DCC
Department of Climate Change

ENERGY TRANSITION PARTNERSHIP
Powering Prosperity and Enabling Sustainability in South East Asia

UNOPS

DESIGN PHASE

DESIGN OF VOLUNTARY CARBON LABELING PROGRAM AND DETAILED IMPLEMENTATION PLAN

RCEE

November 2025

Objective of the Workshop

- Present the proposed design framework for Vietnam's Voluntary Carbon Labeling Programme (VCLP).
- Validate key elements of the programme — methodology, certification, and institutional setup.
- Gather stakeholder feedback to refine the design before pilot implementation.
- Identify capacity-building needs for effective implementation.

Previous Deliverable 2: Captured international experience and Vietnam carbon market conditions.

Contents

1. INTRODUCTION

1.1 Background

- Initial study phase completed (May 2025 - Jul 2025) (Deliverable 02)
- Design phase is ongoing (Sep 2025 – Dec 2025) (Deliverable 03)
- Carbon labeling trial phase to follow (Jan 2026 – Apr 2026) (Deliverable 04)

- VCLP will help enterprises
  - measure, verify & express CFP for better market access
  - focus on low-carbon production, sustainable consumption, and global competitiveness
  - align with international standards (EU CBAM, corporate carbon disclosure)

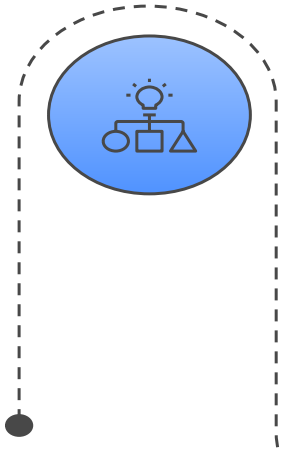
- VCLP will be aligned with national plans such as:
  - Vietnam's Carbon Market Roadmap
  - Net-zero target by 2050 (under COP26 commitment)
  - National Strategy on Climate Change (2021–2050)
  - National Green Growth Strategy (2021–2030, vision to 2050)

CFP – Carbon Footprint
EU CBAM – European Union Carbon Border Adjustment Mechanism
COP – Conference of Parties

1.2 Scope of this task

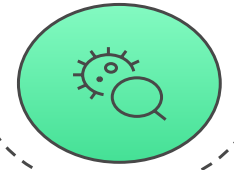
1. Programme Framework

Define mission, vision, and objectives



2. Methodology & Standards

Develop PCRs and carbon accounting standards



3. Certification System

Establish carbon labeling process and accreditation process

4. Institutional & Regulatory Setup

Identify key ministries, departments, stakeholders and establish necessary committees

5. Implementation Plan

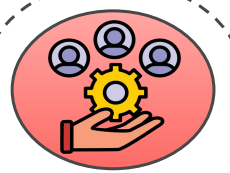
Plan pilot phase and then full rollout

6. Monitoring, Evaluation & Risk Management

Develop M&E* indicators and conduct risk assessments

7. Capacity building and stakeholder management

Conduct training programs and consultations



8. Pilot Phase Workplan (Session 3)

Select pilot sectors and evaluate outcomes

PCR – Product Category Rules

M&E – Monitoring & Evaluation

1.3 Expected overall impact from VCLP

The programme is designed to cover the following key aspects:

1. Develop standardized methods to calculate CFP and label them in line with international standards such as ISO 14067, GHG Protocol, PAS 2050, etc.

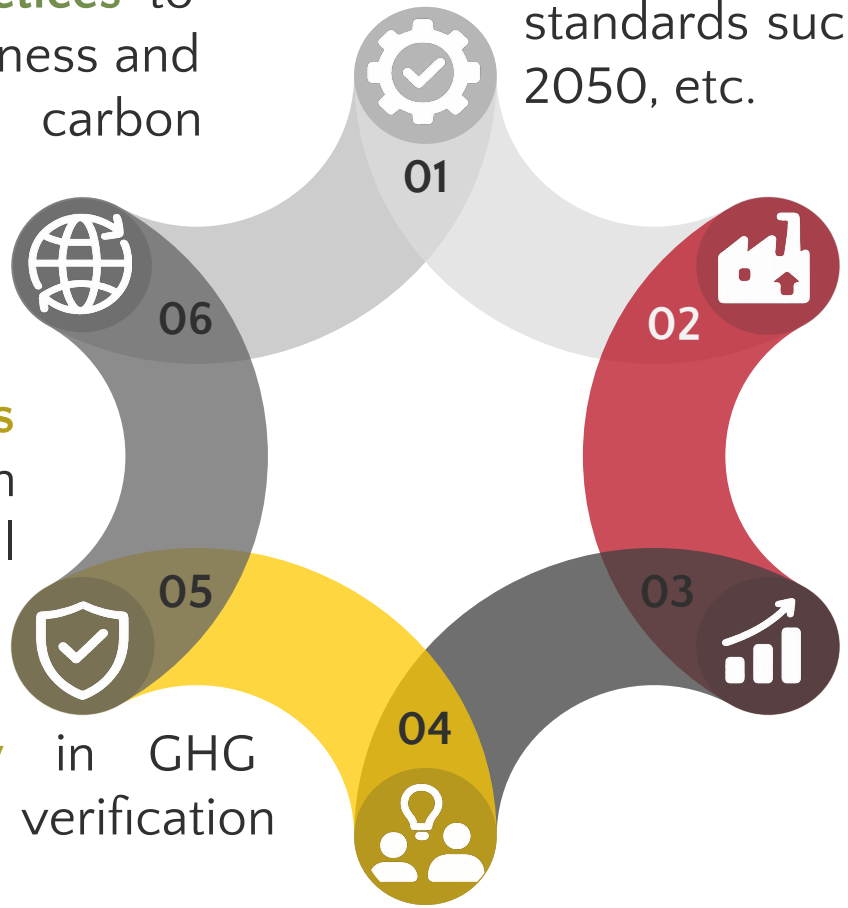
2. Encourage enterprises to identify major emission sources and adopt measures in reducing product-level GHG emissions.

3. Increase consumer awareness on low-carbon products and promote environmentally responsible purchasing decisions.

4. Build national capacity in GHG monitoring, reporting, and verification (MRV) at the product level.

5. Strengthen policy connections between carbon labeling, green public procurement, and national climate targets.

6. Align with international practices to enhance Vietnam's market readiness and competitiveness under global carbon regulations.



PCF – Product Carbon Footprint
PAS – Publicly Available Specification

2. DESIGN OF VCLP

2. Design of VCLP

2.1 Programme Framework

MISSION

- Establish credible and transparent carbon labeling programme
- Enable businesses to quantify, verify, and disclose product-level GHG emissions.
- Empower consumers and markets to make low-carbon choices.

VISION

- VCLP become a nationally recognized and internationally trusted benchmark.
- Drive sustainable production and consumption.
- Contribute to national climate targets and global net-zero goals.

SCOPE

- Covers all registered industries.
- Focus on high-emission and export-oriented sectors.
- Initially voluntary participation, with potential transition to mandatory compliance later.
- Revised periodically based on government decisions.

2.1 Programme Framework

Approach for overall program implementation is:

2. Framework Alignment

Global best practices and international standards.

4. Verification and Assurance

Independent third-party verification for credibility.

6. Capacity Building

Training, guidance, and tools for accurate footprint measurement.

1. Phased Implementation

Pilot in priority sectors, then scale up.

3. Stakeholder Engagement

Involve manufacturers, agencies, certifiers, and consumers.

5. Transparent Communication

Standardized label format and digital platform for CFP data.

2.2 Methodology & Standards

Defines the rules and framework for how the CFP is calculated, verified, and communicated under the VCLP.

Two essential aspects to be developed are:

A. Overall technical standard/guidance for VCLP

B. Product specific guidelines (called as **PCRs)**

A. Overall technical standard/guidance for VCLP

It will define the following,

a) Scope of life cycle emissions

b) Applicable standards

c) General compliance requirements

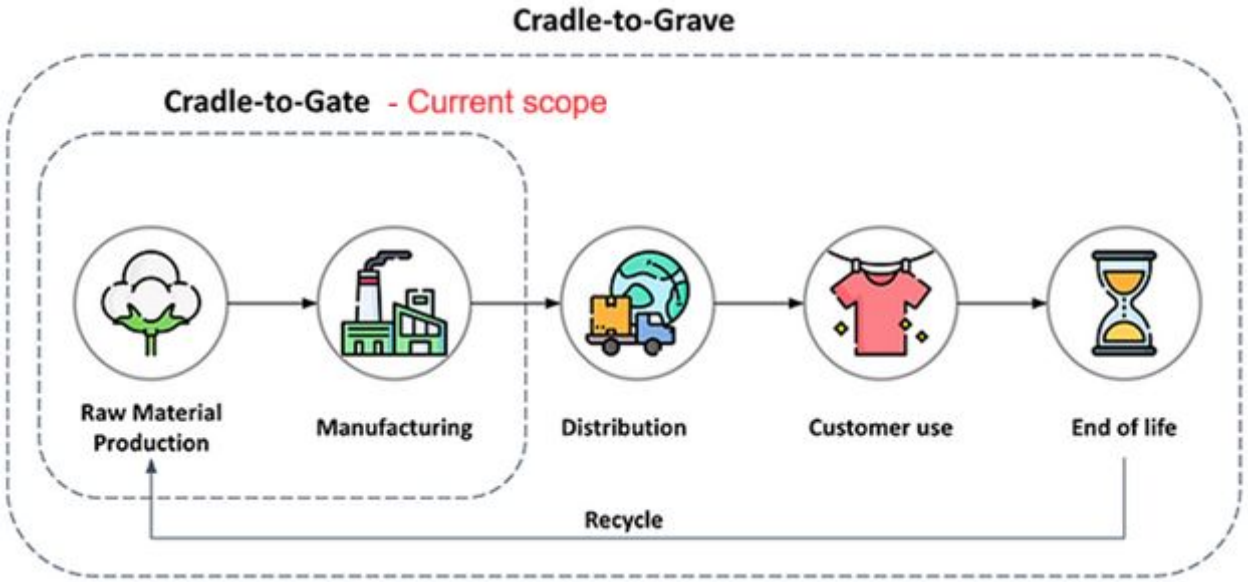
d) Carbon labeling logo design

2.2 Methodology & Standards

A. Overall technical standard/guidance for VCLP

a. Emission scope based on LCA

- CFP can cover Scopes 1, 2 & 3 emissions (of GHG Protocol).
  - Scope 1: Direct emissions from owned/controlled sources.
  - Scope 2: Indirect emissions from purchased energy.
  - Scope 3: Other indirect emissions across the value chain.
- **Current recommended boundary:** *Cradle-to-gate*.
- Can be expanded to *cradle-to-grave* as availability of data and capacity improves.



