-ground microbiology and biodiversity
- the readiness for implementation
- the possibility for increasing soil carbon sequestration potential

ZFPA received 16 applications with 13 Hong Kong applicants and 3 Mainland China applicants, varying in range of experience and years of farming.



# 8 RECIPIENTS AWARDED

Farm Name	Farm Size (Acres)	Location	Regenerative Practices to Implement	Carbon Sequestration Potential (Tons of CO2-)
Bak Li Hang	9.8	Nam Shan District, Shenzhen	Conservation crop rotation, Compost application on annual cropland, Alley cropping	38
Cham Shan Farm	1.6	Fanling, Hong Kong	Mulching, Nutrient management, Compost application on annual cropland, Tree/shrub establishment	3
Hong Miu Organic Farm	2.3	Kam Tin, Hong Kong	Nutrient management, Cover crop, Mulching, Forage & biomass planting	11
Ngan Lam Ecology Farm	11.2	Conghua District, Guangdong	Compost application on perennial cropland/annual cropland, Alley cropping	25
Sun Fung Farm	1.3	Fanling, Hong Kong	Mulching, Nutrient management, Composting	2
Fa Liu	0.6	Tai Po, Hong Kong	Mulching, Compost application, Alley cropping, Nutrient management	2
Noah's Forest	0.3	Ta Ku Ling, Hong Kong	Mulching, Compost application, Alley cropping, Nutrient management	1
YLS Ecology Farm	20	Conghua District, Guangdong	Conservation Crop Rotation, Mulching, Compost application on annual cropland, Compost application on Perennial	40





SHOPS

Commenced on 19/12/2021 Season Ended 31/5/2022 "Crops to Shops" is a local table-to-farm sourcing initiative propped up as a short-term solution to help HK farmers deal with the shortened fall-winter harvest. As a way to support farmers in bringing produces to the local market, ZFPA has partnered with <u>Hong Kong Farmers' Pride (HKFP)</u> and their network of rigorous, experienced organic farmers to link with the wider restaurant community. Our organizations' combined experiences have allowed us to build an ordering, delivery and pick-up system to best communicate and move seasonal produces effectively from farm to table.

# OTHER PROJECTS



1400.35 KG produce distributed



HK\$145,168.35 worth of produce purchased



2 Market Stalls Mercato & Bedu 67 KG HKD5,037.30





OTHER PROJECTS

# EARTH WEEK GLOBAL INITIATIVE

APRIL 17 -23 #Eat4Earth

ZFPA makes it easy to have a real impact by investing in farmers to put carbon back where it belongs - in the soil!

Between April 17-23, <u>ZFP</u>, <u>ZFPA</u> and <u>ZFP Deutschland</u> collectively launched the #Eat4Earth campaign to convert every purchase into climate action.

A total of HKD\$187,401.95 was raised during the one-week campaign which involved over 130 restaurant supporters.

# FOOD WASTE TO COMPOST PROGRAM

OTHER PROJECTS

The Soil-Care Hospitality program makes the sensible reintegration of food waste in regenerative local food cultivation viable and transparent for the eco-socially responsible hospitality industry.

<u>Soil Trust</u> customizes the waste diversion to the partner's operation, coordinates its crops with the chef's menu plan and caters farm-related events and documentation to the marketing needs of all involved. Linking regenerative farming directly with the hospitality industry offers tangible pathways for greenhouse gas reduction, restoring local soil health and revitalizing the agricultural sector that translate into delectable food choices.

Facilitated by Dr. Markus Wernli (<u>Poly U School of Design</u>), Shing Wai Ng, certified Permaculture Practitioner (PDC), with scientific advisory from <u>Poly U's Research Institute for Future Food</u>, the program seeks to demonstrate cross-sectorial support models for smallholder farm innovation, and soil-care directed commercial food waste diversion, benefits, and impacts.





