

亞洲太平洋地區糧食與肥料技術中心 函

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受文者：如正副本行文單位

擬掃描成電子公文寄至本院教學及副屬單位，
請協助轉知所屬人員，踴躍參與。

發文日期：中華民國 113 年 6 月 11 日
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速別：普通件
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附件：國際研討會計畫資料議程(英文)及海報範例模板 1 份

行政組 張瀟文

技正 鄧堯銓

代為決行
國立中興大學 農業暨自然資源學院 陳志峰(用)
06/12

主旨：本中心訂於本(113)年9月10日至12日舉辦「鼓勵永續農糧系統內減排和碳抵換的策略和行動方案」國際研討會，該研討會與農業部農業試驗所、畜產試驗所、國立臺灣大學、國立中興大學及荷蘭在台辦事處共同合作，將於臺大集思會議中心採現場與線上混合方式舉行，相關議程資料如附件，擬邀貴單位提供海報(線上或實體)，分享有關農業淨零議題相關之研發成果、計畫、策略或政策，請查照惠復。

說明：

- 一、亞太糧肥中心(FFTC)農業部農業試驗所、畜產試驗所、國立臺灣大學、國立中興大學及荷蘭在台辦事處共同舉辦旨揭國際研討會，第一、二日為論文發表及討論會，第三日為田間參訪。該研討會包含四個主題：(一)創新的低碳實踐；(二)農糧產業的循環與綠色實踐；(三)橋接永續農糧系統的數據缺口；及(四)農糧領域的政策架構與碳抵換機制。另於第一日第一主題後安排一個小時 20 分鐘的海報簡介、討論及茶會交流時間。
- 二、敬邀貴單位同仁提供海報分享有關農業淨零議題但不限於本研討會主題之相關成果、計畫、策略或政策，以英文內容為主，海報大小為 A1 尺寸。(如附件)

總收文
113. 0. 12

國立中興大學

符合本校「文書處理要點」第18條
33條規定，以紙本公文辦理。

農資學院
113. 6. 12
收件章



- 三、所有參與之海報將被放在線上展示區，該線上展示區包括互動之功能，可與國內外來賓交流互動，研討會籌備委員會將選擇其中部分海報於現場空間實體展示，並邀請海報製作者在現場給予兩分鐘的簡短報告，於茶會暨海報交流時段與現場來賓交流互動。
- 四、倘貴單位同仁對此海報展示活動有興趣，請於本年度 6 月 28 日前向本中心提供報告人姓名、電子郵件及電話。
- 五、報告人需於 8 月 10 日收件截止日時繳交 A4 一頁（12 號字）之摘要一份，以及 A1 海報之電子檔（投影片檔或 PDF 檔均可），本中心將於 8 月 16 日以電子郵件通知獲選現場參與之報告者。
- 六、檢附旨揭國際研討會計畫資料議程(英文)及海報格式說明各一份。該研討會已於 6 月 11 日開放線上網站提供報名及其他詳細資訊，可上本中心網站或臉書查詢。

正本：農業部資源永續利用司氣候治理科、農業部農業試驗所、農業部林業試驗所、農業部水產試驗所、農業部畜產試驗所、農業部桃園區農業改良場、農業部苗栗區農業改良場、農業部臺中區農業改良場、農業部臺南區農業改良場、農業部高雄區農業改良場、農業部花蓮區農業改良場、農業部臺東區農業改良場、農業部茶業及飲料作物改良場、國立臺灣大學生物資源暨農學院、國立中興大學農業暨自然資源學院、國立嘉義大學農學院、國立臺灣海洋大學、國立宜蘭大學生物資源學院、國立高雄科技大學、國立屏東科技大學農學院、臺灣經濟研究院、財團法人農業科技研究院（均含附件）

副本：農業部農業試驗所農業化學組陳琦玲博士、農業部畜產試驗所程梅萍副所長、國立臺灣大學生物資源暨農學院林裕彬院長、國立中興大學工學院楊明德院長、國立中興大學創新產業暨國際學院推廣教育組林政賢組長