Product LCA model & current emission scope

GHG – Greenhouse Gas
LCA – Life Cycle Assessment

2.2 Methodology & Standards

A. Overall technical standard/guidance for VCLP

a. Emission scope based on LCA

Outlines the life-cycle stages (e.g., raw material extraction, manufacturing, use, disposal) that are considered when measuring product carbon emissions.

System boundaries followed by other countries

Country	Label Type	Scope	Purpose
Thailand	CFP	Mostly cradle-to-gate (For e.g. Textile) (for few products, cradle-to-grave. For e.g. Fertilizer)	Shows total GHG emissions of a product
	CFR	Gate-to-gate (For e.g. Rice)	Shows % reduction in factory/process emissions vs baseline
Japan	CFP	Primarily cradle-to-grave (cradle-to-gate is allowed if data is limited)	Discloses total CO_2e emissions; increases consumer awareness
Vietnam (Phase 1)	**CFP**	**Cradle-to-gate**	
Vietnam (Phase 2)	CFP & CFR	Cradle-to-gate	

Any other suggestions on this approach?

CFR – Carbon Footprint Reduction

2.2 Methodology & Standards

A. Overall technical standard/guidance for VCLP

b. Accounting standards

Accounting standards provide the rules and methodologies for measuring and reporting product-level GHG emissions.

Standard / Protocol	Publisher	Purpose / Focus
ISO 14067:2018	ISO	Quantifies & reports CFP based on Life Cycle Assessments (LCA) principles.
ISO 14040/14044:2006	ISO	Framework & guidelines for conducting LCAs (basis for CFP).
ISO 14025:2006	ISO	Rules for developing Type III Environmental Product Declarations (EPDs) & PCRs.
GHG* Protocol – Product Standard	WRI & WBCSD	Guidance on quantifying/reporting GHGs across full product life cycle.
GHG Protocol – Corporate & Scope 3 Standards	WRI & WBCSD	Covers Scope 1, 2, 3 emissions; links CFPs to corporate inventories.
PAS 2050:2011	BSI	Specifies product life cycle GHG assessment requirements.
EN* 15804:2012+A2:2019	CEN	Core rules for EPDs in construction; aligns with ISO 14025 & 14040/44.

ISO – International Standard Organization
GHG – Greenhouse Gas
WRI – World Resources Institute
WBCSD - World Business Council for Sustainable Development
EN – European Norm (European Standard)
BSI - British Standards Institution
CEN - European Committee for Standardization

2.2 Methodology & Standards

A. Overall technical standard/guidance for VCLP

b. Accounting standards

Other country experience on standards used for carbon labeling

Country	Standards / Protocols Used
Thailand	ISO 14067:2018; ISO 14040/44
Japan	ISO 14067:2018; ISO 14040/44; ISO 14025:2006
Taiwan	ISO 14067:2018; ISO 14040/44
United Kingdom (UK)	PAS 2050:2011; ISO 14067; ISO 14025

2.2 Methodology & Standards

A. Overall technical standard/guidance for VCLP

c. Emission factor and databases

- Standardized emission factors ensure consistency and transparency in CFP calculations.
- **Priority ranking:** 1 Vietnam resources,
  2 International references.
- **Some of the Vietnam resources:**
  - Decision No. 2626/QD-BTNMT (2022): Official emission factors for Energy, Industry, Agriculture, and Waste sectors.
  - Electricity Grid Emission Factor: Updated annually by MONRE/DCC (latest: Official Dispatch No. 1726/BDKH-PTCBT).
- These national datasets provide a consistent foundation for CFP assessment.

Key international emission factors reference

No.	Database / Source	Description / Coverage
1	IPCC Emission Factor Database (EFDB)	Global, peer-reviewed emission factors for energy, industry, agriculture & waste (per IPCC guidelines).
2	IEA Emission Factors Database	Provides CO_2 emission factors for electricity and heat generation for different countries and regions. Useful for Scope 2 emission estimates.
3	Emissions Database for Global Atmospheric Research (EDGAR)	Detailed country- and sector-level anthropogenic GHG data.
4	Climatiq Open Emission Factor Database	Aggregated global factors by region, sector & activity — includes Vietnam-specific data.

Any other emission factor resources available?

2.2 Methodology & Standards

A. Overall technical standard/guidance for VCLP

d. Use of GHG Calculation Tools

GHG calculation tools are software platforms used to estimate GHG emissions from products, processes, and/or organizations.

- No specific GHG tool to be developed under VCLP.
- Various international LCA and GHG tools are available for reference and capacity building
- Available tools in market can be used to support calculation and cross-checking of CFPs.

Some of the tools for CFP calculation

Tool	Type	Key Features
SimaPro	LCA software	Supports ISO-compliant CFP studies; advanced modeling; includes emission databases such as Ecoinvent and Agri-footprint
GaBi	LCA software	Strong in industrial and product process modeling; provides detailed proprietary databases
OpenLCA	Open-source LCA tool	Flexible and widely used; supports CFP calculation and environmental impact assessments
OneClick LCA	Cloud-based tool	Widely used in construction sector; aligns with EN 15804 and GHG Protocol
Carbon Trust Footprint Calculator	Product and organization footprints	Based on PAS 2050; suitable for product certification and organizational footprinting
Cool Farm Tool	Agriculture-foc used tool	Calculates GHG emissions, water use, and biodiversity impacts for farm-level assessments

2.2 Methodology & Standards

A. Overall technical standard/guidance for VCLP

e. Carbon label design:

- Development of the label format and symbols used to communicate a product's CFP to consumers and stakeholders.
- Two carbon label types planned under the Vietnam Carbon labeling Program:
  - **CFP Label:** Indicates life-cycle GHG emissions of a product.
  - **CFR Label:** Recognizes verified reductions in CFP compared to a baseline.

(a) Thailand carbon label

(b) Taiwan carbon reduction label

(c) Japan carbon label

Label design examples

EPA – Environmental Protection Administration

2.2 Methodology & Standards

A. Overall technical standard/guidance for VCLP

e. Carbon Label Design

Label Information:

- Total carbon footprint (kg CO_2e)
- Functional unit (e.g., 1 kg, 1 unit, 1 m^2, 1 L)
- Label type (Measured / Reduced / Carbon Neutral)
- Logo and certification details

Optional information:

- Product details such as product type, reduction measures, standard used, commitment, verification frequency, and website link
- Verifier reference and validity period.
- QR code / digital link for detailed certification data and transparency.

2.2 Methodology & Standards

B. PCRs

- Dedicated guideline for CFP calculation for each product type.
- PCR use/development options:
  - Use existing PCR – Use from VCLP database.
  - Adapt related PCR – modify similar PCR with Programme Managing Entity (PME) approval.
  - Develop new PCR – if none available, follow standard procedure.

Note: Draft PCRs will be published on the national website for public comments. A public consultation period of **30 days** will be provided to gather feedback from the industries, experts, and other stakeholders.

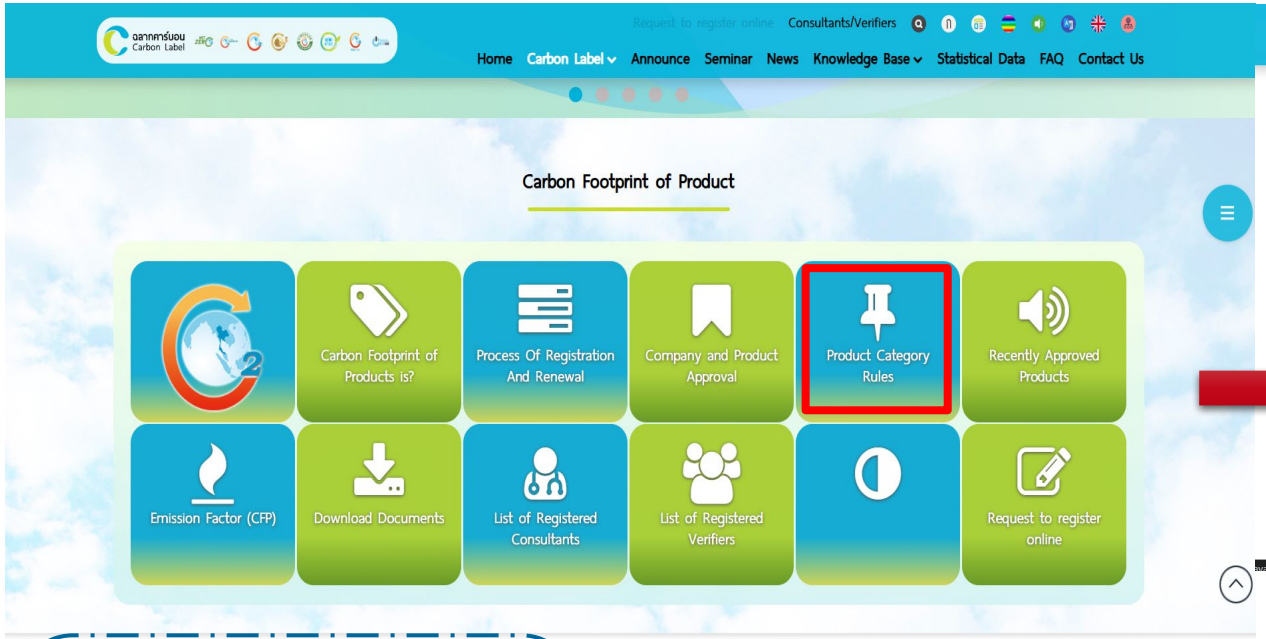
PCR validity period for Vietnam is now kept for **3 years**.
To be confirmed.

