ATOZ™
CarbonCycle

- REGENERATIVE AGRICULTURE AND AGRI-FOOD
- SUSTAINABILITY AND CARBON MANAGEMENT
- ESG AND CARBON PROJECT DEVELOPER

ATOZ CARBON CYCLE

Introduction Handbook

Table Of Content

ATOZ™ CarbonCycle

About Us

WORLD NEW ENERGY CENTRE SDN. BHD

World New Energy Centre Sdn. Bhd was conceptualized on May 20, 2022, with the aim of exploring development trends in the post-digital economy era. Initially, our focus was on the biofuel or biodiesel sector, but as we delved deeper, the potential of microalgae as a catalyst for an era revolution became increasingly evident. Following a rigorous two-month research phase, we officially established the company on July 13, 2022. With the support of the Hong Kong New Energy Center Company (HKNEC), the team developed rapidly and formally became a company oriented towards ESG and carbon credit project development.

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Atoz Carbon Cycle Platform

In September 2023, we officially founded the Atoz Carbon Cycle Platform, an algae-based zero-carbon cycle platform. By adopting a platform model, we integrate agricultural farmers, aquaculture operators, livestock producers, food industry players, industrial designers, ESG system software developers, financiers, business consultants, and carbon credit traders. Our goal is to establish a nature-based ESG and carbon reduction zero-carbon cycle ecosystem

Agricultural applications and cultivation: Microalgae as soil regeneration

We conduct continuous research and analysis on microalgae applications and microalgae cultivation.

Now, with up to 12 collaborative projects underway, the majority of which involve agricultural applications, we are particularly focused on utilizing microalgae as a Soil Regenerative Agent to assist in land regeneration. This involves unlocking the biomass potential of soil and increasing carbon sequestration rates, thereby achieving carbon credit generation. Not only does this help farmers reduce operational costs, but it also brings additional potential income to farmers.

The journey of cultivating microalgae

Our journey as microalgae cultivators began in 2022 when, upon the recommendation of the UTAR (Universiti Tunku Abdul Rahman) team, we obtained microalgae seeds from the University of Texas. After cultivating the algae seeds, we collaborated extensively with Universiti Putra Malaysia (UPM) to design our own bioreactors and microalgae cultivation plans to scale up the cultivation of microalgae.

In 2023, in partnership with UPM's research team, we established a Self Sufficient System Research & Development Demonstration Site.

Our vision

World New Energy Centre's vision is to create a sustainable and profitable cycle—from microalgae cultivation and carbon sequestration to carbon credit generation, ultimately establishing a new green financial system. Our journey has just begun, and we believe our model can inspire and drive broader transformation towards a sustainable global economy.

PRODUCT CATALOGUE

MICROALGAE CULTIVATION SYSTEM (MACS)

MICROALGAE ARE SINGLE-CELLED ORGANISMS,THEY ARE PHYTO-PLANKTON WHICH IS TYPICALLY INVISIBLE TO THE NAKED EYE. THEY HAVE A WIDE RANGE OF APPLICATIONS, AND WE PRIMARILY FOCUS ON THEIR USE AS SOIL REGENERATIVE AGENTS AND IN ENHANCING SOIL CARBON SEQUESTRATION RATES.

BLACK SOLDIER FLY FARMING (BSF)

THE BLACK SOLDIER FLY IS AN INSECT THAT IS BENEFICIAL TO THE ECOSYSTEM. WE FOCUS ON FOOD WASTE MANAGEMENT, ORGANIC FERTILIZER ELEMENTS AND PROTEIN SUPPLY INGREDIENTS

ESG & CARBON CREDIT PROJECT DEVELOPER

PROVIDE COMPANIES WITH ONE-STOP ESG (ENVIRONMENT, SOCIAL, GOVERNANCE) SOLUTIONS AND DEPLOY PROJECTS TO ENHANCE THE CARBON SEQUESTRATION IN AGRICULTURAL LAND.

MICROALGAE EXTRACTION POWDER

SUPERFOODS WITH HIGH PROTEIN SOURCES, BRINGING NEW BREAKTHROUGHS TO THE DEVELOPMENT OF THE CATERING INDUSTRY.