# FOOD WASTE TO COMPOST PROGRAM PARTNERS

OTHER PROJECTS













SPONSORS TBA



# OTHER PROJECTS

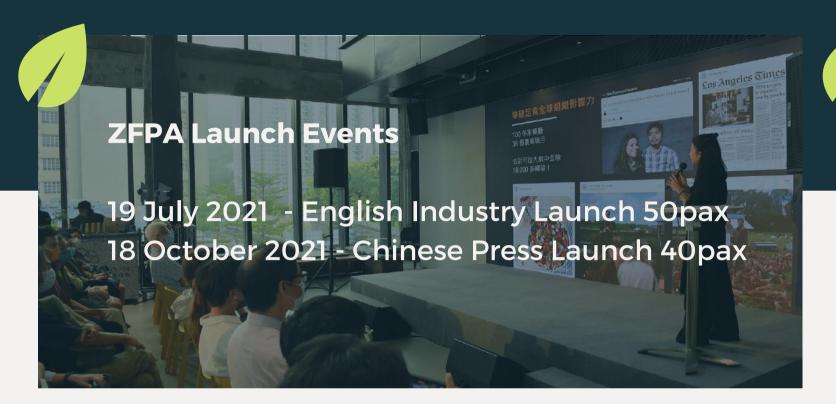
# CARBON FOOTPRINT MANAGEMENT & REPORTING SYSTEMS IN HOSPITALITY RESEARCH

**MAY-DEC 2022** 

In light of the HK and China governments' announcements to become carbon neutral by 2050 and 2060 respectively, the hospitality sector is generally overlooked as a major contributor. HK as a city has set out goals, but with no real defined targets or a plan for the industry to prioritize measuring, reducing, and mitigating embodied and operational emissions.

In collaboration with <u>Polytechnic University School of Hotel and Tourism Management</u> and <u>Grassroots Initiatives Consultancy</u>, our preliminary research involves investigating where carbon emissions derive from within <u>Hotel Icon</u>, the awareness that employees and departments have of carbon footprinting frameworks and tools, and the role that hotel stakeholders play in our city's ability to meet net-zero.

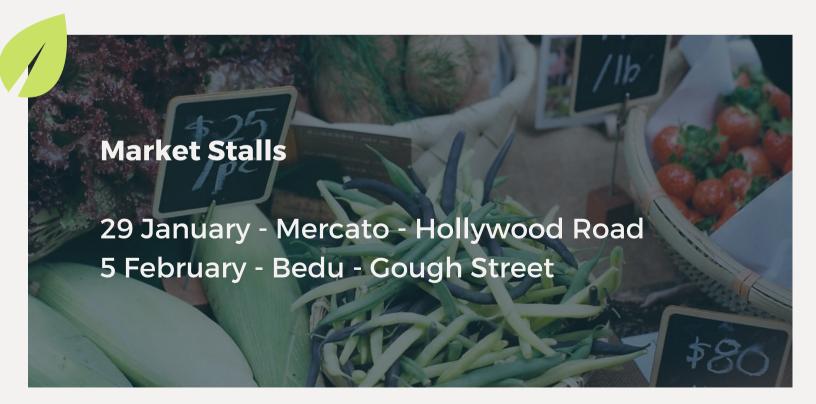
## 2021-2022 EVENTS





Pop-ups

22 April 2021- Earth Day at Arcane
30 June 2021 - Tatler House
3 August 2021 - Bedu
3 October 2021 - Roganic & Friends of Sustainability
19 July 2022 - KIN Food Halls



## PRESS & PANELS

### 1 June 2021

Green Queen "1% Pledge To Restore The Planet: Zero Foodprint Asia Launches Hong Kong Restaurant Program To Capture Carbon"

### 16 June 2021

<u>Tatler Asia</u> "Zero Foodprint Asia: Peggy Chan's New Initiative To Address The Climate Crisis"

### **6 August 2021**

Green Queen "Why These Hong Kong Restaurateurs Are Supporting Regenerative Agriculture"

### 6 October 2021

Re-Think - "Importance of Soil Health" Presentation

### 2 November 2021

In the Moo for Love - "Why Soil?" Presentation

### 8 November 2021

The Mills Fabrica Newsletter

### 2 December 2021

Business of Design Week "Making Sustainability Palatable"

### **21 February 2022**

Tatler Dining Awards - "Sustainability Champion"