主任

張淑賢

2024 FFTC Smart Net Zero (SNZ) Workshop Concept Note

Project Information

| | |
|-------------------|--|
| Project No. | 2024-WS-P05 |
| Project type | Workshop (international conference, hybrid, and field trip) |
| Project title | Strategies and actions to incentivize emission reductions and carbon offset within sustainable agrifood systems |
| Date | September 10-12, 2024 |
| Location | Taipei, Taiwan |
| Partners | National Taiwan University (NTU), National Chung-Hsin University (NCHU), Taiwan Livestock Research Institute (TLRI), Taiwan Agricultural Research Institute (TARI), Netherlands Office Taipei (NLOT) |
| FFTC coordinators | Ray-Yu Yang, Tomonari Watanabe and Jennifer Lii |

Summary

Rationale

The agriculture sector and food system are major sources of greenhouse gas (GHG) emissions, resulting from factors like methane emission from rice paddies and livestock, land use changes, synthetic fertilizers, and energy-intensive food production and transportation. These emissions exacerbate climate change, creating a dual challenge of food security and global warming. To address these issues, we must transition to sustainable practices, provide policy support, and promote carbon offset mechanisms to reduce emissions.

Key actions to reduce GHG emissions include practices like low methane emission animal feeds or probiotics, alternate wetting and drying (AWD) of rice paddies, site-specific application of pesticides and fertilizers, reduced tillage, crop rotation, and organic farming to enhance soil health, optimizing logistics, promoting local food systems, and adopting renewable energy sources and fuel-efficient vehicles. Reducing food waste along the supply chain, from production to consumption, is crucial. Government policies and incentives can encourage emission reductions and sustainable agriculture, while educating and motivating consumers can reduce the carbon footprint of the agrifood system.

Carbon offsetting compensates for GHG emissions by reducing or removing an equivalent amount elsewhere. These offsets are typically used to mitigate emissions that are challenging or expensive to eliminate directly. Methods include planting trees (afforestation), restoring forests (reforestation), investing in clean energy sources, capturing methane emissions, enhancing carbon storage in soils, and developing carbon markets and trading.

Policy support, such as government incentives for sustainable practices through subsidies and regulations, is critical for large-scale involvement of farmers and other food system actors. Leveraging ICT, including precision agriculture, data-driven decision-making, supply chain efficiency, smart packaging, blockchain technology, e-commerce, and carbon accounting, can streamline operations, reduce waste, optimize resource use, and make data-informed decisions, all contributing to lower carbon emissions and a more sustainable agrifood system.

Objectives:

- Facilitate the sharing of knowledge, expertise, and innovative approaches among international experts, researchers, and practitioners in the field of sustainable agrifood systems, emission reductions, and carbon offset strategies.
- Discuss and formulate effective policies and strategies that promote emission reductions and carbon offset within the agrifood sector, contributing to broader sustainability and net-zero goals.
- Foster collaboration, partnerships, and networking opportunities among conference participants, encouraging cross-border and interdisciplinary cooperation in addressing sustainability challenges.
- Highlight and showcase successful case studies and initiatives from Taiwan and abroad that have achieved emission reductions and carbon offset within sustainable agrifood systems.

Possible themes:

1. Innovative Low-Carbon Practices in Agriculture:

Showcase and discuss the latest innovations that are effectively reducing the carbon footprint in agrifood systems.

Focus areas:

- Exploration of cutting-edge techniques and practices that minimize carbon footprints in farming.
- Action plan or case studies on successful implementation of low-carbon practices in different regions.

2. Circular and Greener Practices in the Agrifood Sector:

Explore and promote practices that lead to more environmentally friendly and circular agrifood systems.

Focus areas

- Emphasizing circular economy principles in the agrifood sector, including waste reduction, sustainable packaging, and resource- and energy efficient practices.
- Exploring systems that close the loop in food production and consumption, thereby reducing environmental impact and enhancing sustainability.
- Discussing the role of consumer behavior and market dynamics in promoting a greener agrifood system.

3. **Bridging Data Gaps for Sustainable Agrifood Systems:**

Understand and strategize on bridging critical data gaps to advance sustainable practices in the agrifood sector.

Focus Areas:

- Identifying key data gaps hindering sustainable agrifood development.
- Leveraging big data and AI for enhanced decision-making in agrifood sustainability.

4. **Policy Frameworks and Carbon Offsetting Mechanisms in Agrifood:**

Delve into how policy support and carbon offset mechanisms can collaboratively contribute to achieving sustainability in the agrifood sector.

Focus Areas:

- Discussion of policy frameworks that incentivize emission reductions and sustainable practices.
- Insights into carbon trading and offsetting as tools for sustainable agrifood systems.
- Exploring the feasibility and impact of carbon markets in the agrifood sector.