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MICROALGAE CULTIVATION SYSYTEM (MACS)

4 BIG FACTORS

POTENTIAL SOLUTIONS TO REDUCE ECONOMIC COSTS

BRANDING AND MARKETING OF AGRICULTURAL PRODUCTS

SOIL REGENERATION BRINGS POTENTIAL YIELD INCREASE

SOIL REGENERATION BRINGS POTENTIAL CARBON CREDIT

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POTENTIAL SOLUTIONS TO REDUCE COSTS

Analyze soil and operating model

Solving soil problems

Strategizing cost reduction option

- Microalgae as a soil regenerative agent can help to reduce the amount of fertilizer, thereby reducing economic cost

- It is our mission to reduce cost by at least 10% and bring sustainable development strategies to farmers

- According to some case studies, applications of microalgae in farming can reduce overall operating costs by up to 70% (For references only, as all projects need to be evaluated according to different crops)

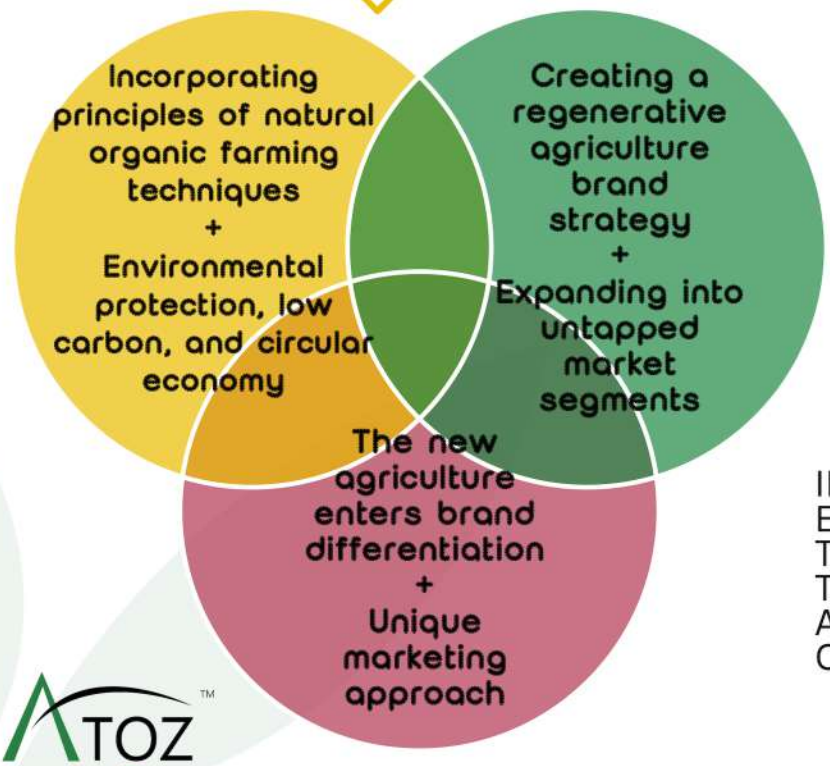
WHY? MICROALGAE IS THE SOLUTION PROVIDER

SOIL FERTILIZATION BALANCE PH VALUE

NATURAL BASIS SOIL REGENERATIVE AGENT

IMPROVE TRACE ELEMENT NUTRITION

IMPROVE SOIL WATER RETENTION



Potential of crop yield increase

IMPROVE SOIL ORGANIC MATTER, THUS INCREASING THE POTENTIAL OF PRODUCTION

IN THE MICROBIAL ECOLOGICAL ENVIRONMENT, MICROALGAE SERVE AS THE LOWEST AND HEALTHIEST LEVEL OF THE FOOD CHAIN, NATURALLY BRINGING ABOUT BIODIVERSITY AND MORE ORGANIC MATTER

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SOIL REGENERATION ELEMENTS BRING POTENTIAL CARBON CREDIT GENERATION

WHAT?

IS CARBON CREDIT?

CARBON CREDIT = $?

It's a mechanism for mitigating climate change by incentivizing businesses and nations to reduce greenhouse gas emissions through the limitation and trading of carbon dioxide emissions. Specifically, for every ton of carbon dioxide emissions reduced, a carbon credit can be earned. Businesses can achieve their emission targets by buying or selling these carbon credits

WILL IT BE TROUBLESOME? NO, CARBON CREDIT PROJECT DEVELOPERS THEMSELVES HAVE MECHANISMS IN PLACE TO COLLECT CARBON REDUCTION DATA

ONE OF THE METHODOLOGIES ACCEPTED BY THE INTERNATIONAL REGISTERED CARBON CREDIT ORGANIZATION VERRA IS THE USE OF "INNOVATIVE SOIL REGENERATION PRACTICES" INSTEAD OF "TRADITIONAL FERTILIZATION METHODS." APPLYING FOR CARBON CREDIT PROJECT REGISTRATION CAN BE DONE THROUGH VM0042, WHICH AIMS TO ENHANCE AGRICULTURAL LAND QUALITY MANAGEMENT.

