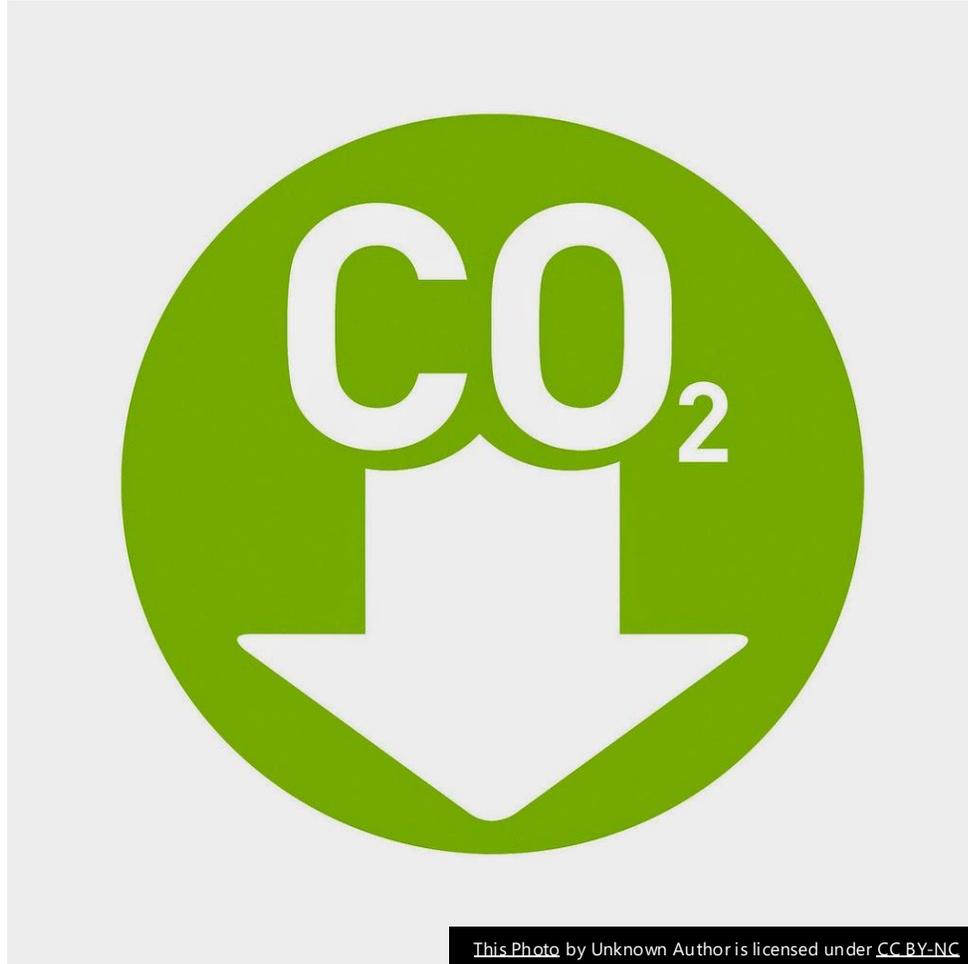


STOCK-TAKING AND NEEDS ASSESSMENT

ANALYZING THE LEGAL
FRAMEWORK IN VIETNAM, GAP
ANALYSIS AND CAPACITY
BUILDING NEEDED TO IMPLEMENT
A CARBON LABELLING PROGRAM



Agenda



- Introduction
- National orientation and existing policy framework
- Consultation and survey in energy and industry sectors
- International experience and case studies
- Gap analysis and needs assessment
- Recommendations and roadmap for implementation
- Conclusion