Additional components:

- **Online Poster Presentations:** Highlight the innovations, strategies and policies addressing the selected themes.
- **Field Trip and On-Site Learning:** Offer participants practical insights into successful emission reduction, carbon sequestration, and carbon offset projects in Taiwan, with real-world examples and lessons.

Expected participants

- Approximately 16 internationally renowned speakers addressed 3-5 selected thematic topics from at least 5 countries.
- Around 20-40 poster presenters, either online or in person.
- Conference registration is open internationally for interested individuals to participate online or in person.

Expected outputs

- A 1.5 days of international conference
- A 1.5 days of field trip (by invitation)
- Invitations for speakers to join the SNZ project consortium
- Action plan recommendations
- Presentations for open access
- A workshop report for open access
- A workshop video for open access

2024 SNZ International Conference

Strategies and Actions to Incentivize GHG Emission Reductions and Carbon Offset within Sustainable Agrifood Systems

0900 – 17:30, September 10-12 (Tue – Thu), 2024

In-Person and Online (GMT+8)

GIS NTU Convention Center, Taipei, Taiwan

Cisco-Webex Meeting Link; Poster Session Link

Tentative Program

(2024/5/10 Update-JL)

Day 1: September 10, Tuesday

| Time (GMT+8) | Topic | Note |
|--------------|--|---|
| 09:00-09:30 | Registration | |
| 09:30-10:00 | Opening Ceremony Welcome Remarks MOA, NTU, NCHU, NLOT, TARI, TLRI, FFTC. (TBC) Group Photo | |
| 10:00-10:40 | Keynote 1 Dr. Imelda Bacudo , COP28 Senior Advisor, Climate, Food, and Agriculture and Land Use Expert; Co-Chair Global Alliance on Climate Smart Agriculture (GACSA), Researcher, SEI-Asia, the Philippines Topic: TBD | Conference themes |
| 10:40-11:00 | Break (poster view) | |
| 11:00-12:00 | Session 1: Innovative Low-Carbon Practices <i>Showcase and discuss the latest innovations that are effectively reducing the carbon footprint in agrifood systems.</i> Speaker 1-1 Dr. Gregory McCarty , Research Soil Scientist, United States Department of Agriculture, Agricultural Research Service (USDA-ARS), US Topic: Research Supporting Strategies for | Focus: (TBD) <ul style="list-style-type: none">• Exploration of cutting-edge techniques and practices that minimize carbon footprints in farming.• Action plan or case studies on successful implementation of |

| Time (GMT+8) | Topic | Note |
|--------------|---|---|
| | <p><i>Reduced Carbon Footprint in US Agricultural Production Systems</i></p> <p>Speaker 1-2 (addressing south countries)</p> <p>Mr. Russ Martin Cullinane, Independent Consultant, Carbon Markets and Agriculture (Former Global Lead - Technology Strategies, Agriculture, South Pole, Indonesia)</p> <p>Topic: <i>Overview of Agricultural Technologies for Carbon Credits: Challenges and Potential</i></p> | low-carbon practices in different regions. |
| 12:00-13:00 | Lunch break (poster view) | |
| 13:00-14:00 | <p>Speaker 1-3</p> <p>Dr. David Pacheco, Principal Science Advisor, New Zealand Agricultural Greenhouse Gas Research Centre (NZAGRC), Greenlands Research Center, New Zealand</p> <p>Topic: <i>Reducing greenhouse gas emissions from livestock production systems</i></p> <p>Speaker 1-4</p> <p>TBD Dutch company's representative from NIOT's connection, Netherland</p> <p>Topic: TBD</p> | |
| 14:00-15:00 | Poster session (poster presentation) | |
| 15:00-15:20 | Break | |
| 15:20-17:20 | <p>Session 2: Circular and Greener Practices in the Agrifood Sector</p> <p><i>Explore and promote practices that lead to more environmentally friendly and circular agrifood systems.</i></p> <p>Speaker 2-1</p> <p>Dr. Matias Vanotti, Research Soil Scientist, United States Department of Agriculture, Agricultural Research Service (USDA-ARS), US</p> <p>Topic: TBD</p> <p>Speaker 2-2</p> | <p>Focus: (TBD)</p> <ul style="list-style-type: none"> Emphasizing circular economy principles in the agrifood sector, including waste reduction, sustainable packaging, and resource- and energy efficient practices and their LCA. |

