



DRIVEN BY PURPOSE. GUIDED BY RESEARCH.  
MEASURED BY RESULTS.

# Verified Low-Carbon Insetting Rice Project 2025



BEYOND CERTIFICATION

# CREATING SOLUTIONS — Not Just Measuring Risk

Unlike traditional Assurance, Testing, Inspection, and Certification companies, SCI goes beyond risk measurement to create real, scalable solutions that transform supply chains.

With deep expertise and innovative strategies, we help businesses ensure compliance, enhance sustainability, reduce carbon emissions, and drive lasting impact.

By leveraging intelligent solutions and data-driven insights, we empower companies to meet standards and lead in efficiency, environmental responsibility, and long-term success.







# PARTNERS IN SUSTAINABLE SOLUTIONS

*"A reliable partner for today, an innovative partner for tomorrow."*

Our experienced and diverse team excels in delivering innovative, technology-driven services with meticulous attention to standards and governance.

2025



*"Since partnering with SCI in 2023, their professionalism and expertise in safety & legal solutions have been invaluable. Operating across 11 jurisdictions, we needed a seamless global approach—SCI has become a fundamental part of our project's success."*

Noel Birchall  
Director Global Sourcing ~ ALDI SÜD

2021

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# THE GLOBAL OPPORTUNITY

*“OFFSETTING REDUCES EMISSIONS ELSEWHERE  
— INSETTING TRANSFORMS YOUR OWN SUPPLY CHAIN.”*

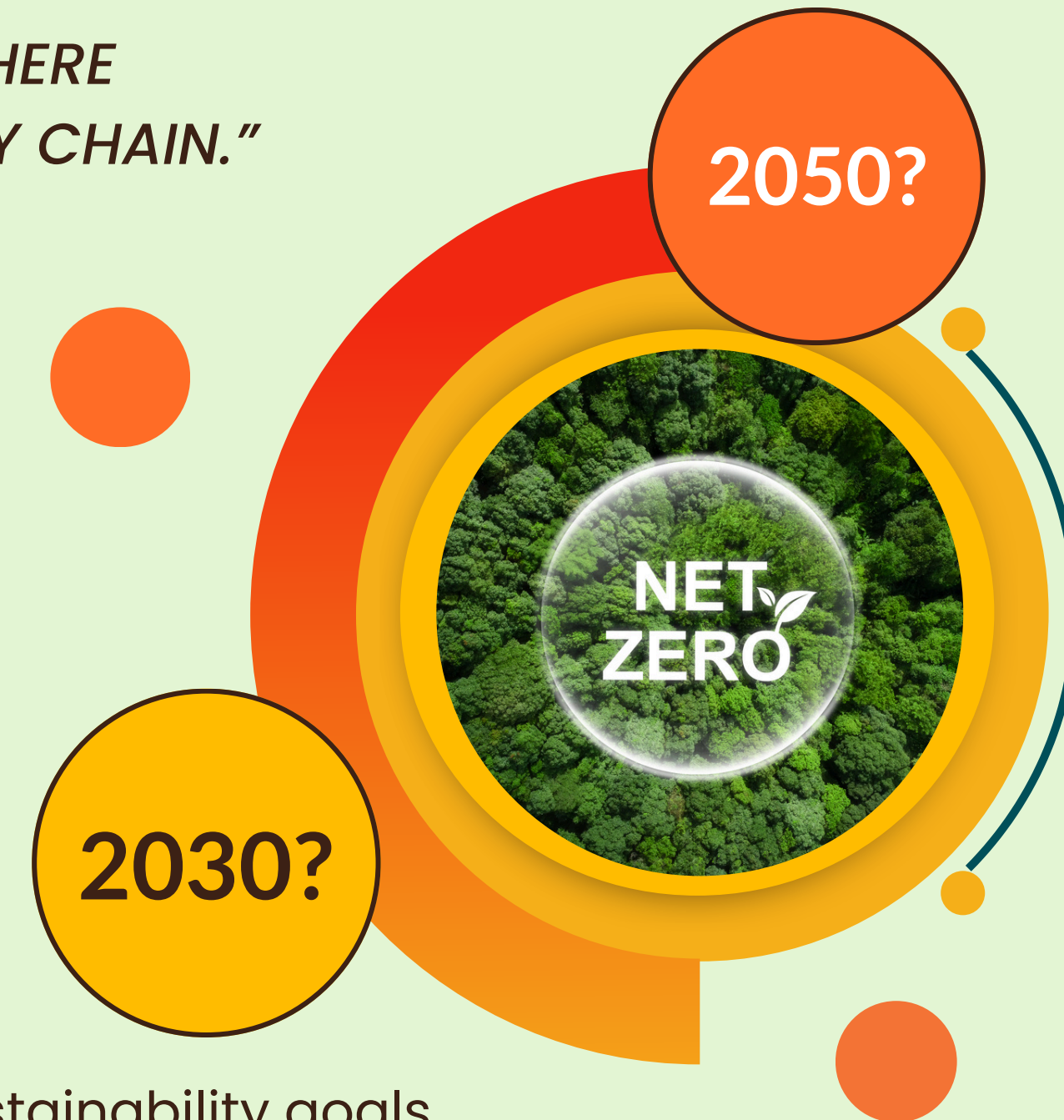
**THE WORLD’S LARGEST 2000 COMPANIES,**  
based on rankings like the Forbes Global 2000, which includes  
companies with the highest revenues, profits, assets, and market value.