I. INTRODUCTION

I.1. Context & Study Objectives

 Purpose & Benefits <p>Carbon labelling promotes sustainable consumption and production by disclosing product emissions, guiding low-carbon choices, and encouraging cleaner production.</p>	 Relevance to Vietnam <p>Supports national sustainable development goals and prepares businesses for global mechanisms like the EU's Carbon Border Adjustment Mechanism (CBAM).</p>
 Current Initiative <p>A voluntary carbon labelling scheme is being developed under ETP technical assistance, led by the Ministry of Agriculture and Environment (MAE) via the Department of Climate Change (DCC).</p>	 National Commitment <p>Vietnam has committed to net-zero emissions by 2050 (COP26) and issued key policies, including the Law on Environmental Protection (2020), Decree 06/2022, and the National Climate Change Strategy.</p>
 Report Objectives <p>Provides a legal and institutional review, private sector survey insights, international experience, and recommendations to build a credible carbon labelling framework aligned with future carbon markets.</p>	

Objectives



Assess Vietnam's readiness (legal, institutional, technical) for implementing a voluntary carbon labelling scheme and propose tailored solutions.



Review laws, policies, and guidelines on GHG inventory, emissions reduction, carbon markets, and product labelling.



Analyze institutional setup and coordination mechanisms related to climate and environmental labelling.



Assess private sector readiness in energy and industry: awareness, technical capacity, and barriers.



Gather stakeholder inputs from government, industry, and international partners to guide program design.



Examine international carbon labelling experiences and adapt lessons learned to Vietnam.



Identify legal, institutional, and technical gaps and challenges.



Recommend policies, technical assistance, and capacity-building measures to support pilot implementation.

I. INTRODUCTION

I.2. Research Methodology

Review of secondary documents

National strategies, plans, and policy orientations are analyzed to assess their relevance and support for the carbon labelling initiative.

Private sector survey

An online survey was conducted with companies in the energy and industrial sectors, which are the target groups currently responsible for GHG inventory.

Study of international experience

Carbon labelling models from five countries were analyzed, focusing on program design, verification systems, the role of government, and the technical standards applied. The results are used for benchmarking best practices and deriving applicable lessons for Vietnam.

Institutional analysis and stakeholder mapping

Identified key roles, functions, and coordination mechanisms among relevant organizations for their potential involvement in the carbon labelling program.

Expert interviews and stakeholder consultations

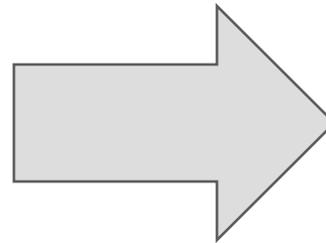
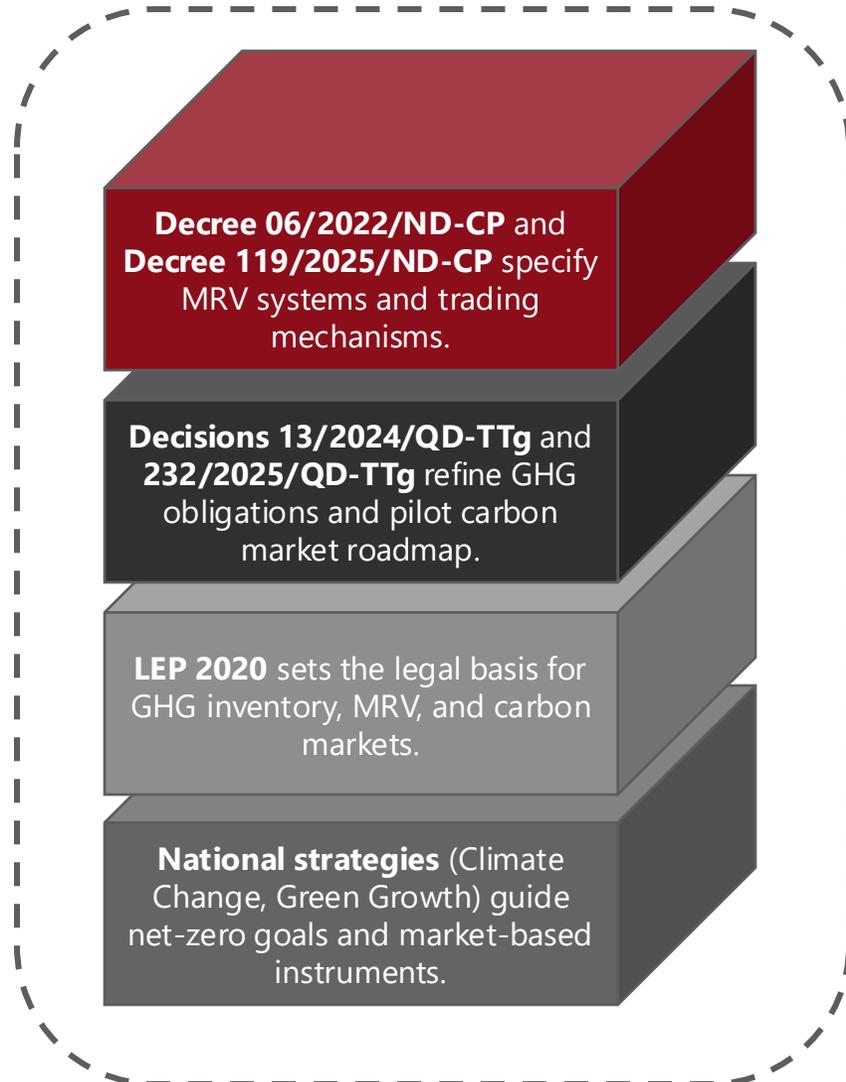
Direct meetings held with the representatives from regulatory bodies, international organizations, business associations, and independent experts.