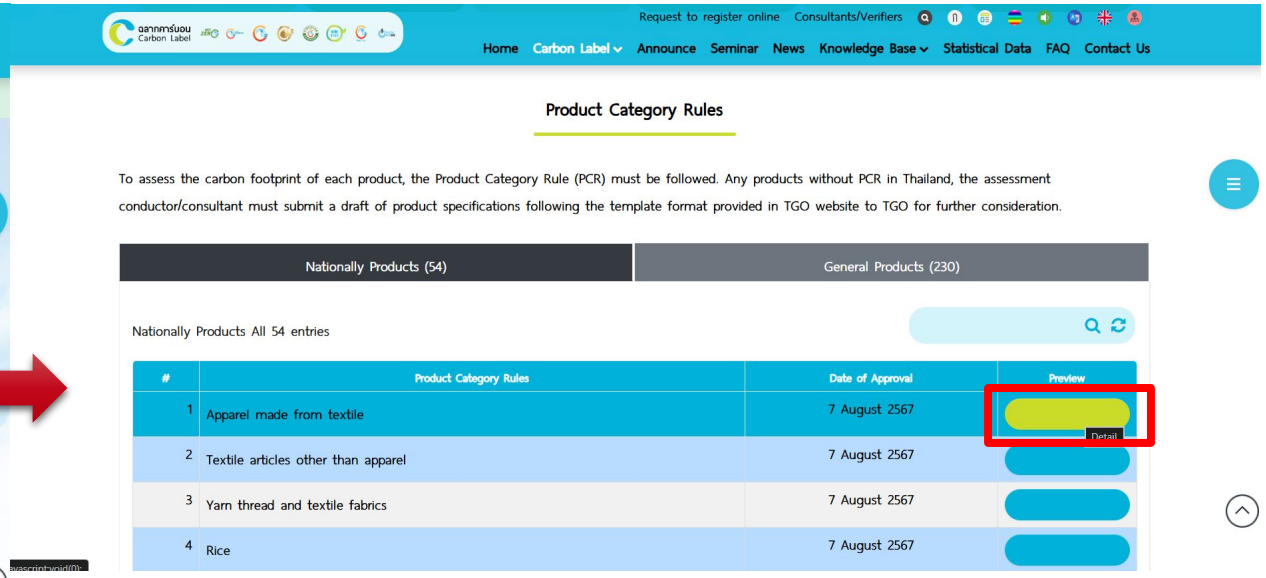
PCR development process

MAE – Ministry of Agriculture and Environment
JEMAI – Japan Environmental Management Association for Industry
TGO – Thailand Greenhouse Gas Management Organization
KEITI – Korea Environmental Industry & Technology Institute

Note: *Japan (JEMAI CFP Program – 3 years), Thailand (TGO – 3 years), and South Korea (KEITI Carbon Labeling Program – 5 years)*

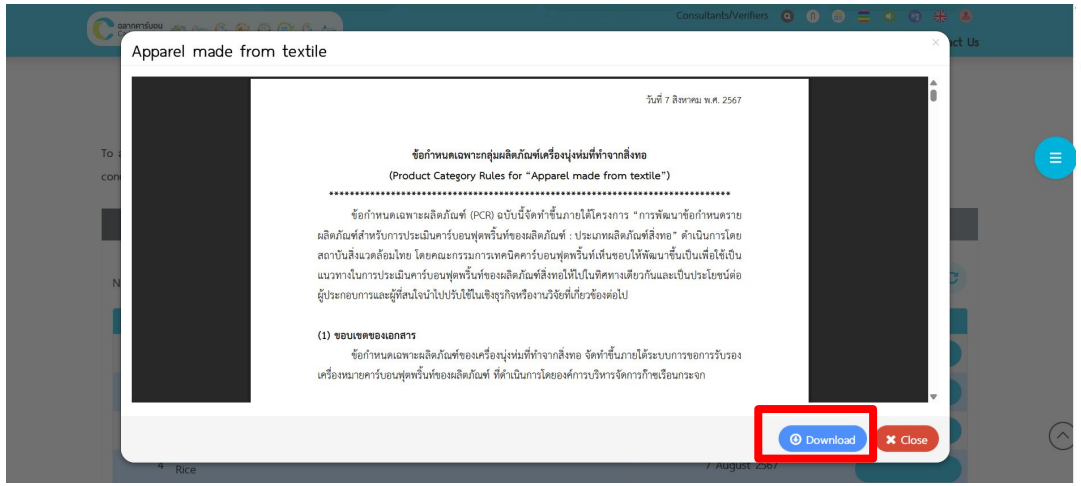
Model database of PCR





Step 1: On the Carbon Label website, "Product Category Rules" can be had under the section of *Carbon Footprint of Product*.

Step 2: From the PCR list, we can scroll down to view the available product-specific PCR documents. The preview icon (highlighted in red) can be clicked on to open the document.



Step 3: A pop-up window with the selected product's PCR can appear. "Download" can be clicked to save the file by the users.

Source: https://thaicarbonlabel.tgo.or.th/?lang=en

2.3 Certification system

To be confirmed.

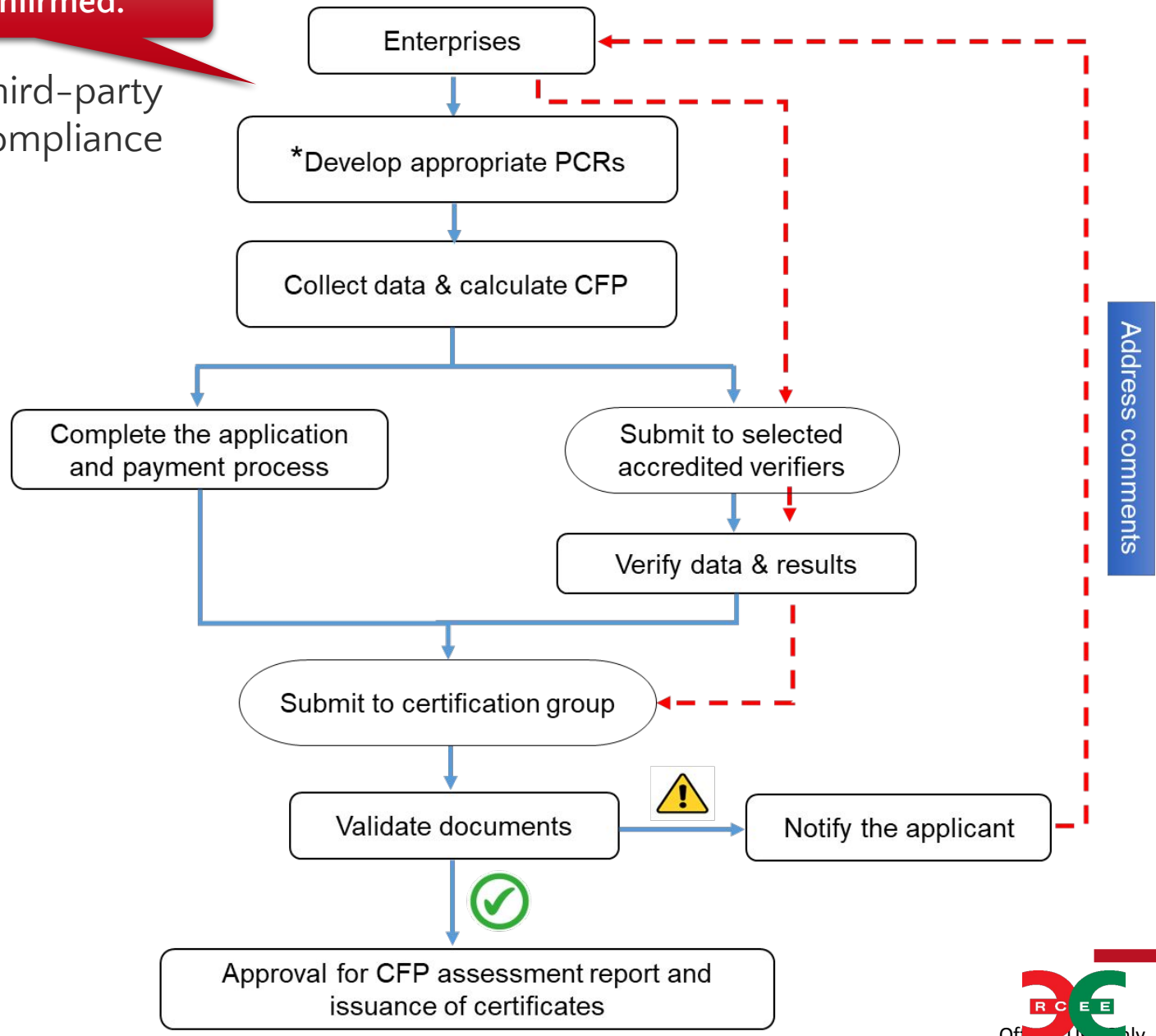
It will verify CFP calculations through accredited third-party verifiers, ensuring transparency, reliability, and compliance with Vietnam's CFP guidelines.

A. Carbon labeling process

- Establishes a structured pathway to measure, verify, and communicate product GHG emissions.

Certification Scheme Stages

1. Application
2. Verification
3. Review and approval



*PCR developing process is discussed in slide 20.

2.3 Certification system

A. Carbon labeling process

Key Elements of Carbon Labeling Certification Process

01 **Accredited Verifiers:** Ensure verification by qualified professionals for credibility.

02 **Quality Assurance:** Multi-stage* checks to prevent errors before approval.

03 **Transparency:** Clear feedback to applicants for continuous improvement.

04 **Traceability:** Maintain documented records for audits and accountability.

05 **Standardization:** Apply consistent methods (e.g., ISO 14067) for comparability.

Includes internal review, technical review, third-party verification, expert panel review, etc.

Certification Process – Evaluation Criteria
Decision-making, compliance, and governance of the certification body.