### **21 February 2022**

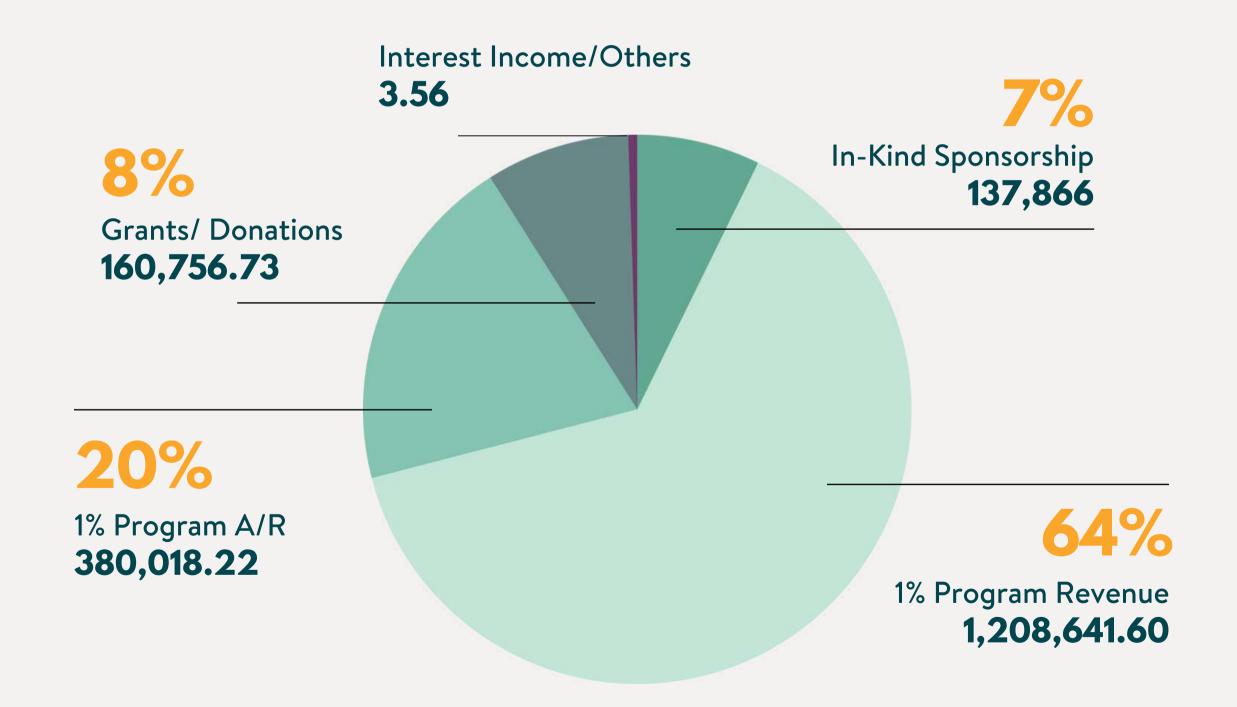
The Loop - <u>Catching Up with Peggy Chan on ZFPA</u>

### 28 June 2022

Green Monday Academy - Food Systems & our Global Impact Seminar

# FUND BREAKDOWN

### REVENUE (HKD)



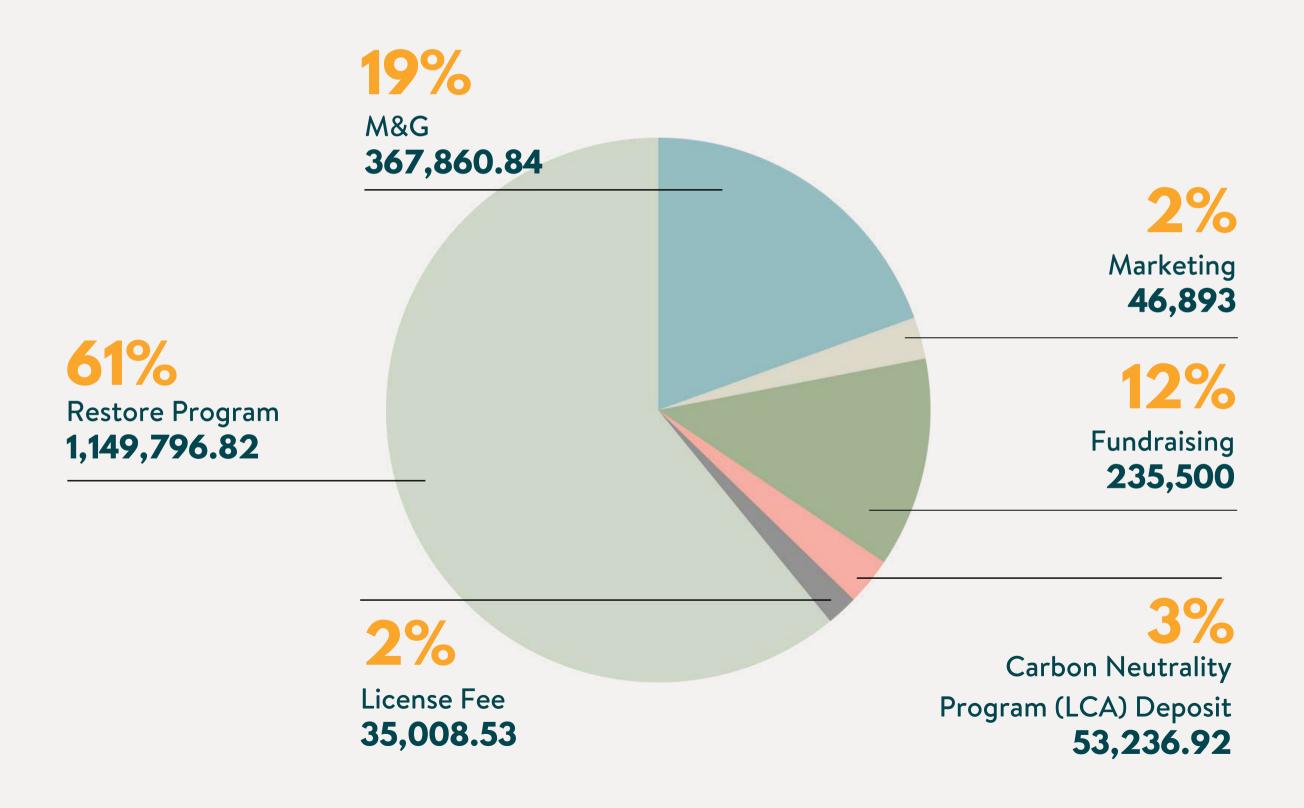
In-Kind Sponsorship: direct funding for operations