**ARE COVERED BY NET ZERO TARGETS,**  
these companies have pledged to reduce their greenhouse gas  
emissions to near zero. However, only 1.3% achieved reductions across all  
three scopes. (1, 2 & 3), with any remaining emissions offset by carbon  
removal or reforestation, typically by a specific deadline (e.g., 2030 or  
2050).

## WITH THESE IMPLICATIONS:

- Economic Impact: A significant share of global commerce aligns with sustainability goals.
- Industry Leadership: Large corporations are driving the transition to lower-carbon economies.
- Potential Accountability: These companies must measure and report progress, which could influence regulations, investments, and consumer expectations.

THERE IS A MAJOR SHIFT IN CORPORATE RESPONSIBILITY TOWARD COMBATING CLIMATE CHANGE HOWEVER...



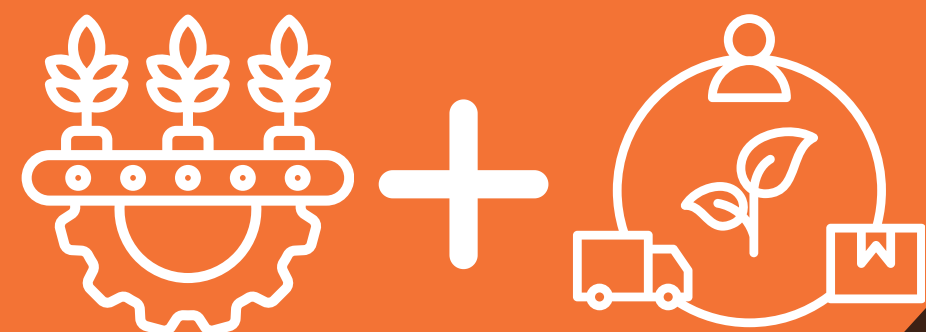


# ~~YOUR~~ OUR OPPORTUNITY



FOOD INDUSTRIES  
ACCOUNT FOR 30% OF  
**TOTAL GREENHOUSE  
GAS EMISSIONS**,  
SIGNIFICANTLY MORE  
THAN THE AVIATION  
INDUSTRY (2.5%)

ICCT, IPCC, Our World in Data



**93% OF FOOD INDUSTRY  
EMISSIONS** COME FROM  
THEIR SUPPLY CHAINS,  
AND **82% OF THOSE  
EMISSIONS ARE FROM  
FARM PRODUCTION.**

ICCT, IPCC, Our World in Data



AMONG THE 20 LARGEST GLOBAL  
FOOD RETAILERS, **ONLY 6 HAVE  
SCOPE 3 EMISSIONS TARGETS**,  
**AND NONE** HAVE SET SPECIFIC  
GOALS FOR METHANE REDUCTION  
—DESPITE ITS MAJOR ROLE IN  
FOOD SECTOR EMISSIONS.