| Time (GMT+8) | Topic | Note |
|--------------|--|---|
| | <p>Dr. Minjian Yuan (袁明鑑), Associate professor, Department of Industrial Engineering and Management, National Yunlin University of Science and Technology, Taiwan</p> <p>Topic: <i>Strategies and actions to incentivize emission reductions and carbon offset within sustainable agrifood system</i></p> <p>Speaker 2-3</p> <p>Dr. Hiroki SASAKI, Director, Policy Research Institute, Ministry of Agriculture, Forestry and Fisheries, Japan</p> <p>Topic: <i>Behavioral Changes in Farmers and Consumers Towards a Greener Agri-food System</i></p> <p>Speaker 2-4 (online)</p> <p>Mr. Shohei Takeuchi, General Manager, Strategy Execution Group, Customized Feed Solution Dept., Bio & Fine Chemicals Division, Ajinomoto Co., Inc., Japan</p> <p>Topic: <i>Carbon footprint from production to consumption (TBD)</i></p> | <ul style="list-style-type: none"> • Exploring systems that close the loop in food production and consumption, thereby reducing environmental impact and enhancing sustainability. • Discussing the role of consumer behavior and market dynamics in promoting a greener agrifood system. |
| 17:20-18:00 | <p>Keynote 2 (online)</p> <p>Dr. Jean-François Soussana, Research Director, Vice-President for international policy and executive board member at the French National Research Institute for Agriculture, Food and the Environment (INRAE), France</p> <p>Topic: TBD</p> | Conference themes |
| 18:30 | Welcome dinner | |

Day 2: September 11, Wednesday

| Time (GMT+8) | Topic | Note |
|--------------|---|--------------|
| 09:00-09:10 | 1 st Day Recap | |
| 09:10-10:40 | Session 3: Bridging Data Gaps for Sustainable Agrifood Systems | Focus: (TBD) |

| Time (GMT+8) | Topic | Note |
|---------------------------------|---|--|
| | <p><i>Understand and strategize on bridging critical data gaps to advance sustainable practices in the agrifood sector.</i></p> <p>Speaker 3-1</p> <p>Dr. Frits van Evert, Senior Researcher in precision agriculture, Wageningen University & Research, Netherland</p> <p>Topic: <i>Digital twin for arable farming, System-based precision agriculture, Digital future farm</i></p> <p>Speaker 3-2</p> <p>Dr. Do-Kyoung Lee, Professor, University of Illinois (UIUC), US</p> <p>Topic: <i>Agricultural Carbon Emission and Agrifood Sustainability; Scale-Up of Highly Variable Spatial Data</i></p> <p>Speaker 3-3</p> <p>Name: Dr. Nicola Cerutti, Researcher, Oasis Loss Modelling Framework, London, UK</p> <p>Topic: <i>Food system emissions: trends, drivers, and policy approaches</i></p> | <ul style="list-style-type: none"> Identifying key data gaps hindering sustainable agrifood development. Leveraging big data and AI for enhanced decision-making in agrifood sustainability. |
| 10:40-11:00 | Break | |
| 11:00-11:20 (Presentation-1) | <p>Session 4: Policy Frameworks and Carbon Offsetting Mechanisms in Agrifood Systems</p> <p><i>Delve into how policy support and carbon offset mechanisms can collaboratively contribute to achieving sustainability in the agrifood sector.</i></p> <p>Speaker 4-1: (panel presentation, 10 min):</p> <p>Dr. Hui-Hsin (Anna) Tseng (曾惠馨教授), Deputy Director of Green Manufacturing Department, Taiwan Semiconductor Manufacturing Company, Ltd. (TSMC)</p> <p>Topic: TBD</p> <p>Speaker 4-2: (panel presentation, 10 min):</p> <p>Mr. Jay Fang (方儉董事長), CEO, Eco-Affinity</p> | <p>Focus (TBD)</p> <ul style="list-style-type: none"> Discussion of policy frameworks that incentivize emission reductions and sustainable practices. Insights into carbon trading and offsetting as tools for sustainable agrifood systems. Exploring the feasibility and impact |