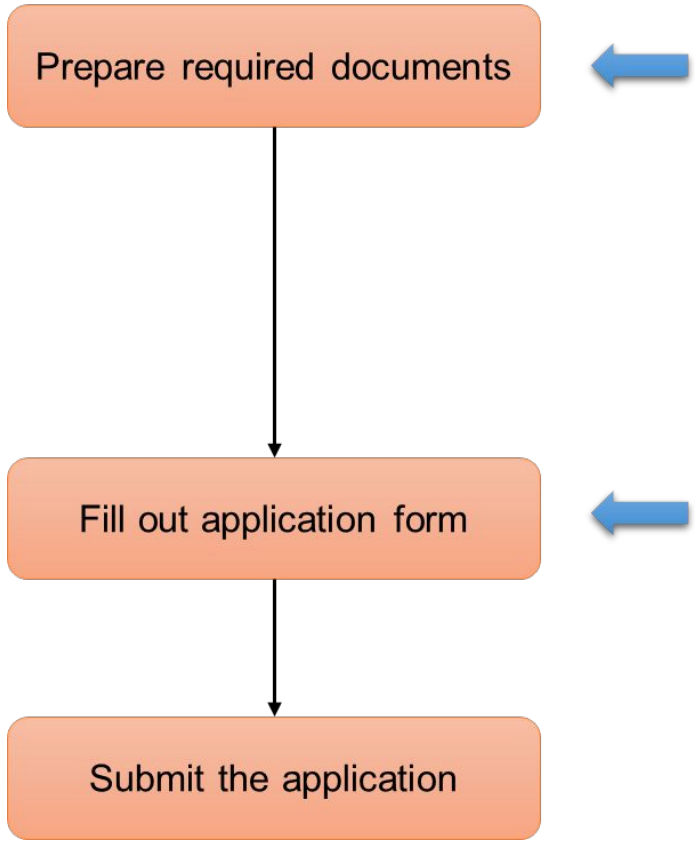
- **Scheme & PCR Compliance** – Adherence to program rules and Product Category Rules.
- **Validity of Verification** – Verification reports and supporting documents meet quality and procedural requirements.
- **Decision-Making Impartiality** – Certification decisions made without conflicts of interest.
- **Qualified Decision-Makers** – Competent personnel not involved in verification activities.
- **Operational Efficiency** – Timely processing of certification decisions.
- **Record-Keeping & Traceability** – Documentation of decisions and evidence for audits.
- **Corrective Action Closure** – All non-conformities addressed before approval.
- **Ongoing Surveillance** – Periodic reviews and renewals to maintain certification status.

2.3 Certification system

A. Carbon labeling process

A.1 Application Process

- Applicant prepares and submits all required documents for carbon labeling.
- PME reviews submission for completeness before moving to the next stage.



Includes:
- CFP calculation report
- PCR document
- Verification report (from accredited verifier)
- Product specification and production information
- Payment proof
- Signed declaration form

Includes:
- Company details
- Product name and category
- Functional unit
- GHG emissions summary
- PCR
- Verifier name and accreditation number
- Signature and declaration

2.3 Certification system

A. Carbon labeling process

A.2 Third-party verification process:

- Independent assessment of CFP by an accredited verifier.
- Verifier's report submitted with the application for evaluation.
- Verifier selection by the enterprises depends on:
  - Program rules (individuals / organizations)
  - Product or sector scope
  - Availability of qualified experts

Verification Process – Evaluation Criteria
Ensuring the accuracy, completeness, and reliability of reported data.

Accuracy – Checking correctness of emission factors, calculations, and results.

Completeness – Ensuring all relevant data, processes, and life cycle stages (as per PCR or protocol) are included.

Methodological Consistency – Alignment with recognized standards (e.g., ISO 14067, PAS 2050, GHG Protocol).

Transparency – Clear documentation of assumptions, data sources, boundaries, and limitations.

Reliability – Reproducibility of results under the same conditions.

Impartiality – Independence of the verifier from the project or product being assessed.

Technical Competence – Expertise in Life Cycle Assessment (LCA) and GHG accounting methods.

Evidence-Based Reporting – Conclusions supported by verifiable data and records.

On-site Assessment (if applicable) - Conduct facility or system checks to validate data collection and monitoring practices.

2.3 Certification system

A. Carbon labeling process

A.3 Review and approval process

Multi-level review ensures accuracy and compliance

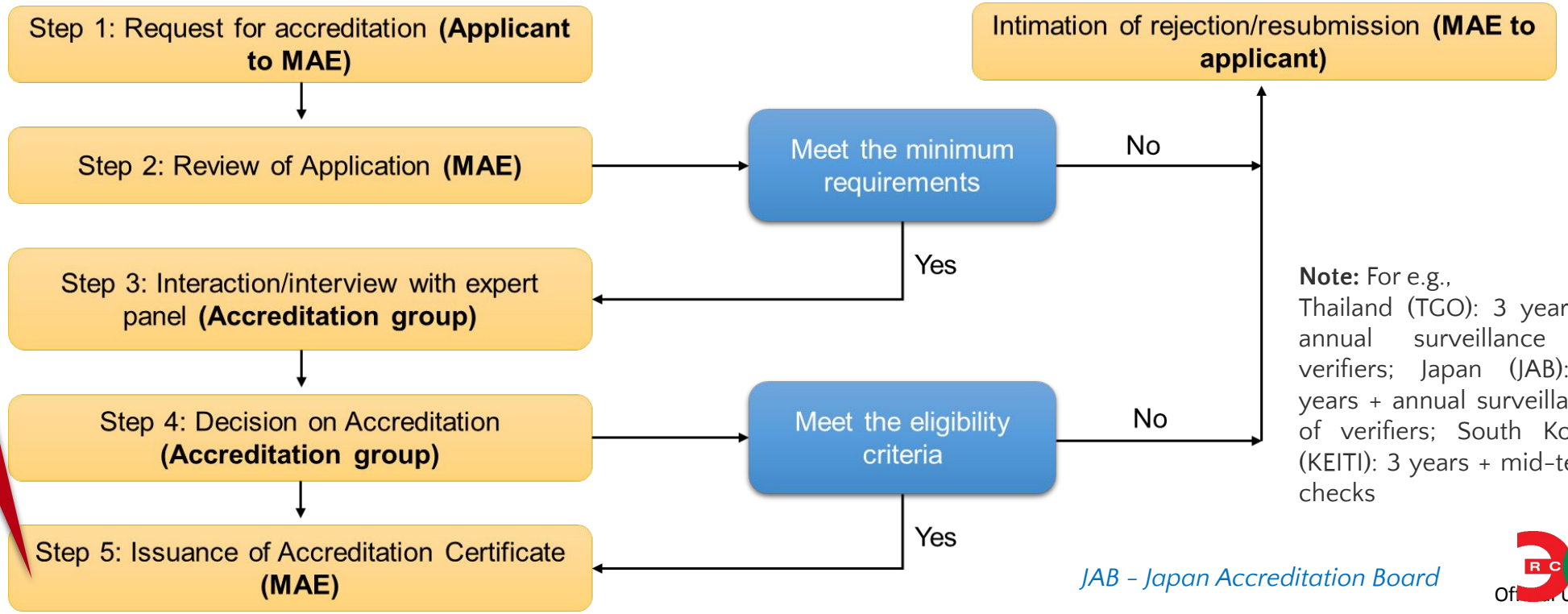
Review Stage	Key Responsibility
CFP verification Review	Third party reviews and issues the verification certificate.
Technical Review	Certification group checks CFP calculations and PCR alignment and verification report by third-party.
Administrative Review	PME (e.g., MAE) verifies payment proof, eligibility, and product category.

2.3 Certification system

B. Accreditation of verifiers

- **Types of Accredited Verifiers:**
  - **Individual Verifiers:** Qualified professionals meeting the requirements of programme or accreditation body; can work independently or in teams within defined scopes.
  - **Verification Organizations:** Accredited entities (e.g., ISO 14065) with qualified teams, quality systems, and ensured impartiality.

Validity period suggested for an accreditation certificate is **3 years** (by MAE), with annual surveillance of verifiers for Vietnam.
Any alternate suggestions?



Note: For e.g., Thailand (TGO): 3 years + annual surveillance of verifiers; Japan (JAB): 4 years + annual surveillance of verifiers; South Korea (KEITI): 3 years + mid-term checks

JAB - Japan Accreditation Board

2.3 Certification system

B. Accreditation process

Any other criteria need to be added?

CRITERIA AND REQUIREMENTS FOR REGISTERED VERIFIERS

Individuals

Eligibility - Vietnamese nationality or 5+ years working with a Vietnam-based organization.

Conflict of Interest - Not an owner, beneficiary, or consultant for the products being registered.

Education - Bachelor's degree or higher in Science, Engineering, or related fields.

Training - Completed accredited training ≥20 hours in LCA and ≥10 hours in carbon footprint calculation.

Experience - Practical experience in carbon footprint calculation and verification.

Skills

- Apply verification methods in all circumstances.
- Communicate processes and interpret results effectively.

Professional Integrity - Honest, responsible, free from bias or external influence.

Confidentiality - Protect data privacy; disclose information only with authorization or when legally required.

Competence - Utilize knowledge and experience effectively in verification processes.

2.3 Certification system

B. Accreditation process

Any other criteria need to be added?

CRITERIA AND REQUIREMENTS FOR REGISTERED VERIFIERS

Entity

Legal Status - Registered in Vietnam and engaged in relevant business activities.

Conflict of Interest - Not an owner, beneficiary, or consultant for the products being registered.

Management - Strong human resources management system.

Verifier Requirements:

- Employ at least two MAE-registered carbon footprint verifiers.
- Verification must be performed only by registered verifiers.

Compliance - Verifiers must not have had their MAE registration withdrawn.