IMAGINE THIS: WITHOUT COMPROMISING AGRICULTURAL YIELDS OR INCREASING COSTS, NOT ONLY CAN YOU ENRICH THE SOIL, BUT ALSO GENERATE ADDITIONAL CARBON CREDIT INCOME FOR YOU.

AS A NEW STARTUP TEAM IN MALAYSIA FOCUSED ON CARBON CREDIT PROJECT DEVELOPMENT, WE HAVE TAKEN A SERIES OF MEASURES TO ENSURE THE SMOOTH IMPLEMENTATION OF OUR CARBON CREDIT PROJECTS.

THIS INCLUDES ESTABLISHING BASIC GUIDELINES AND METHODS FOR MONITORING CARBON REDUCTION DATA. AFTER REGISTERING WITH INTERNATIONAL CARBON CREDIT REGISTRIES, IT IS NECESSARY TO APPOINT INDEPENDENT THIRD-PARTY CARBON CREDIT PROJECT CERTIFICATION COMPANIES (VVB) TO VERIFY AND VALIDATE PROJECT DATA.

THROUGHOUT THE PROCESS, IT IS ALSO ESSENTIAL TO ENGAGE PROFESSIONAL CARBON ACCOUNTING AND AUDITING ADVISORY FIRMS TO DOCUMENT DATA, ENSURING THAT EVERY STAKEHOLDER BENEFITS.

How do we start?

AFTER THE INITIAL CONSULTATION AND THE MUTUAL AGREEMENT OF THE FARMERS
ATOZ WILL THEN COMPLETE A SITE VISIT AND PROCEED WITH THE INITIAL ASSESSMENT AND ANALYSIS

Provide the farmers with a comprehensive data analysis report

Prepare a report on farming cycle costs and soil conditions

Assist in establishing a microalgae cultivation system and implementing the plan

BLACK SOLDIER FLY FARMING

4 BIG FACTORS

NUTRIENT-RICH RESIDUE :
THE EXCREMENT PRODUCED BY BLACK SOLDIER FLY LARVAE IS AN EXCELLENT SOIL AMENDMENT.

SUPERB NUTRITIONAL VALUE :
BLACK SOLDIER FLY LARVAE POSSESS HIGH PROTEIN CONTENT.

LOW-CARBON CYCLING, REGENERATIVE PROTEIN OPTIONS :
BSF CAN EFFECTIVELY PROVIDE AN OPTION FOR LIVESTOCK INDUSTRY, OFFERING A SOLUTION TO INCREASE PROTEIN INTAKE.

ENVIRONMENTAL CONSERVATION AND SUSTAINABLE DEVELOPMENT :
BSF BRING A SECOND LIFE TO ORGANIC WASTE, ACHIEVING ZERO WASTE BY REVITALIZING IT.

BSF DO IT ALL

FOODWASTE MANAGEMENT

The larvae can rapidly consume organic waste generated by the food industry and restaurants.

LIVESTOCK FEED

AQUACULTURE FEED

Mature larvae are a valuable source of protein and can serve as one of the options for enhancing protein intake.

LOW COST CYCLING

After implementing BSF farming, farmers will have their own sustainable ecosystem, based on circular concept, ultimately reducing economic costs.

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ESG ERA

MORE FINANCING OPPORTUNITIES.

EXPLORE NEW MARKET

BUILD BRAND IMAGE

ESG ELEMENTS BRINGING NEW OPPORTUNITIES TO AGRICULTURE

ESG IS CURRENTLY THE HOTTEST AND MOST UNFAMILIAR ACRONYM. MOST PUBLICLY LISTED COMPANIES WORLDWIDE ARE REQUIRED TO PRACTICE THE ESG FRAMEWORK, WITH MANY LARGE ENTERPRISES ALSO REQUIRING SUPPLIERS TO COMPLY WITH ESG FRAMEWORK REGULATIONS. AT THIS POINT, AGRICULTURAL ENTERPRISES ARE MOST IN NEED OF UNDERSTANDING ESG AND LEVERAGING IT FOR TRANSFORMATION AND EXPANDING INTO NEW MARKETS.

THE GLOBAL TREND, AGRICULTURE'S GAIN

OUT WITH THE OLD, IN WITH THE NEW, FROM MARKET STALLS TO WI-FI'S VIEW.