FOODNAVIGATOR.COM



APPROXIMATELY **44.2% OF FOOD  
COMPANIES REPORTING SCOPE 3  
EMISSIONS NOTED REDUCTIONS**  
IN THEIR SUPPLY CHAIN EMISSIONS.  
HOWEVER, **ONLY 1.3% ACHIEVED  
REDUCTIONS** ACROSS ALL THREE  
SCOPES. (1, 2 & 3)

CARBONCLOUD



**RETAIL IS STARTING TO MOVE FORWARD:**  
A CERES BENCHMARK REVEALED THAT OUT  
OF 12 MAJOR FOOD RETAILERS ASSESSED,  
**ONLY 4 HAD DISCLOSED THEIR SUPPLY CHAIN  
EMISSIONS AND SET REDUCTION TARGETS.**



# DFI LOW-CARBON RICE PILOT PROGRAMME

## Why Rice?

### DFI 2030 CLIMATE & CARBON REDUCTION CHALLENGE



### VISION STATEMENT

*"TO LEAD THE FOOD RETAIL SECTOR IN ASIA IN MEASURABLE,  
SCIENCE-BASED REDUCTIONS OF **SCOPE 3 EMISSIONS** BY  
TRANSFORMING HIGH-IMPACT COMMODITY SOURCING—  
BEGINNING WITH RICE—  
**INTO A VERIFIABLE, LOW-CARBON SUPPLY CHAIN."***

### CONTEXT & SIGNIFICANCE

#### RICE = MAJOR EMISSION SOURCE:

- ACCOUNTS FOR ~6% OF DFI'S SCOPE 3 EMISSIONS (2023)
- GLOBALLY, RICE CONTRIBUTES 22% OF AGRICULTURAL METHANE EMISSIONS
- AND 11% OF NITROUS OXIDE.

#### THAILAND AS A FOCUS:

- 6TH LARGEST RICE PRODUCER GLOBALLY
- JASMINE RICE IS A KEY EXPORT AND A DFI PRIVATE-LABEL PRODUCT.

#### STRATEGIC FIT:

- RICE OFFERS THE HIGHEST EMISSIONS REDUCTION POTENTIAL (UP TO 48%) AMONG AGRI-SECTORS,
- MAKING IT IDEAL FOR LOW-CARBON TRANSFORMATION





# THE DFI RICE USE CASE

## Project Summary



### Challenges

To reduce the impact of emissions on growing rice.

- To do so without impacting crop yield.
- Not impacting margins.
- To educate and achieve 100% compliance from a group of farmers.

### Objective

Reduce greenhouse gas emissions by 30/40%.

- No drop in yield because of the changes made.
- Measure and manage the optimal use of fertilizer.

### Projected Results

To attain +90% Farm compliance, document real CO2 impact.

- To have zero impact on yield from the changes introduced.
- Prove the optimal amount of fertilizer
- Prove that our methodology was the fastest way to implement and achieve the desired verified results.

### THE POWER OF INSETTING...

- INVESTING IN YOUR **OWN** ECOSYSTEM TO CHANGE PRACTICES AND LOWER EMISSIONS.





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## STAGE 1 Research / Design



## STAGE 2 Training / Implementation



## STAGE 3 Data Assessment



## STAGE 4 Data Monitoring



## STAGE 5 Remote/Field Monitoring



- **Focus on in-depth academic research** to uncover the key challenges in rice farming.
- **Identified critical changes** needed to reduce environmental and operational impact.
- **Established a strong foundation** for credible, independent assessments by trusted industry auditors.
- **Informed the development of innovative processes** that drive measurable, sustainable outcomes.

- **Trained farmers on best practices** to boost yields and understand the impact of sustainable process changes.
- **Delivered accessible education** using visual tools, local languages & mobile-friendly support.
- **Encouraged peer-to-peer learning** through community forums & shared success stories.
- **Fostered ongoing social engagement**, promoting collaboration & farmer-led innovation.

- **Farmers, producers, and harvesters are trained** to use the proprietary SCI App.
- **The app enables real-time input and monitoring** of critical tracking events.
- **Ensures alignment with compliance requirements** throughout the supply chain.
- **Designed with intuitive UI/UX** for seamless adaptability and operational efficiency.

- **We leverage AI tools to automate compliance assessments** using real-time data from the SCI App.
- **Submitted data is analyzed instantly** to evaluate SCI compliance levels.
- **Timely data capture provides a critical advantage** in responding to weather-related impacts.

- **An integrated online database enables seamless image uploads** and response tracking.
- **Supported by an AI-powered dashboard** for enhanced visibility and control.
- **Real-time updates provide precise, immutable compliance measurements.**
- **Delivers predictive insights** to substantiate emission reduction claims for stakeholders.

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SCI "DFI"  
-Scope 3-  
RICE  
Insetting  
Method

## ENGAGE

ENGAGED RICE  
FARMERS IN  
COMPLIANCE,  
PRODUCTIVITY, AND  
INCENTIVE-DRIVEN  
REWARDS

## EDUCATE

PROVIDED INITIAL  
AND ONGOING  
TRAINING TO  
FARMERS FOR  
EFFECTIVE SYSTEM  
UTILIZATION.