2.3 Certification system

B. Accreditation process

Strengths and limitations of accredited verifiers for carbon labeling

Aspects	Individual-Accredited Verifiers	Organization-Accredited Verifiers
Strengths	✔ Low cost; ideal for SMEs and pilots ✔ Quick and flexible ✔ Strong sector expertise (e.g., textiles, food) ✔ Direct responsibility and accountability	✔ High credibility and recognition ✔ Handle large or multi-sector programs ✔ Strong quality assurance systems (peer review, audits) ✔ Continuity owing to team-based expertise
Limitations	✔ Limited capacity for large projects ✔ Weaker safeguards for impartiality ✔ Lower global credibility ✔ Risk if verifier unavailable	✔ Comparatively costlier ✔ Longer, procedural timelines ✔ Potential conflicts of interest ✔ Less personalized engagement
Best Fit	✔ Pilot or early-stage programs ✔ Industries needing affordable options ✔ Niche or specialized products	✔ National rollouts and export programs ✔ High-emission or large-scale sectors
Examples	✔ **Thailand:** Individual experts in PCF pilots ✔ **Vietnam (suggested):** Start with individuals also during pilot; shift to organizations later	✔ **Japan:** JEMAI uses accredited bodies ✔ **Taiwan:** EPA-approved third-party verifiers ✔ **UK:** PAS 2050 verified by SGS, Bureau Veritas

2.3 Certification system

B. Accreditation process

1. Verifier Listing under VCLP

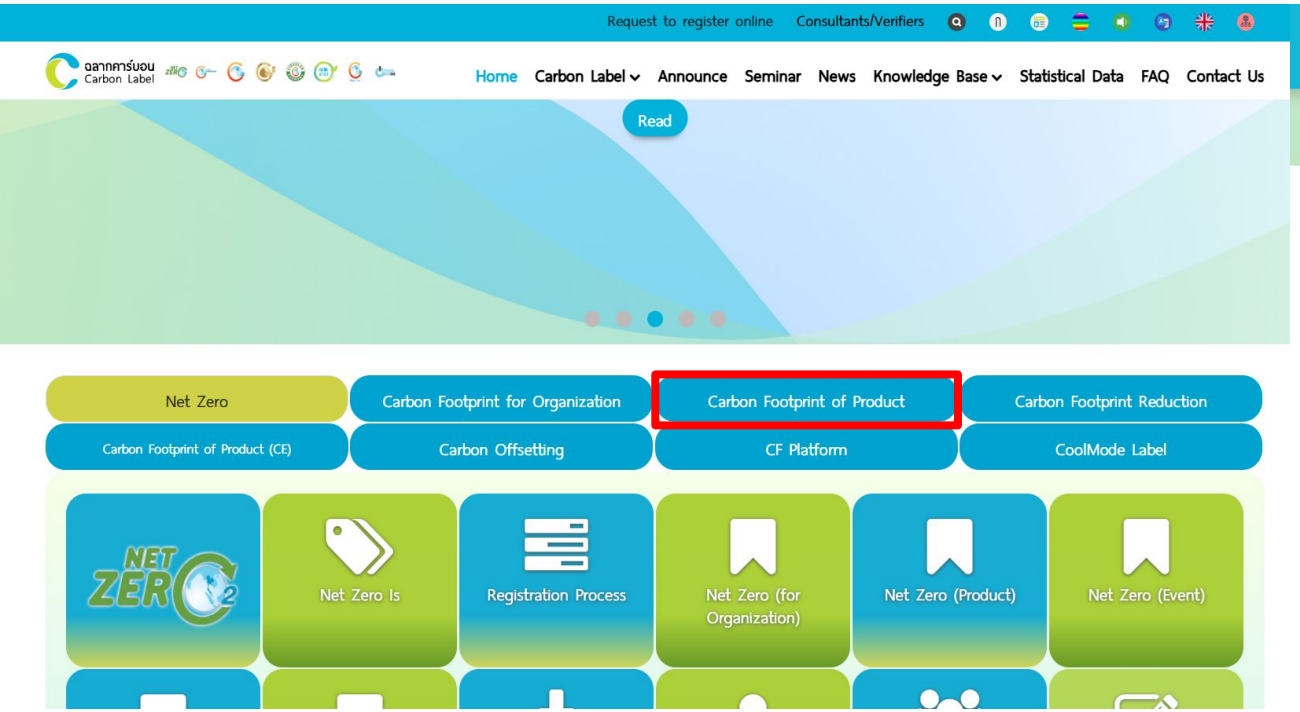
- ✔ Accredited verification firms and qualified verifiers under recognized standards (e.g., ISO 14065).
- ✔ Apply to PME with proof of competence.
- ✔ Upon approval by PME, it is added to the official verifier list.
- ✔ Accreditation is valid for 3 years and is to be renewed after that.

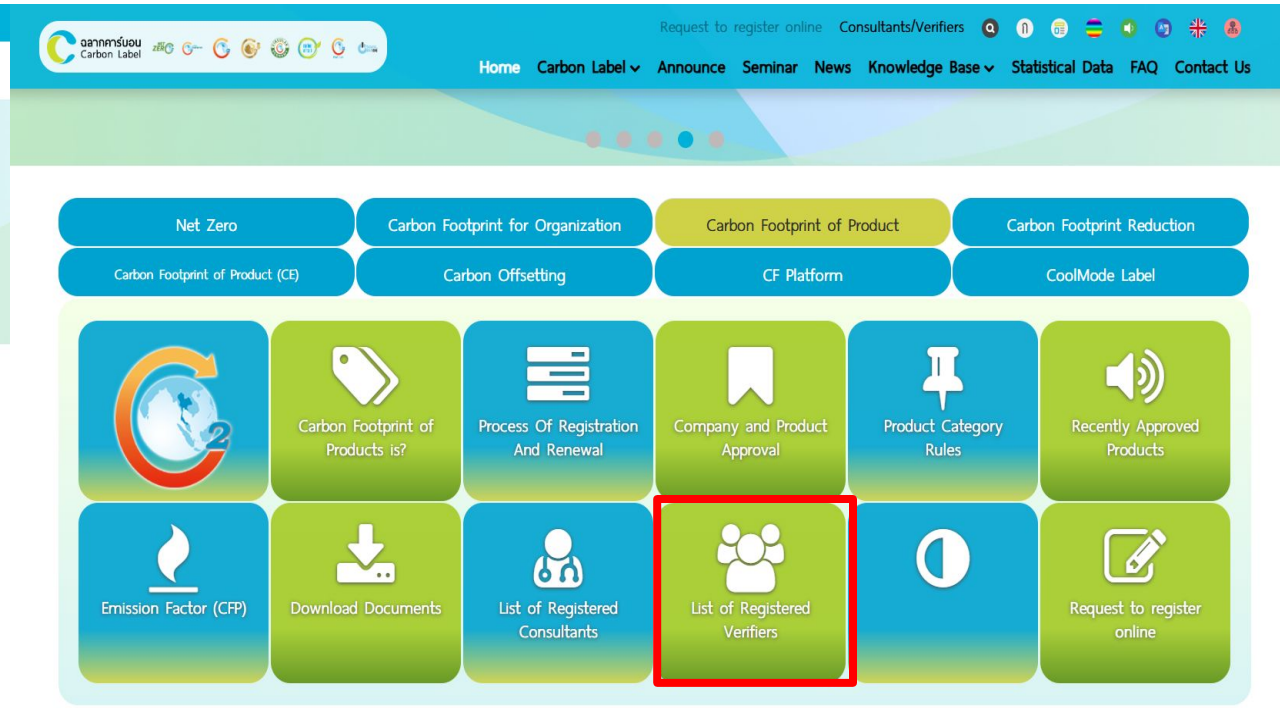
To be confirmed.

2. Verifier Selection by enterprises

- ✔ Applicants select the verifiers from the approved list based on scope, expertise & impartiality.
- ✔ Agreement is signed between applicant and verifier.
- ✔ Verifier to audit CFP calculation and issue verification report with its/his/her opinion to PME.

Model database for verifier list



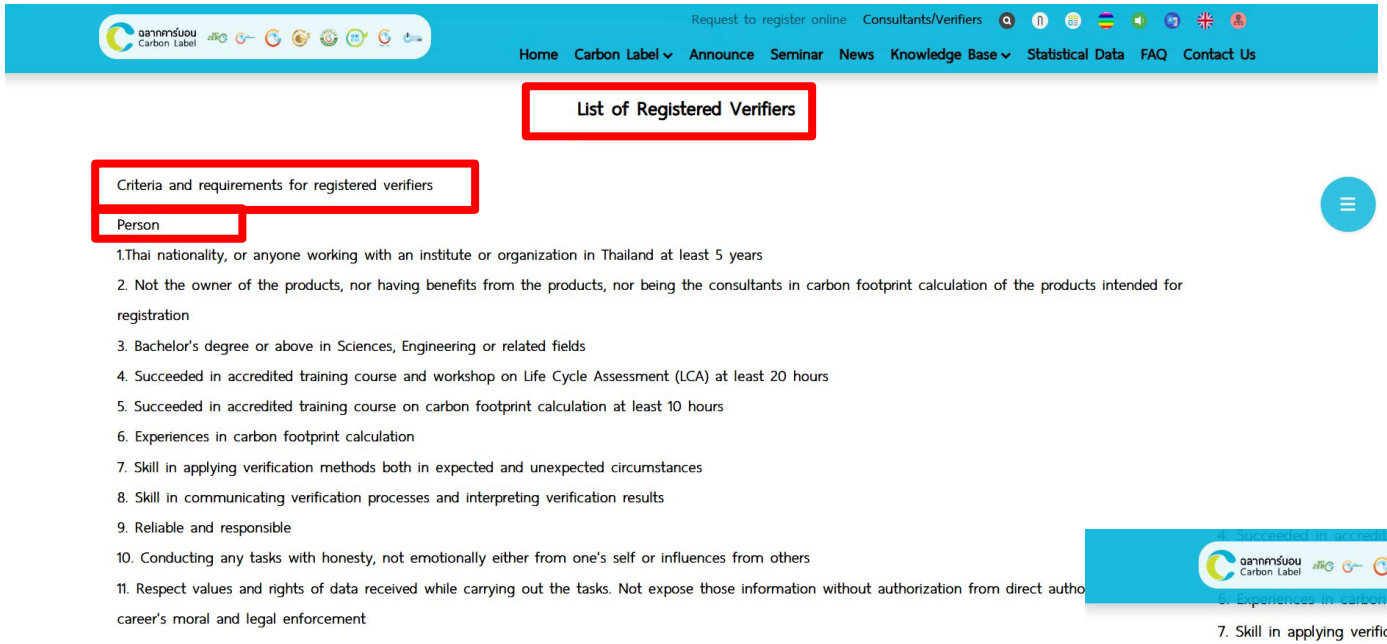


Step 1: Go to the Carbon Label website and select "Carbon Footprint of Product."

Step 2: Click "List of Registered Verifiers."