| Time (GMT+8) | Topic | Note |
|-------------------------------|--|--|
| | Company, Ltd. Taiwan Topic: <i>The first year of Small Farmers Carbon Farming Project in Taiwan Field Trial</i> | of carbon markets in the agrifood sector. • MRV, Private sector |
| 11:20-12:00 (Discussion-1) | Panel discussion 1: ESG, carbon offset, carbon credit, exchange market examples/ cases in Taiwan Panelists: <ul style="list-style-type: none"> • Mr. Jay Fang (方儉董事長), CEO, Eco-Affinity Company, Ltd. • Dr. Hui-Hsin (Anna) Tseng (曾惠馨教授), Deputy Director of Green Manufacturing Department, Taiwan Semiconductor Manufacturing Company, Ltd. (TSMC) • Dr. Cheng-Hsien Lin (林政賢助理教授), Team Leader, Extension and In Service Training Division, International College of Innovation and Industry Liaison; Assistant Professor, Dep. Soil and Environmental Sciences, National Chung Hsing University, Taiwan • Dr. Abraham Li (黎安國首席營運長), Chief Operating Officer, FiO Tech (Houston, Taipei, Hong Kong, Singapore, Beijing), Taiwan | • |
| 12:00-13:00 | Lunch | |
| 13:00-13:20 | Session 4: Policy Frameworks and Carbon Offsetting Mechanisms in Agrifood Systems Delve into how policy support and carbon offset mechanisms can collaboratively contribute to achieving sustainability in the agrifood sector. Speaker 4-3 Mr. Chusak Chuenprayoth , Vice Chairman of the Thai Chamber of Commerce, Bangkok, Thailand Topic: <i>Policy Framework and Carbon Offsetting Mechanisms in Agrifood Systems</i> | |
| 13:20-14:00 | Panel discussion 2: ESG, carbon offset, carbon credit, exchange market examples/ cases in Southeast Asia | |

| Time (GMT+8) | Topic | Note | | | | |
|-----------------------------|---|-----------------------------|-------------------------|-------------------------|-----------------------------|--|
| | Panelists <ul style="list-style-type: none"> Thailand: Mr. Chusak Chuenprayoth Singapore: Mr. David Chen, CEO, AgriG8 Singapore startup Financing Philippines: Dr. Imelda Bacudo, SEI Asia Indonesia: Mr. Russ Cullinane, Consultant- Carbon Markets and Agriculture | | | | | |
| 14:00-14:20 | Day 2 Wrap-up and Closing (Closing remarks: TBD) | | | | | |
| 14:20-15:00 | Back to hotel and upload luggage to buses | Speakers and guests | | | | |
| | | | | | | |
| | Field Trip Program | By invitation | | | | |
| 15:00-15:15 | Walk toward Eco House in NTU Farm | *if rain, take the bus | | | | |
| 15:15-15:40 | <table border="1"> <tr> <td>Group A</td> <td>Group B</td> </tr> <tr> <td>Visit the NTU Eco House</td> <td>Visit the Smart Green House</td> </tr> </table> | Group A | Group B | Visit the NTU Eco House | Visit the Smart Green House | |
| Group A | Group B | | | | | |
| Visit the NTU Eco House | Visit the Smart Green House | | | | | |
| 15:40-16:05 | <table border="1"> <tr> <td>Visit the Smart Green House</td> <td>Visit the NTU Eco House</td> </tr> </table> | Visit the Smart Green House | Visit the NTU Eco House | | | |
| Visit the Smart Green House | Visit the NTU Eco House | | | | | |
| 16:05-16:20 | Get on the bus from Keelung Rd. | (基隆路四段42巷5號) | | | | |
| 16:20-17:10 | Transport to Taipei HSR station | Rush hour: 40 mins by bus | | | | |
| 17:31 | HSR No. 0149/ Arrival Time: 18:18 to Taichung HSR | | | | | |
| 19:00 | Arrive at National Hotel Taichung/ Dinner | | | | | |