## ENACT

30 LOW-CARBON  
FARMERS  
COMMITMENT TO  
VERIFIABLE  
SUSTAINABLE  
PRACTICES





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SCI "DFI"  
-Scope 3-  
RICE  
Insetting  
Method

**EVALUATE**

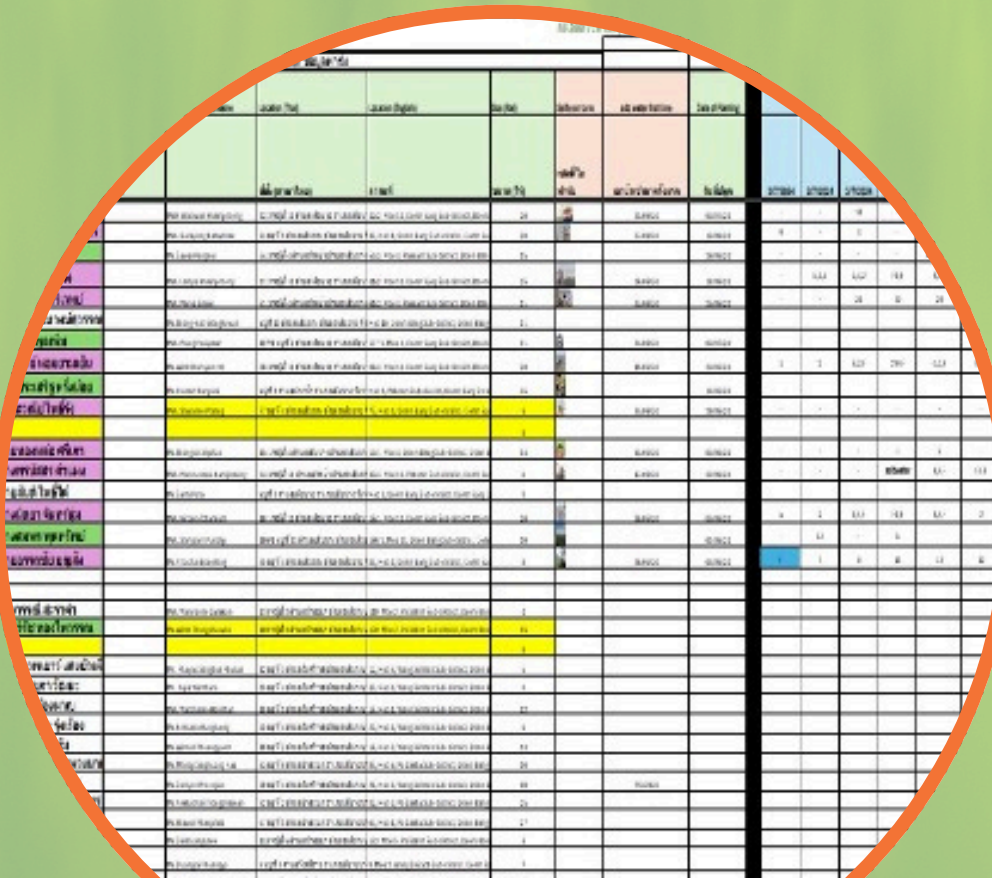
FARMERS MAINTAIN DETAILED LOGS TO RECORD FIELD WATER LEVELS, FUEL USAGE, AND CHEMICAL APPLICATIONS.

**EXAMINE**

FARMERS UPLOAD IMAGES OF CRITICAL CONTROL POINTS TO SUPPORT COMPLIANCE VERIFICATION.

**EXECUTE**

CONDUCTED COMPLIANCE AUDITS & GAS SAMPLING TO SUBSTANTIATE GHG EMISSION REDUCTION CLAIMS.



วันที่	พื้นที่	กิจกรรม	ปริมาณ	หน่วย	หมายเหตุ
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26/01/2564	แปลงนา	ปลูกข้าว	10	ไร่	
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30/02/2564	แปลงนา	ปลูกข้าว	10	ไร่	







SCI  
SUPPLY CHAIN IN-SITES

# THE DFI RICE USE CASE

## Verified Results

2024



110,000 kg



COMPLIANCE

95%

THIRTY ENGAGED  
FARMERS  
INCREASED  
COMPLIANCE FROM  
10% TO 95%.