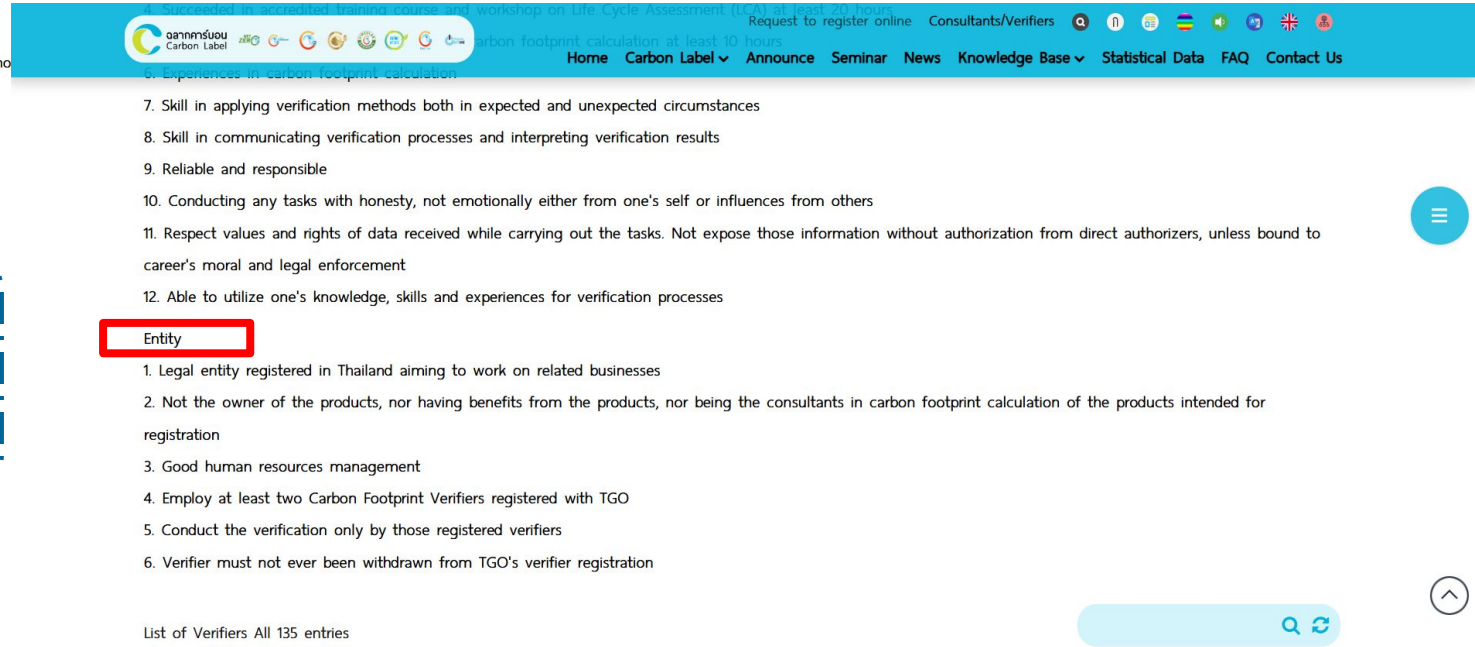
Source: *https://thaicarbonlabel.tgo.or.th/?lang=en*

Model database for verifier list



Step 3: Can scroll down to view the criteria and requirements for registered verifiers. Information can be provided for both individual (person) and organization (entity) verifiers.

Step 4: Below the criteria section, the list of registered verifiers, both separately for individuals and entities can be given.



Source: *https://thaicarbonlabel.tgo.or.th/?lang=en*

Model database for verifier list

List of registered verifiers entity as of 17

Entity logo

1. **Entity name**

Expertise: Power generation and electrical power management, Chemical manufacturing, Petroleum and gas exploration, production, refining and pipeline transportation, Petrochemical industry, General manufacturing, Food and beverage industry, Automobile and automotive parts manufacturing.

Address: No. 1858/75-76, Interlink Building, 16th Floor, Theparat Road, Bangna Tai Subdistrict, Bangna District, Bangna, Bangna, Bangkok 10260

Phone:

Email:

Website:

Registration Date: 08/10/2025

Expire Date: 07/10/2028

Branches and scope of corporate greenhouse gas verification:

1.

Power Generation and Electric Power Transactions 2. General Manufacturing Industries 3. Oil and Gas Exploration, Extraction, Production and Refining, and pipeline distribution, including Petrochemicals 4. Metals Production 5. Aluminum Production 6. Mining and Mineral Production 7. Pulp, Paper and Print (Construction) 8. Chemical Production 9. Carbon Capture Storage 10. Transport 11. Waste handling and disposal 12. Agriculture , Forestry and Other Land Use 13. General Service Activities

Note: This is just a preliminary concept illustrating how data could be organized and presented in an online database.

Step 5: Enterprises can refer to this list to select suitable verifiers based on expertise, scope, and registration details.

Source: https://thaicarbonlabel.tgo.or.th/?lang=en

2.4 Institutional and regulatory setup

Clear institutional roles and supporting regulations are required to govern the CFP scheme, ensure compliance, and enable effective program implementation.

A. Need for enabling regulations

Different policies exist related to GHG mitigation and carbon market. But there is no dedicated policy so far on domestic carbon labeling. Glimpse of key existing and upcoming laws are given below:

Overview

- Vietnam has built a comprehensive and evolving framework for GHG management, MRV, and carbon market development, aligned with the Paris Agreement and Net Zero 2050 target.
- Framework covers laws, decrees, circulars, and decisions regulating GHG inventory, MRV systems, and carbon market operations.
- Achieved 12% reduction in GHG intensity per GDP (2020–2025)*

Existing Strategic Policies Supporting Broader Climate Goals

- Resolution No. 24-NQ/TW 2013
- Resolution No. 93/NQ-CP 2023
- Decision No. 896/QD-TTg 2022
- Decision No. 1658/QD-TTg 2021
- Updated Nationally Determined Contribution (NDC) 2022

World Bank 2025

MRV – Monitoring, Reporting and Verification

GDP – Gross Domestic Product

2.4 Institutional and regulatory setup

A. Need for enabling regulations

Key Components

Foundational Legislation

Law on Environmental Protection (LEP) 2020 – Core legal basis for GHG inventory, MRV, EPR, and carbon market establishment.

Implementation Decrees

- Decree 06/2022/ND-CP – Defines national GHG inventory and mitigation framework.
- Decree 119/2025/ND-CP – Updates MRV procedures and carbon credit trading.
- Decree 08/2022/ND-CP – Supports lifecycle reporting and EPR.

Facility-Level Mandates

- Decisions 13/2024/QD-TTg - Updates and expands the scope of entities required to report GHG inventories
- Decisions 232/2025/QD-TTg - Specify facility-level GHG reporting list and roadmap for domestic carbon market.

EPR - Extended Producer Responsibility

2.4 Institutional and regulatory setup

A. Need for enabling regulations

Overview of upcoming laws

- Vietnam is developing new regulations,
  - To operationalize the domestic carbon market (Emission Trading System (ETS)) and strengthen the GHG inventory and MRV system
  - Focusing on compliance with Paris Agreement (Articles 6.2, 6.4) and EU CBAM (2026)
  - To support the NDC target: 43.5% (Unconditional – 15.8%; Conditional – 27.7%) GHG reduction by 2030 and Net Zero by 2050
- Key directions are to: enhance data reliability, digitalize systems, expand sectoral coverage, and ensure transparency

2.4 Institutional and regulatory setup

A. Need for enabling regulations

Upcoming Directions for GHG Reporting

- Designated entities to submit mandatorily,
  - GHG reporting from Jan 1, 2025 (covering 6 key sectors: Energy, Industry, Agriculture, Waste, Forestry, Others)
  - Initial GHG inventory by Mar 31, 2025.
- Verification levels:
  - Facility level (provincial authorities),
  - Sectoral level (line ministries),
  - National level (MONRE)
- Align with ISO 14064:2018 and IPCC guidelines
- Builds foundation for Pilot carbon market (2025–2028) → full operation by 2029 (Decision 232/QD-TTg)

Integration with Carbon Market & International Commitments

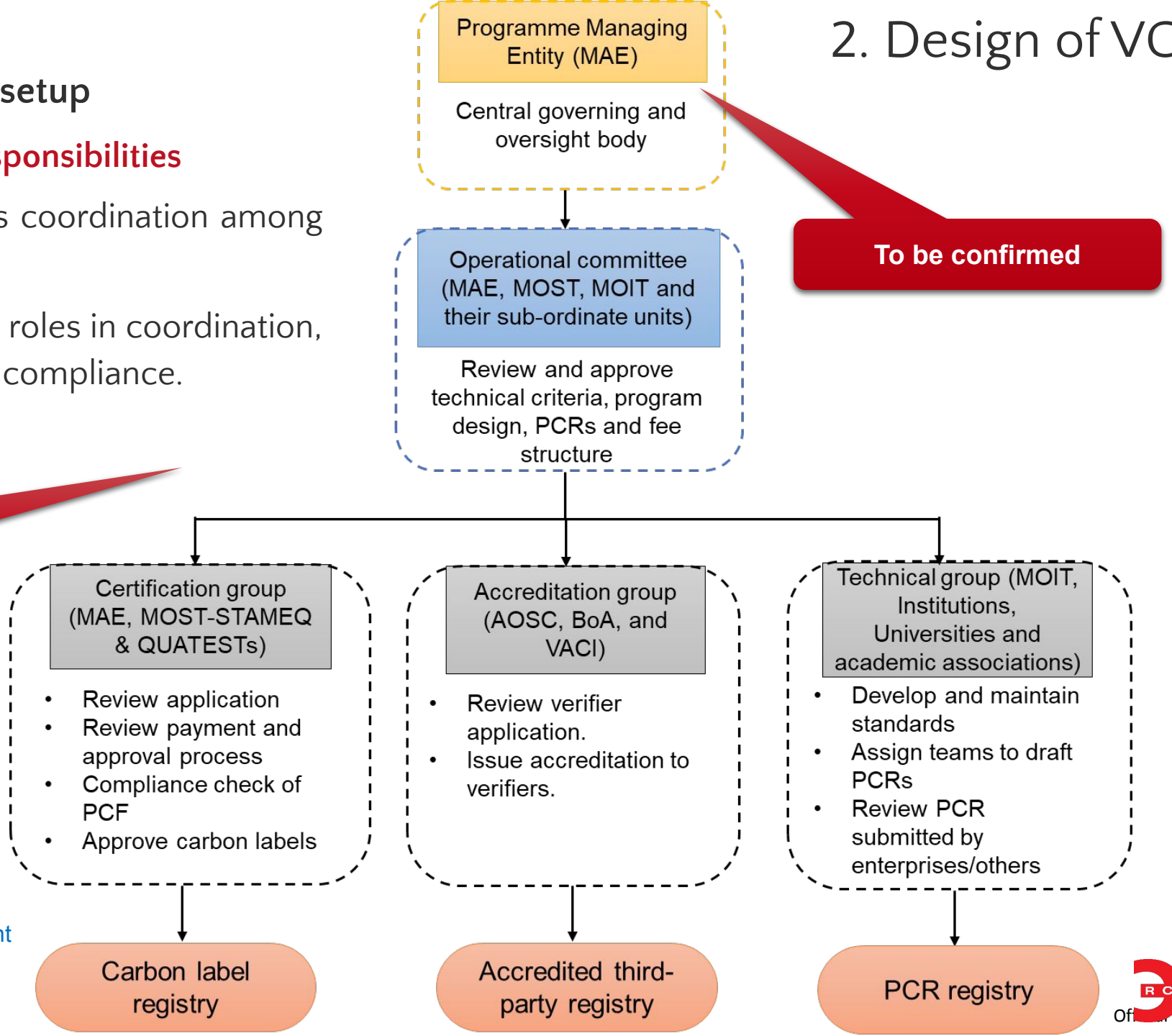
- Carbon trading platform to be launched in late 2026, linked with Article 6 of the Paris Agreement.
- Decree on international credit exchange (draft 2025) ensures transparency & avoids double counting
- Trading cap: 50–70%, to be reserved domestic credits for NDC compliance.
- Such integration will support carbon pricing, green finance, etc and reinforce COP26 commitments → 8% emissions cut by 2030 through market mechanisms

2.4 Institutional and regulatory setup

B. Key Stakeholders – roles and responsibilities

- Successful CFP labeling requires coordination among all stakeholders.
- Each stakeholder has its defined roles in coordination, standard-setting, certification & compliance.