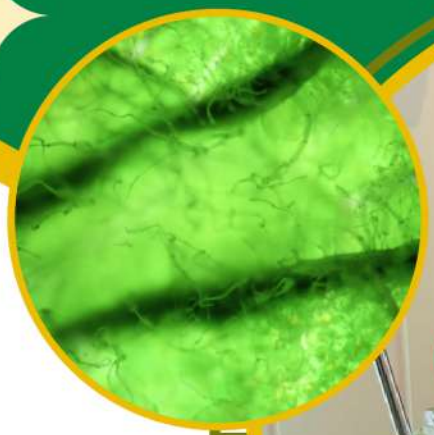
IN THE FUTURE, ESG'S OUR CUE.

IS ESG IMPORTANT?

Governments around the world are revising ESG regulatory framework. This will affect the supply chain and may bring a turnaround for small and medium-sized enterprises. especially the agricultural industry.

Welcome to our unique Microalgae Cafe !

Here, we use microalgae as the foundation to present you with a range of delicious and healthy foods and beverages, allowing you to indulge in the joys of green living.



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1st in Malaysia Microalgae cafe

The intersection of innovation and health

Explore the marvelous of microalgae

Microalgae, hailed as the "green treasure of the ocean," is a nutrient-rich superfood. In our café, you'll have the opportunity to delve into the wonders of microalgae. From its growth process to its nutritional value, we'll take you on a journey to explore the marvelous world of microalgae, leaving you in awe of this incredible organism.

Committed to sustainable living

Our café is not just a dining establishment; it's our commitment to sustainable living. We uphold a serious attitude towards environmental and social responsibility, striving to reduce our impact on the planet at every turn. From selecting organic ingredients to embracing energy-efficient and eco-friendly business practices, we endeavor to integrate sustainable development into our daily lives.

Let's keep in touch

Our Contact

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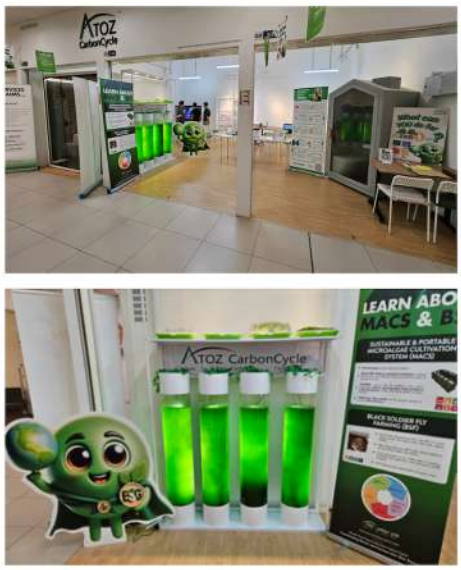
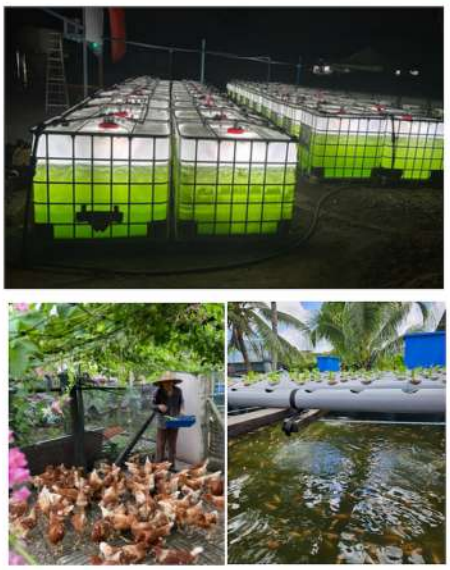
Algae To Zero Carbon Cycle

Our primary vision is to provide ecosystems to help people improve their lives. With Atoz Carbon Cycle, we aim to create a better, more sustainable world.



Atoz Carbon Cycle Microalgae Experience Store
微藻体验馆

Store GM3-3, 3rd Floor, GMBB Kompleks, 2, Jalan Robertson, Bukit Bintang, 50150 Kuala Lumpur, Wilayah Persekutuan Kuala Lumpur



Atoz Carbon Cycle Operation Site
营运基地

World New Energy Centre Sdn Bhd (WNEC) Lot 260, Kampung Begia, Mukim Teloi 08200 Sik, Kedah.

Atoz Carbon Cycle R&D Collaboration Demo Site
合作研究与示范基地

Universiti Putra Malaysia, Ladang 15, 43400 Seri Kembangan, Selangor, Malaysia

Social Media

Instagram: @atozcarboncycle

Tiktok: @algaetozerocarbon

Facebook: ATOZ Carbon Cycle

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