REDUCTION

≥ 36%

CARBON IMPACT  
REDUCED BY 30-50%  
ACROSS 30 FARM  
WITHOUT  
COMPROMISING  
CROP YIELD.



YIELD LOSS

0%

SCI METHODOLOGY  
SHOWS THAT  
ADDITIONAL  
FERTILIZER DOES NOT  
INCREASE YIELD.

2025



200,000 kg

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# DFI LOW-CARBON RICE PILOT

## Programme Results

DFI 2030 CLIMATE & CARBON  
REDUCTION ROADMAP



### VISION STATEMENT

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SCIENCE-BASED REDUCTIONS OF **SCOPE 3 EMISSIONS** BY  
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## 40.5 TONNES GHG SAVED!

110,000 kg low-carbon rice, 36% GHG reduction, 30 farmers trained

### GHGs\* AVG. PER HECTARE

EXISTING METHOD  
= 3.75 TONNES

SCI - METHOD  
= 2.40 TONNES

### GHGs\* 30 HECTARES

EXISTING METHOD  
= 112.5 TONNES

SCI - METHOD  
= 72.0 TONNES

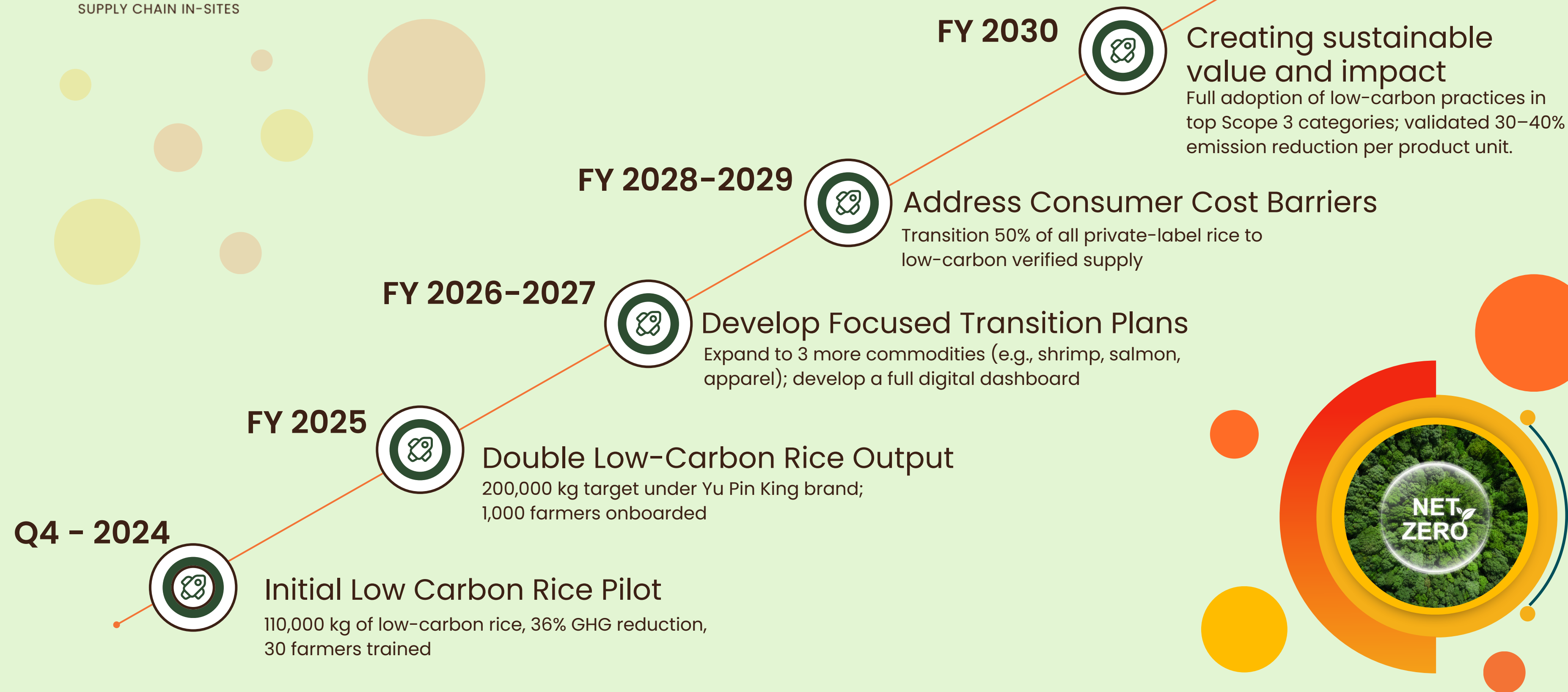
(\*including CH<sub>4</sub>, N<sub>2</sub>O, and CO<sub>2</sub> from energy use)