Suitability of the listed steps for Vietnam's context to be confirmed



MAE – Ministry of Agriculture and Environment
MOIT – Ministry of Industry and Trade
MOST – Ministry of Science and Technology
PCF – Product Carbon Footprint
STAMEQ – Directorate for Standards, Metrology & Quality
QUATESTs – Quality Assurance and Testing Center
AOSC – Accreditation Office for Conformity Assessment
BoA – Bureau of Accreditation
VACI – Vietnam Institute of Accreditation

2.4 Institutional and regulatory setup

B. Key Stakeholders – roles and responsibilities

To be confirmed

Roles	Responsibilities	Entity/Ministry
Programme Managing Entity	• Serve as the central governing and oversight body for the VLCP • Provide overall coordination, supervision, and strategic direction. • Coordinate and support PCR development and approval. • Manage application and payment processes for certification and label issuance. • Oversee MRV systems to ensure transparency and data integrity. • Supervise the national database and • Issue carbon labels.	• MAE
Operational Committee	• Review and approve technical criteria, program design, PCRs and fee structure. • Coordinate among implementing and supporting agencies.	• MAE • MOIT • MOST
Certification Group	• Review applications and eligibility processes. • Conduct compliance checks of CFPs. • Approve carbon labels.	• MOST • STAMEQ (under MOST) • QUATEST (under MOST)

2.4 Institutional and regulatory setup

B. Key Stakeholders – roles and responsibilities

Roles	Responsibilities	Entity/Ministry
Accreditation Group	• Review verifier application. • Issue accreditation to verifiers.	• BoA • AOSC • VACI
Technical Group	• Develop and maintain standards for CFP assessment and labeling through PCR development teams. • Assign teams to draft PCRs • Review PCR submitted by enterprises/others	• MOIT, industry association, research institutions and universities.
Supporting Registries	Carbon Label Registry: Maintain carbon labels issued to enterprises.	
	Accredited Third-Party Registry: Lists accredited verifiers.	
	PCR Registry: Maintains approved PCRs for reference and updates.	

To be confirmed.

2.4 Institutional and regulatory setup

C. National Database for VCLP

Centralized platform to support management, transparency, and traceability of the carbon labeling program.

- Following records to be maintained in the national database:
  - ✔ Records of approved labels, including product details, certification status, and validity period.
  - ✔ Application and payment processes.
  - ✔ PCRs and methodological documents.
  - ✔ List of accredited verifiers.

- Facilitate data submission and review processes for participating enterprises.

2.5 Implementation Plan

It provides a structured roadmap for operationalizing VCLP.

Phase	Description	Key Activities and Features	Timeline
Pilot Phase	Initial testing and system setup with limited sector coverage.	✔ Select 2-3 priority sectors for pilot implementation. ✔ Government to fund verification, certification, and training/capacity building ✔ Develop and approve standard PCRs centrally. ✔ Build capacity of enterprises, verifiers, and certification bodies. ✔ Test the database and label format. ✔ Conduct awareness workshops and technical training.	2 years (2026-2028)
Full-rollout	Program expansion to cover additional sectors and product categories.	✔ Extend coverage to more industries and products. ✔ Recover costs through training, application, and accreditation fees. ✔ Allow enterprises to develop or adapt PCRs with PME approval. ✔ Strengthen verifier accreditation and institutional coordination. ✔ Enhance data management and transparency.	4 years (2029 – 2032)
Future Scale-up	Transition from voluntary to broader mandatory framework aligned with national carbon policies.	✔ Expand to more sectors and full life cycle (cradle-to-grave). ✔ Integrate with green procurement and carbon market systems. ✔ Collaborate with international cooperations. ✔ Promote digital tools for transparency and accessibility.	After 2033

2.6 Risk Management During Implementation Phase

Successful implementation of the VCLP requires proactive **identification** and management of potential risks.

Risk Assessment & Mitigation Measures

Technical capacity

Develop GHG calculation models and guidelines; Conduct targeted training.

Data quality

Develop standardized data templates and promote data sharing.

Institutional coordination

Define clear roles. Identify gaps and strengthen inter-ministerial/stakeholder coordination.

Financial constraints among the enterprises

Provide subsidized verification support and explore donor partnerships.

Operational Committee assigns responsible teams to implement mitigation actions.

Enterprise participation

Raise awareness and highlight market benefits of carbon labeling

Quality verification and credibility

Enforce accreditation and conduct random quality audits.

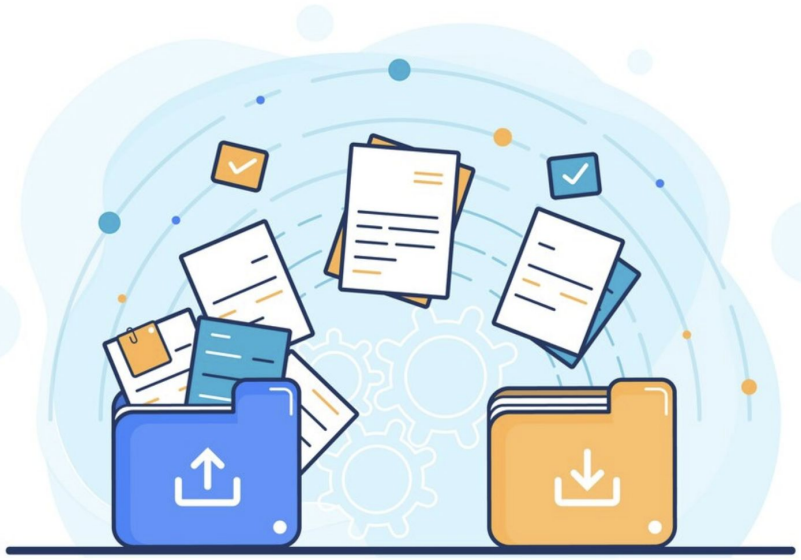
2.7 Capacity Building

- Strengthen technical and institutional capacity for carbon labeling.
- Involve government agencies, enterprises, verifiers, and certification bodies.
- Focus on accurate, transparent, and credible implementation.

A. Capacity Needs Assessment

- ✔ Identify gaps in knowledge, skills, and readiness.
- ✔ Assess understanding of ISO, GHG Protocol, PAS, etc.
- ✔ Evaluate enterprise data collection and reporting capacity.
- ✔ Review verifier and certification competency.
- ✔ Examine institutional ability for oversight and coordination.
- ✔ Provide guide training, technical assistance, and knowledge sharing.

2.7 Capacity Building



B. Training and Knowledge Transfer Plan

- ✔ Strengthen stakeholder capacity through targeted training.
- ✔ Conduct workshops/webinars on CFP calculation, reporting & verification.
- ✔ Provide technical sessions for verifiers & government officers on MRV and quality assurance.
- ✔ Organize awareness programs for enterprises & consumers on carbon labels.
- ✔ Facilitate knowledge exchange with international experts & regional programs.
- ✔ Tailor training materials and methods to suit participant roles and skill levels.

C. Support Tools and Guidance Materials

- ✔ Develop tools to ensure consistent application of standards.
- ✔ Create user manuals & calculation guidelines for enterprises.
- ✔ Provide verification & certification checklists.
- ✔ Develop reporting & documentation templates.
- ✔ Share FAQs, case studies & outreach materials.
- ✔ Promote standardized implementation and continuous learning.

3. MOVING FORWARD AFTER THIS WORKSHOP

- **Stakeholder Consultation Process**

  will be updated after workshop not limited to but including the below points

  - List of Consulted Stakeholders
  - Consultation Workshop Agenda and Methods
  - Feedback Received and Integration into Design

- **Final Proposal for Design and Pilot Implementation**

Thank you

Emission categories under ISO 14064

Category 1 - direct GHG emissions and removals

All Scope 1 activities

- 1. Direct emissions from stationary combustion
- 2. Direct emissions from mobile combustion
- 3. Direct emissions from processes
- 4. Direct fugitive emissions
- 5. Direct emissions from LULUCF

Category 2 - indirect GHG emissions from imported energy

All Scope 2 activities

- 6. Indirect emissions from imported electricity consumption
- 7. Indirect emissions from imported network energy consumption (excluding electricity)

Category 3 - indirect GHG emissions from transportation

Part of Scope 3 activities

- 12. Upstream transport and distribution
- 13. Business travels
- 16. Transportation of clients and visitors
- 17. Downstream transportation and distribution
- 22. Employee commuting

Category 4 - indirect GHG emissions from products used by organization

Part of Scope 3 activities

- 8. Energy-related activities not included in direct emissions and energy indirect emissions
- 9. Purchased products
- 10. Capital equipment
- 11. Waste generated
- 14. Upstream leased assets

Category 5 - indirect GHG emissions associated with the use of organization's products

