

Organic World Congress 2024

Workshop Concept Note

Note for Workshop Organisers

Thanks for contributing to the 21st Organic World Congress (OWC) by proposing to organise a workshop.

Workshops are:

- One or more sessions, each allocated a 1 hour and 30-minute time slot during the OWC main Conference (2-4 December 2024).
- Proposed and organised by an Organic Stakeholder, by contracting with the OWC Organisers.
- Dealing with a topic relevant for the Organic sector and in line with the congress' objectives and themes.
- Dealing with a topic in a complementary way to the various OWC Tracks.
- Addressing stakeholders from all over the world and not only a single country or a single region.
- An in-person event organised in Taiwan.
- Included and visible on the OWC programme.

Please note that:

- You can submit your contribution **until the 31 July 2024** by email to papers2024@owc-bio.org
- The OWC Organisers will assess the proposal and may ask for additional information.
- All proposals will be reviewed by a committee of international and Taiwanese experts. The evaluation will be based on the following criteria:
 - Content Integrity: 30%
 - Relevance to Organic Content: 40%
 - Event Attractiveness: 20%
 - Budget Reasonableness: 10%
- The workshop admission results will be communicated to all organisers prior to **the end of August**.
- The organiser may delay notification of admission results due to the review process.

For selected Workshops:

- Workshop organisers will organise the workshop and will cover the related organisation costs (*e.g. working time, edition costs, flyer, proceedings, travel costs, invited speakers, sponsoring*).
- Workshop organizers should pay the meeting room cost to OWC organizers.
- The interpreter cost will be charged if you need interpreters. OWC organisers will provide one interpreter only during the workshop. Interpreter equipment isn't included.
- The capacity of the meeting room ranged from 40 to 300 persons per room. Please indicate the expected number of participants in the proposal so that we can arrange the suitable meeting room for the Pre-Conference organizers.

Cost of host a Workshop:

- Total cost of One session (*venue rental, venue cleaning*): €300, NT\$10500
- Total cost of One session (*venue rental, venue cleaning, one interpreter*): €600, NT\$21000

NB. For further questions, please contact papers2024@owc-bio.org

Workshop Title

What is the name of this workshop that will be used on the website and other communications?

Agricultural Carbon Neutrality

Main organiser, contact person

First name, Last name, Institution name, country, web-address, email address

Name: 0 0 0,

Institution: Society of Green Technology for Sustainability in Taiwan; Center of Green Technology for Sustainability, Nanhua University.

Country: Taiwan

Web-address: <https://owc.ifoam.bio/>

Email address: 0 0 0@gmail.com

Steering committee members (and scientific board, if any)

0 0 0, Yin-Chuan Sustainable Farm, Hualien

0 0 0, Agriculture and Food Agency, Ministry of Agriculture

Main Objectives of the workshop

What are the aims of this workshop? What issue does it address? Why is it important? Maximum 1000 characters (incl. Spaces)

The primary goal of the "Agriculture Carbon Neutrality" workshop is to facilitate and advocate for approaches that empower the agricultural sector to attain carbon neutrality. In an era where global consciousness of climate change is escalating, the agricultural industry is increasingly compelled to reduce its environmental footprint. Achieving carbon neutrality in agriculture requires diminishing greenhouse gas emissions to net-zero through direct reductions and compensatory measures like carbon sequestration. This workshop aims to convene stakeholders, experts, and practitioners to deliberate on sectoral challenges, exchange expertise, and delineate viable strategies that reinforce sustainable farming practices.

Main topic(s)

Maximum 1000 Characters (incl. Spaces)

1. Understanding Current Agricultural Challenges: Provide an overview of carbon emissions in the agricultural sector, with a focus on emissions resulting from crop cultivation and changes in land use. Address challenges specific to the agricultural industry and regional disparities.