Day 3: September 12, Thursday

Field trip program, Taipei, and Taichung (by invitation)

| Time (GMT+8) | Schedule | Note |
|--------------|--|------|
| 08:30 | Check out the Hotel National (before 8:20) Gather at the lobby for bus pickup | |
| 08:30-09:40 | Bus trip from Hotel National to Taichung DARES | |
| 09:40-10:40 | Visit Taichung DARES (AWD rice farming) | |
| 10:40-10:55 | Walk to grape orchard near TC DARES | |
| 10:55-11:25 | Visit grape orchard (grass cultivation) | |
| 11:25-11:40 | Bus trip to Q-Yo Biotechnology Farm Co., LTD. | |

| | | |
|-------------|---|--|
| 11:40-13:10 | Visit Q-Yo Biotechnology Farm (Smart mushroom production) Lunch at Magical Mushrooms Tribe | |
| 13:10-13:35 | Bus trip to King-Yi-Young Mushroom Farm | |
| 13:35-14:35 | Visit King-Yi-Young Mushroom Farm (rice straw and vegetable waste management for mushroom production) | |
| 14:35-15:35 | Bus trip to CH Biotech R&D Co., LTD. | |
| 15:35-16:35 | Visit CH Biotech R&D Co., LTD. (Low carbon fertilizers) Coffee break | |
| 16:35-17:35 | Back to Taichung High Speed Rail Station | |
| 18:32 | Group A: HSR to Taoyuan HSR station | |
| 18:39 | Group B: HSR to Taipei HSR station | |

Day 4: bilateral meetings or departure



Project Brief

Example 1

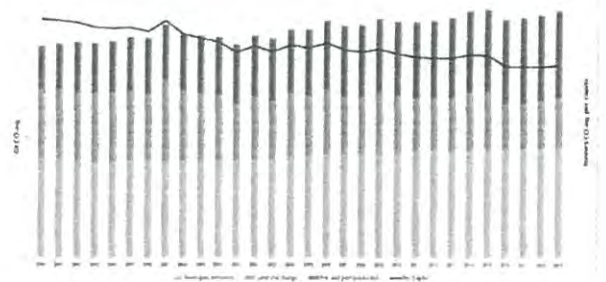
Ray-Yu Yang, Jennifer Lii, Jenny Chen, Tomonari Watanabe and Susan Chang*
 Food and Fertilizer Technology Center for the Asian and Pacific Region
 Taipei, Taiwan
 Corresponding email: xxxxxxx@fftc.org.tw

Smart & Net-Zero (SNZ)
 Enhancing international cooperation for sustainable agrifood systems towards net-zero
 Web: <https://net.fftc.org.tw/smartnetzero>
 Contact: smart.net-zero@fftc.org.tw

Rationale

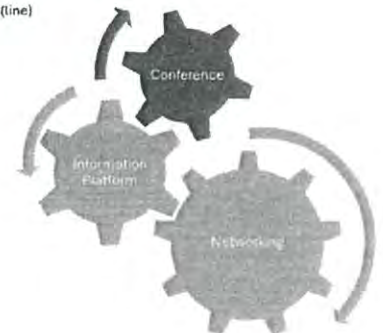
The agrifood system accounts for one-third of global GHG emissions. A significant increase in these emissions in the past decades has been driven primarily by a doubling in pre- and post-production activities like fertilizer manufacturing, cold chains, retailers, consumer behaviors, and waste. There is a notable data gap and a lack of a universally adopted framework for measuring and reporting emissions specific to the agrifood sector. This gap hinders effective comparison and assessment of progress across countries, leading to a general lack of awareness about the agrifood systems' impact on climate change. It also impedes effective communication and the development of strategies, action plans, interventions, and policies for mitigation.

World total GHG emissions from agrifood systems, 1990–2019



- Farm gate (grey)
- land use change (green)
- pre- and post-production along food supply chains (blue)
- emissions per capita (line)

Source: Tubiello et al., 2021



Objective

This project aims to enhance international cooperation through interactive platforms for stakeholders from various countries to share experiences, challenges, and solutions, focusing on technology and data related to GHG emissions from traditional agricultural activities and the broader agrifood systems.

Approaches

Information platform:

- Information type: Research, News, Policy, Open Data, and Event
- Themes:
 - o GHG Emission Reduction
 - o Carbon Sequestration
 - o ICT in Agrifood Sustainability
 - o Measurement, Reporting, Verification
 - o Policy Incentives, Financing, Pricing



Networking:

- Invited international consortium and webinars
- Facilitating communications and collaborations between Taiwan and Asia-Pacific countries

International conference:

FFTC-SNZ 2024 (Online and In-Person):
 Strategies and Actions to Incentivize GHG Emission Reductions and Carbon Offset within Sustainable Agrifood Systems
 Sept. 10-12, Taipei and Taichung, Taiwan