Part of Scope 3 activities

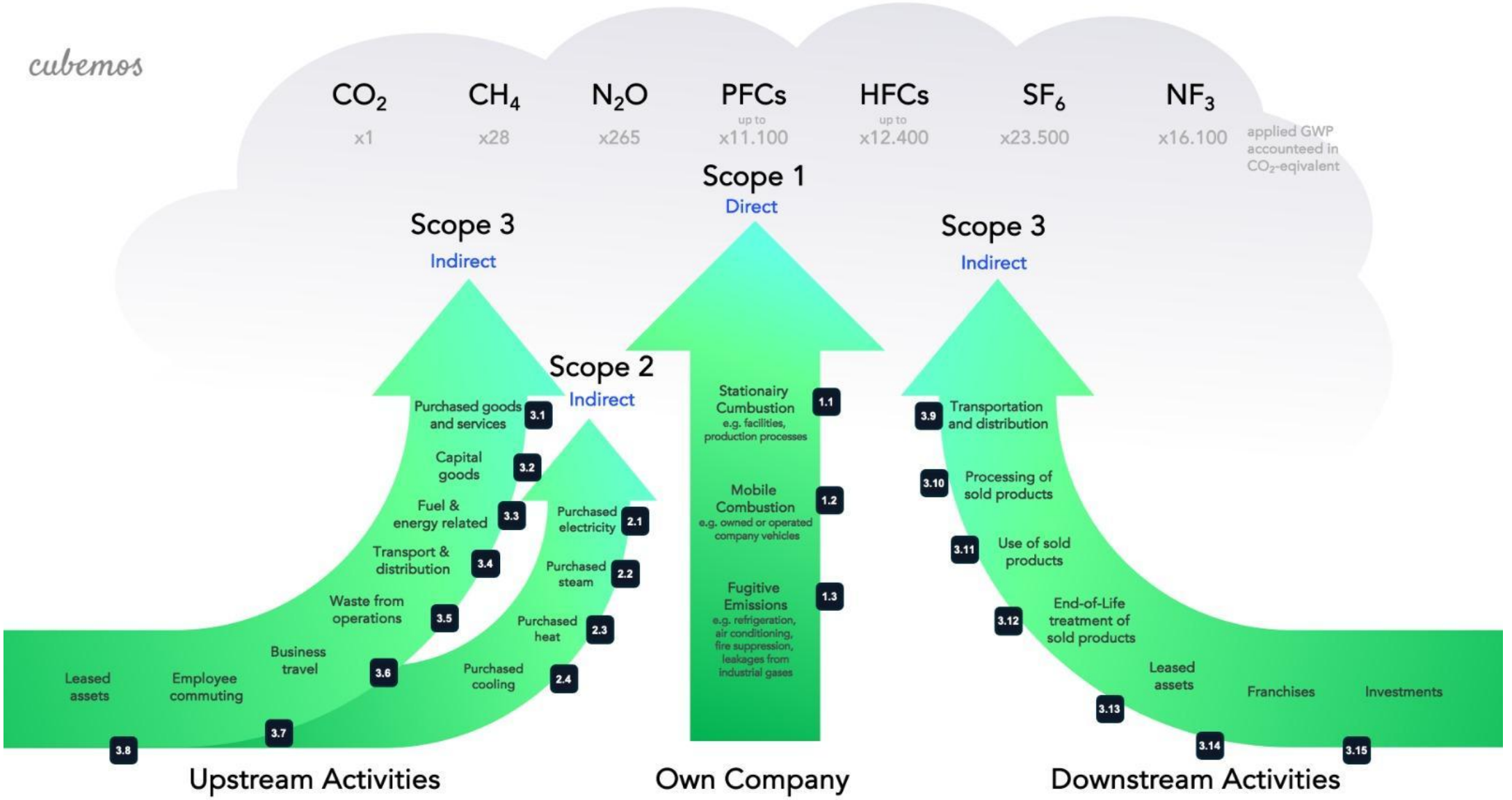
- 15. Investments
- 18. Use stage of the product
- 19. End-of-life of the product
- 20. Downstream franchises
- 21. Downstream leased assets

Category 6 - indirect GHG emissions from other sources

Part of Scope 3 activities

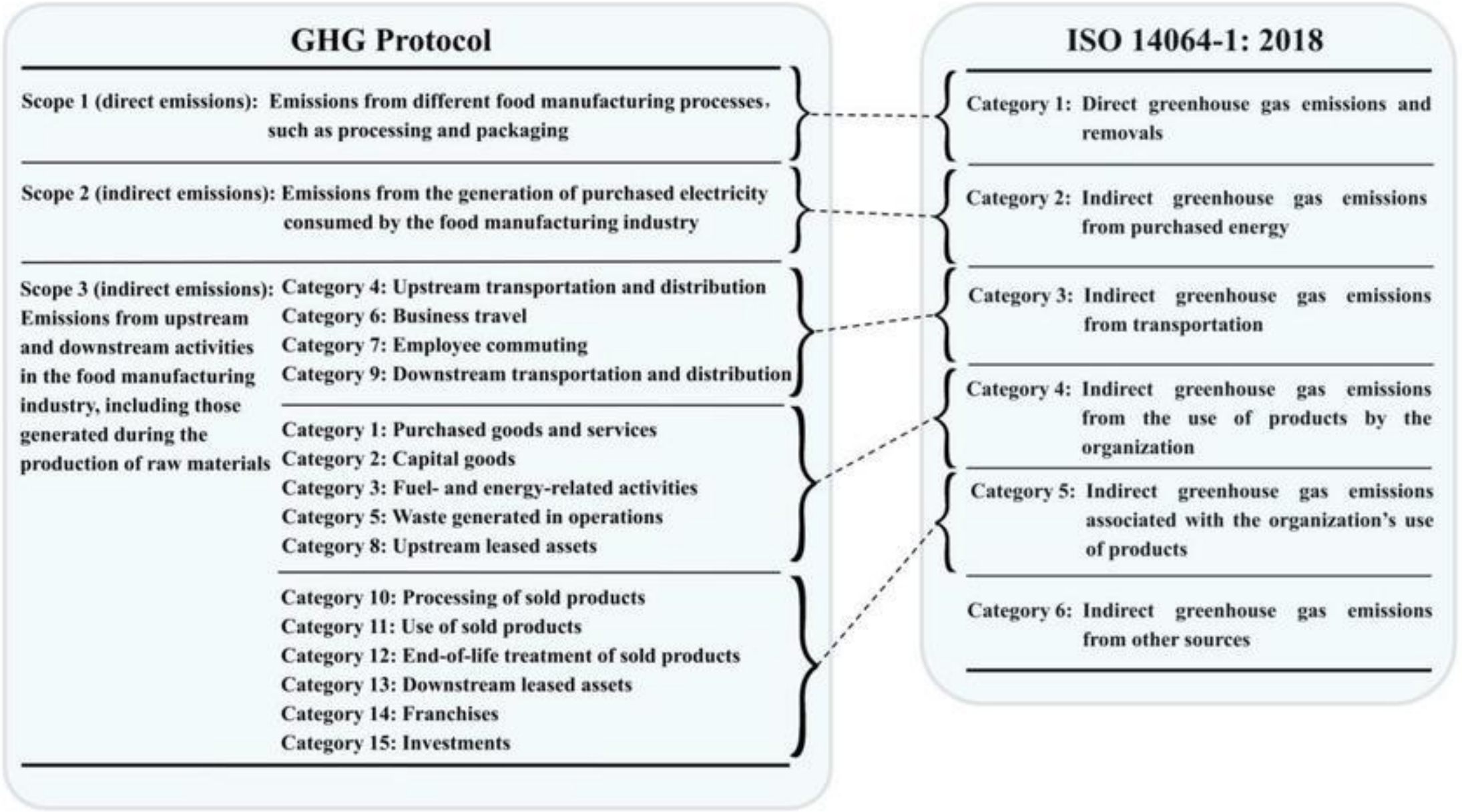
- 23. Other indirect emissions or removals

Scoping of emissions as per GHG Protocol



www.cubemos.com, CO2 Accounting Overview, 2024, adapted from GHG Protocol

GHG protocol vs ISO



2.4 Institutional and regulatory setup

B. Key Stakeholders – roles and responsibilities

Vietnam Accreditation Bodies

Bureau of Accreditation (BoA):

- National accreditation body under STAMEQ – Ministry of Science and Technology.
- Accredits labs, certification/inspection bodies, proficiency testing, reference materials.
- Represents Vietnam in ILAC, IAF, APAC for international recognition.

Accreditation Office for Standards Conformity Assessment Capacity (AOSC):

- Under Vietnam Union of Science and Technology Associations.
- Accredits testing & medical labs (ISO/IEC 17025, ISO 15189).
- Provides training on laboratory quality management systems.

Vietnam Institute of Accreditation (VACI):

- Third-party accreditation supporting scientific and technological activities.
- Accredits certification bodies, labs, inspection organizations under ISO 17011 and domestic law.
- Aligns domestic and international practices.

Requirements of CBAM for Vietnamese Export Sectors

- **CBAM Overview:**
  - EU mechanism imposing a carbon price on imports to match EU ETS costs.
  - Aims to prevent carbon leakage and promote global low-carbon transition.
- **Transitional Phase (Oct 2023 – Dec 2025):**
  - Focus on data collection and reporting only.
  - Applies to cement, steel, aluminium, fertilizers, electricity, and hydrogen.
  - No financial obligations yet.
- **Full Implementation (from Jan 2026):**
  - EU importers must purchase CBAM certificates for embedded emissions.
  - Exporters need accurate, verified emissions data to avoid high default values.
- **Key Actions for Vietnamese Exporters:**
  - Establish MRV systems.
  - Conduct CFP assessments.
  - Invest in low-carbon and energy-efficient technologies.

Abbreviations
EU – European Union
CBAM – Carbon Border Adjustment Mechanism

Requirements of CBAM for Vietnamese Export Sectors

- **Sectors Under CBAM / High Risk** *(based on survey conducted for Deliverable 2)***:**
  - Iron & steel: High energy use and export volume.
  - Cement & chemicals (fertilizers, paints, rubber): Major process emissions.
  - Aluminium: High emissions, moderate exports.
  - Paper, plastics, textiles: Not yet covered, but indirectly affected via EU supply chains.
- **Future Expansion** *(based on survey conducted for Deliverable 2)***:**
  - Possible inclusion of chemicals, plastics, and electronics in later phases.
- **Government Response:**
  - Developing domestic carbon market and policies aligned with EU CBAM.
  - Supporting exporters to adapt and stay competitive.