- 2. Exploring Agricultural Technological Innovations:** Identify and assess technologies that mitigate greenhouse gas emissions in agriculture, including precision agriculture, agroecological practices, and the integration of renewable energy solutions.
- 3. Policy and Regulatory Frameworks:** Discuss the impact of policies on promoting carbon neutrality in agriculture. Analyse existing frameworks, identify gaps, and propose strategies for sustainable practices.
- 4. Knowledge Exchange:** Promote collaboration among stakeholders in the agricultural sector to share innovative agricultural technologies and sustainable practices.
- 5. Addressing Social and Economic Impacts:** Assess the social and economic effects of transitioning to carbon-neutral agriculture. Develop strategies to benefit rural communities, enhance food security, and support resilient livelihoods.
- 6. Measuring and Monitoring Progress:** Discuss methodologies for tracking greenhouse gas emissions in agriculture. Emphasize data-driven decision-making, transparency, and accountability.
- 7. Promoting Cross-Sectoral Collaboration:** Encourage collaboration between agriculture and other industries, such as energy and transportation, to achieve broader climate goals and explore integrated carbon reduction efforts.

How does this workshop link with the main conference theme and which track does the workshop belong to?

The main conference theme is: Cultivating Organic Solutions for True Sustainability. The 4tracks: Policy for scaling up organics and agroecology, Organic culture and lifestyle, Knowledge and practice sharing, Growing Organic Markets, rooted in organic principles.

The workshop titled "Agricultural Carbon Neutrality" seamlessly integrates with the main conference theme, "Cultivating Organic Solutions for True Sustainability," by tackling the pivotal challenge of reducing carbon emissions within the agricultural sector. Achieving carbon neutrality in agriculture is a cornerstone of attaining genuine sustainability, encompassing the adoption of practices that mitigate climate change impacts while either maintaining or boosting agricultural productivity. This endeavour is in perfect harmony with the overarching aim of nurturing sustainable, organic agricultural methods.

Relevant Conference Tracks:

- 1. Policy for Scaling Up Organics and Agroecology:** This workshop contributes to this track by exploring policies and regulatory frameworks that encourage carbon-neutral agricultural methods. Discussions may cover how governmental policies, incentives, and international accords can aid farmers in adopting sustainable practices that minimize carbon footprints.
- 2. Knowledge Exchange and Practice Sharing:** This track aligns well with the workshop's objectives, as it provides a venue for disseminating innovative practices, technologies, and research findings pertinent to achieving agricultural carbon neutrality. Participants will benefit from exposure to case studies, exemplary practices, and scientific breakthroughs that aid in curbing carbon emissions in agriculture.

By aligning with these tracks, the "Agricultural Carbon Neutrality" workshop aims to deliver valuable insights and actionable strategies that resonate with the conference's mission to advance organic

solutions for sustainability. This contributes to fostering a resilient agricultural system grounded in organic and sustainable principles.

Targeted public (type of actors, regions of the world)

Students, Researchers, Farmers, Policy makers and Government officials, Agricultural company representative.

Format of the workshop

(e.g. farm visits, workshop with participatory method, presentations, keynotes...). When available, please present the indicative programme. Max. 1,500 characters (incl. Spaces)

1. Keynotes session: "The realization of Agricultural carbon neutrality" by Prof. Hong Yao-Ming (Nanhua University) (20 minutes)
2. Keynotes session: "How to count/reduce the carbon emission in rice field" by Prof. Chen Bo-Ching (Nanhua University) (20 minutes)
3. Keynotes session: "An introduction of Carbon Neutrality Platform" by Cheska Aujero (Center of Green Technology for Sustainability, Nanhua University) (20 minutes)
4. Panel Discussion: Challenges and Opportunities for achieving carbon neutrality in agriculture. (20 minutes)
5. Q&A session (10 minutes)

Duration of the workshop

1 or 2 or 3 sessions: 2nd December and/or 3rd December and/or 4th December 2024

1 session only, 11:30 – 13:00 on 2nd December 2024

How will the program be set up

e.g. will you launch a call for contributions? Will you organise a paper review? Preliminary programme envisaged. Max. 1000 characters (incl. spaces)

No.

Main outcomes expected

e.g. What are the key takeaways for the participants? an exchange on an issue, network building, new insights...