# DFI PROGRESSIVE TARGETS (2024–2030)





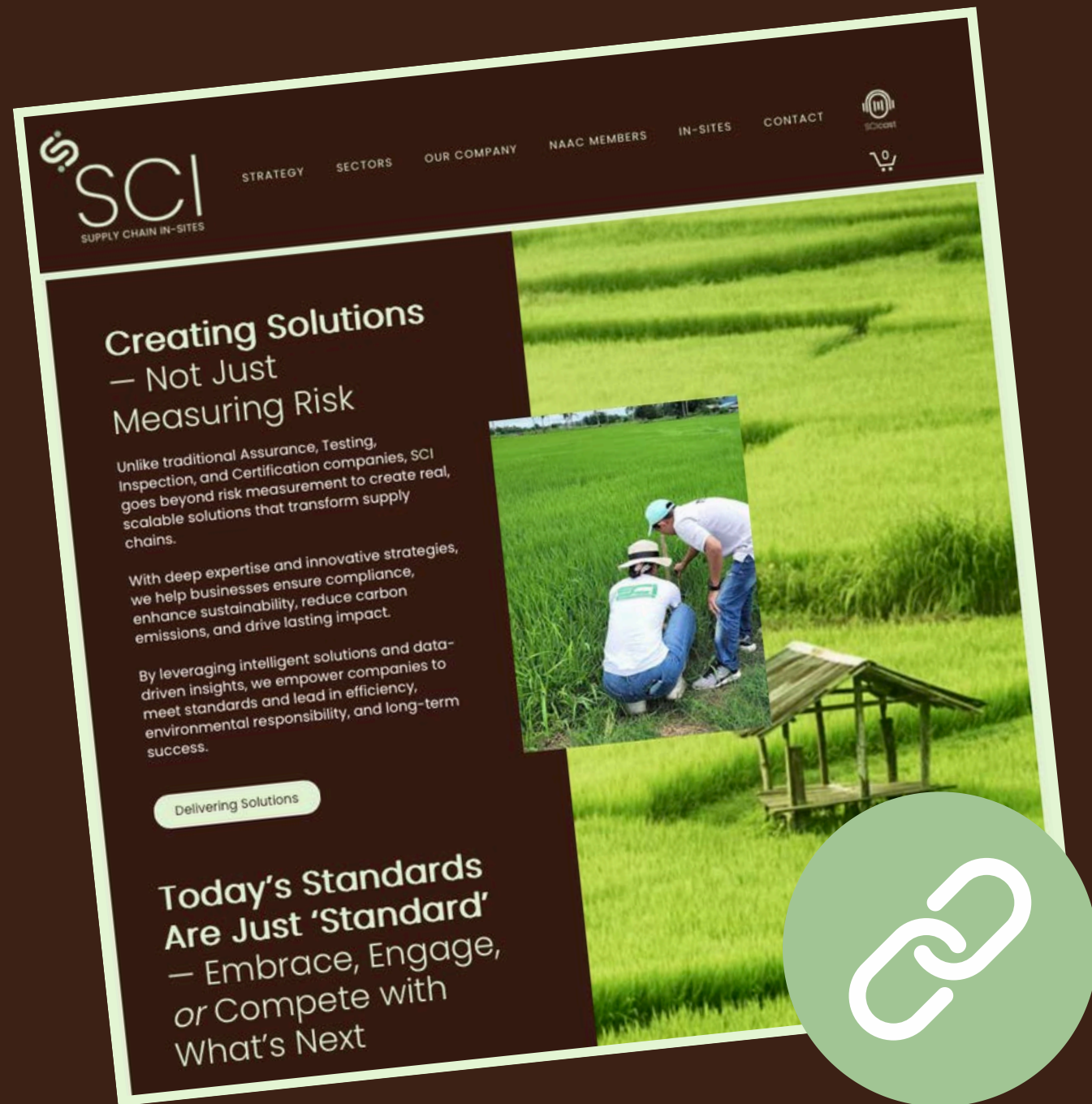
# WHY SCI?

## Trusted Innovation That Delivers for You





# LET'S TALK TO CREATE SOLUTIONS!



- Call / Text  
+44 20 3835 5101
- Global Reach  
[info@scinsites.com](mailto:info@scinsites.com)

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