FFTC-SNZ 2023 (Online and In-Person):
 Developing Low Carbon Farming for Smallholders in the Asian and Pacific Region: Options, Mitigation Potential, and Challenges
 Oct. 17-19, Taichung, Taiwan

Acknowledgement: We are grateful for the funding from Ministry of Agriculture, Taiwan



Enhancing international cooperation for sustainable agrifood systems towards net-zero

Example 2

Ray-Yu Yang, Jennifer Lii, Jenny Chen, Tomonari Watanabe and Susan Chang*
Food and Fertilizer Technology Center for the Asian and Pacific Region, Taipei, Taiwan
Corresponding email: xxxxxxx@fftc.org.tw

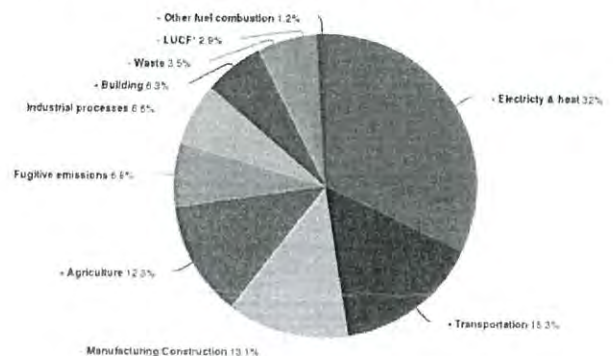
Background

The transformation of agricultural and food systems towards intelligent and low-carbon models is imperative to achieve the dual Sustainable Development Goals (SDGs) of food security and climate change mitigation. The integration of climate-smart and digital intelligent farming technologies holds the potential to usher in innovations that can revolutionize every facet of the agri-food system, thus enabling the inclusion of numerous smallholder farmers in this transformative paradigm. By fostering international information exchanges, networking, and the active engagement of researchers in international initiatives and events, the acceleration of information exchange and dissemination among countries will be facilitated, thereby propelling the development of intelligent and climate-smart agri-food systems.

Primary Objective

Strengthen international collaboration to advance sustainable agri-food systems towards improved health, safety, and net-zero carbon emissions through the sharing of information, effective knowledge management, and the establishment of international networks.

Distribution of greenhouse gas emissions worldwide in 2020, by sector

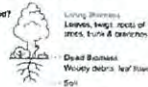


Carbon Storage in Earth's Ecosystems

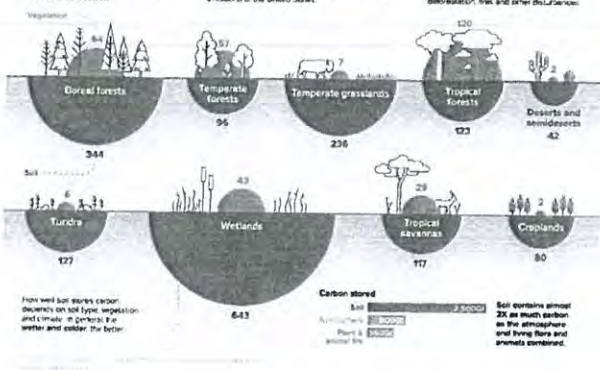
Achieving net-zero by 2050 depends on the Earth's natural carbon sinks.

Forests play a critical role in regulating the global climate. They absorb carbon from the atmosphere and then store it, acting as nature's carbon sinks.

Where is Carbon Stored?
There are various carbon pools in a forest ecosystem.



Carbon Storage



Carbon Streaming is protecting the Earth's natural carbon sinks with carbon credit streams across the following REDD+ projects:



CARBON STREAMING logo and website information: Learn more at CARBONSTREAMING.COM. NLO NETZ, OTCQB: OPSTF, FSE: M30. VISUAL CAPITALIST logo.

Workplan and Expected Outputs

Within the framework of the 4-year project plan (2023-2026):

- Establish an international consortium, create networks, and extend invitations to experts and scholars from various countries in both the public and private sectors
- Develop an information platform designed to collect and disseminate up-to-date insights on critical issues.
- Organize annual international seminars/online sessions focusing on topics revolving around "Net-zero and smart agricultural approaches for enhanced sustainable agri-food systems."
- Disseminate information about pivotal international seminars, encouraging Taiwanese researchers and government officials to actively partake in global activities.
- Conduct expert consultation meetings to synthesize project information and outcomes, thereby identifying crucial issues and offering recommendations.

Acknowledgement