This workshop will deepen participants' comprehension of both the challenges and opportunities associated with attaining carbon neutrality in agriculture. Attendees will collaboratively pinpoint practical strategies that promote innovation in sustainable agricultural practices. The session will focus on crafting policy recommendations and frameworks designed to encourage carbon-neutral

agricultural methods, while also enhancing awareness and commitment across various stakeholders. Networking opportunities will bolster collaborations between different sectors, facilitating the exchange of knowledge and the adoption of scalable solutions. Ultimately, the workshop is designed to catalyse decisive actions towards reducing agricultural greenhouse gas emissions, thus fostering resilient farming systems that actively support broader climate objectives and sustainable development.

How will these outcomes be shared and disseminated?

Will you publish workshop proceedings? Will you have a follow up session during the OWC itself.

Provide questionnaires to share experiences, comments and suggestions

Language of the workshop

If it's not in English, how will you manage translation, with which resources?

English

Meeting room needs (capacity)

Please outline your requests below. Be advised that fulfilment may not be possible for all. How many participants are you expecting?

We expect 50-100 participants

Equipment needs

Please outline your requests below. Be advised that fulfilment may not be possible for all. What equipment are you expecting? (e.g. projector, microphone, extension cord, speakers, audio amplifier)

Projector, microphone, extension cord, speakers, audio amplifier

Additional information or specific request

in case you would like to add something to your proposal.


No.

VISUAL HIGHLIGHTS

1. Greenhouse Gas emission measurement from Organic Rice Production

	
<p>Air sampling collection from the rice field</p>	<p>Installation of the chamber box for air sampling</p>
	
<p>Introduction and demonstration of materials in air sampling</p>	<p>Introduction and demonstration of the water sensor for wetland carbon emission</p>
	
<p>Demonstration of the proper usage of the water sensor</p>	

2. System Carbon Inventory Platform



Natural Zero

ISO14064-1 Carbon Inventory Service Platform

Account	<input type="text" value="userID"/>
Password	<input type="password" value="Password"/>
Verification code	<input type="text" value="VerifyCode"/> Refresh Verification Code (Verification is case insensitive.)
<input type="button" value="Sign Up"/>	<input type="button" value="Login"/>

Carbon Inventory Service Platform Login

<div style="background-color: #2980b9; color: white; padding: 5px; text-align: center; font-weight: bold; font-size: 1.2em;">ESG System</div> <div style="background-color: #a6c9ec; padding: 5px; text-align: center; font-weight: bold; font-size: 0.9em;">FUNCTION LIST</div> <ul style="list-style-type: none"> <li style="padding: 5px; display: flex; justify-content: space-between; align-items: center;">Boundary < <li style="padding: 5px; display: flex; justify-content: space-between; align-items: center;">INSPECTION < <li style="padding: 5px; display: flex; justify-content: space-between; align-items: center;">REPORT < <li style="padding: 5px; display: flex; justify-content: space-between; align-items: center;">MANAGEMENT < 	<ul style="list-style-type: none"> <li style="background-color: #27ae60; color: white; padding: 5px; display: flex; justify-content: space-between; align-items: center;">Boundary < <li style="background-color: #27ae60; color: white; padding: 5px; display: flex; justify-content: space-between; align-items: center;">INSPECTION > <li style="padding: 5px; display: flex; justify-content: space-between; align-items: center;">INVENTORY LIST SELECT < <li style="padding: 5px; display: flex; justify-content: space-between; align-items: center;">INVENTORY LIST < <li style="padding: 5px; display: flex; justify-content: space-between; align-items: center;">Category One < <li style="padding: 5px; display: flex; justify-content: space-between; align-items: center;">Category One-Land Use < <li style="padding: 5px; display: flex; justify-content: space-between; align-items: center;">Category Two < <li style="padding: 5px; display: flex; justify-content: space-between; align-items: center;">Category Three < <li style="padding: 5px; display: flex; justify-content: space-between; align-items: center;">Category Four < <li style="padding: 5px; display: flex; justify-content: space-between; align-items: center;">Category Five < <li style="background-color: #a6c9ec; padding: 5px; display: flex; justify-content: space-between; align-items: center;">REPORT < <li style="padding: 5px; display: flex; justify-content: space-between; align-items: center;">MANAGEMENT <
System platform main menu function	System platform sub-menu function