1% Program Revenue + A/R: income received from 1% pledge program and carbon neutrality pilots

Grants & Donations: via popups, direct individual donations

# FUND BREAKDOWN

### **EXPENSES (HKD)**



M&G: mgt fee, advertising, business development, office expense, bank charges, company secretary

Marketing: video production, content creation, printing and stationary

Fundraising: grant & donation seeking activities, operating memberships schemes, presentations, events and charity, public fundraising

# MEET OUR TEAM



Peggy Chan
Executive Director



**Joel Tomas**Director of Partnerships



Tarana Bhargavan
Communications Coordinator
4/2021-3/2022



**Loïs Schotanus**Programs Coordinator
5/2021-4/2022



**Kevin Lui**Translator & Copywriter
2/2022-present





Nick Leung
Admin & Communications



**Kylie Law**Multimedia



Tim Li
Business & Communications



Om Melwani Research & Podcast



**Yoanna Wan**Promotional Video

## BOARD OF DIRECTORS



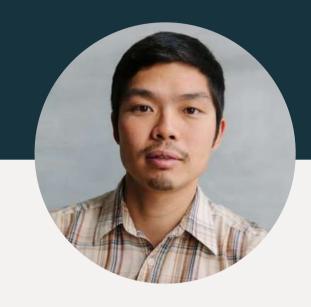
**Terrence Tsang** 

Founder & Managing Partner of Quality Quotient Solutions Ltd | Hospitality Management Consultant



Dr. Jeanne Ng

Chair of the Hong Kong Institute of Qualified Professionals | Adjunct Professor, Division of Environment & Sustainability, HKUST



**Anthony Myint** 

Co-founder & Executive Director of Zero Foodprint



**Cherrie De Erit Atilano** 

Founding Farmer, President, CEO of AGREA | UN Food Systems Champion | WEF Young Global Leader



Dr. Li Ying

Conservation & Agriculture Director TNC China | Plant Pathology & Soil Science



**Manuel Klarmann** 

Founder & CEO of Eaternity | Life Cycle Assessment Expert



**Adam Li** 

Legal Advisor
Partner at Y.S Lau & Partners



**David Leung** 

Founder of Hong Kong Farmers Pride, an organic farmers association

## **ADVISORY MEMBERS**



**Dr. Shauhrat Chopra** 

Asst. Professor at School of Energy & Environment at City University of HK | Life Cycle Assessment Scientist



Josephine Mak Wen NIng

Founder & Chairlady of Homeland Green | Regenerative Farming Educator & Soil Health Expert



**Janice Leung Hayes** 

Founder of Honestly Green & Capsule 48 | Prominent Food Writer & Journalist



**Katherine Desbaillets Braha** 

Owner of SaladStop!



Alvin Li

Co-founder of The Kommon Goods | Public Policy and Social Innovation

# **THANK YOU**