Carbon Emission Statistics

Inventory Reference Number	<input type="text" value="691"/>
Company Name	<input type="text" value="Guarantee Responsibility Yunlin County Kouhu Fish"/>
Factory Name	<input type="text" value="Guarantee Responsibility Yunlin County Kouhu Fish Production Coc"/>
Inventory Year	<input type="text" value="2023"/>
Inventory Name	<input type="text" value="KOUHU FISH PRODUCTION"/>
Inventory Description	<input type="text" value="Provide an inventory of individual greenhouse gas emitting entities"/>

General information for the system report download

Greenhouse Gas Inventory Emissions by Category			表3-3 報告邊界				
Emission Category	Inventory Category	Carbon Emissions (kgCO ₂ e)	Category	Sub Category	Area	Item	Emission source
Category 1 Fixed Combustion	Stationary Emission Category	20,160.4858	Category 1 Direct Emissions	Mobile Emission Category	WHOLE FACTORY	BARREL OF GAS	stationary LPG KgCO ₂ e/t
Category 1 Fixed Combustion	All Year	0.0000	Category 1 Direct Emissions	Mobile Emission Category	WHOLE FACTORY	GENERATOR AND BOILER	stationary Stationary diesel KgCO ₂ e/L
Category 1 Mobile Combustion	Mobile Emission Category	235,437.6231	Category 1 Direct Emissions	Mobile Emission Category	WHOLE FACTORY	VEHICLE	mobile migration source diesel KgCO ₂ e / L
Category 1 Fugitive Emission	Gas cylinder	0.0000	Category 1 Direct Emissions	Mobile Emission Category	WHOLE FACTORY	VEHICLE	mobile migration source diesel KgCO ₂ e / L
Category 1 Fugitive Emission	Fire equipment	0.0000	Category 1 Direct Emissions	Refrigerant equipment	Guarantee Responsibility Yunlin County Kouhu Fish Production Cooperative	EXCAVATOR	1923
Category 1 Fugitive Emission	Land Use-Fertilizer	0.0000	Category 1 Direct	Refrigerant	Guarantee	TRUCK	1923
Category 1 Fugitive Emission	Land Use-Pesticide	0.0000					
Category 1 Fugitive Emission	Land Use-Rice Field	0.0000					
Category 1 Fugitive Emission	Land Use-Livestock	0.0000					
Category 1 Fugitive Emission	Land Use-Nitrogen Fertilizer	0.0000					
Category 1 Fugitive Emission	Land Use-Combustion	0.0000					
Category 1 Fugitive Emission	Land Use-Biomass	0.0000					
Category 1 Fugitive Emission	Septic Tank	19.4866					

A sample of generated report by Category after uploading the inventory information

Table 3-4 Total Greenhouse Gas Emissions							
Category	CO ₂	CH ₄	N ₂ O	HFC ₅	PFC ₅	SF ₆	Total
Emission equivalent (metric tons CO ₂ e/year)	255.2757	0.3049	0.0370	0.0000	0.0000	0.0000	255.6176
Gas proportion (%)	99.8662%	0.1193%	0.0145%	0.0000%	0.0000%	0.0000%	100.0000%

Table 3-5 Greenhouse Gas Emissions for Category 1							
Category 1	CO ₂	CH ₄	N ₂ O	HFC ₅	PFC ₅	SF ₆	Total
All Year	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile Emission Category	235.1720	0.2656	0.0000	0.0000	0.0000	0.0000	235.4376
Stationary Emission Category	20.1037	0.0198	0.0370	0.0000	0.0000	0.0000	20.1605

A sample report for the total greenhouse gas emission and category

Table 3-6 Greenhouse Gas Emissions by Category							
Category	Category 1 Direct Emissions	Category 2 Indirect Emissions	Category 3 Transportation Indirect Emissions	Category 4 Materials/Services Indirect Emissions	Category 5 Product Use Indirect Emissions	Category 6 Other Indirect Emissions	Total
Emission equivalent (metric tons)	255.6176	0.0000	0.0000	0.0000	0.0000	0.0000	255.6176

A sample report for the total greenhouse gas emission by overall category