Gap analysis and needs assessment

Training needs, capacity building, and technical support are evaluated for the upcoming implementation phase.

II. NATIONAL ORIENTATION AND EXISTING POLICY FRAMEWORK

II.1. Legal Framework



- **No legal definition** of “carbon label” or “product carbon footprint”.
- **No technical guidelines** for product-level GHG calculation or verification.
- **Misalignment** with global rules (e.g., EU CBAM).
- **Lacks pilot programs** and **reporting standards** for carbon-labelled products.

II. NATIONAL ORIENTATION AND EXISTING POLICY FRAMEWORK

II.2. Existing Product Labelling Systems



Energy Labelling

- Mandatory since 2017; covers >20 product groups.
- Based on TCVN/QCVN standards; 1–5 star or endorsement labels.
- Reduces energy use & GHG emissions; raises consumer awareness.



Vietnam Green Label

- Official ecolabel since 2009; 14 product categories.
- Uses LCA & compliance checks.
- Promotes sustainable production; improves market access.



Organic Label

- Verifies compliance with TCVN 11041 for organic farming.
- Reduces synthetic inputs; lowers GHG from agriculture.



VFCS/PEFC Forest Certification

- Established 2018; PEFC-aligned.
- Ensures sustainable forest management; boosts exports.



OCOP Program

- Recognizes rural products (1–5 stars) based on quality, market potential, sustainability.
- Supports local economies & eco-friendly practices.



Recycled/Biodegradable Packaging Labels

- Voluntary; growing trend of self-declared eco-information.
- No unified national standard yet; EPR under LEP 2020 enforces recycling obligations.



II. NATIONAL ORIENTATION AND EXISTING POLICY FRAMEWORK

II.3. Institutional Arrangement



Ministry of Agriculture and Environment (MAE)
formed by merging MARD & MONRE; designated to manage GHG emissions, NDC implementation, and carbon market development.

Interministerial Technical Agencies

❖ Ministry of Industry and Trade

- *Electricity Regulatory Authority*: Input for energy-related criteria.
- *Department of Innovation, Green Transition and Industrial Promotion*: Support for green production & tech shift.
- *Department of Industry*: Emission criteria for industrial products.
- *Department of Industrial Safety Techniques and Environment*: Standards & supervision.

❖ Ministry of Science and Technology

- *Directorate for Standards, Metrology and Quality (STAMEQ)*: National standards (TCVN), carbon footprint, CO₂e evaluation.
- *Quality Assurance and Testing Centers (QUATESTs)*: Testing & verification for emissions & labelling.

Department of Climate Change:

GHG inventory, mitigation, carbon market, MRV.

Department of Environment: EIA, eco-label experience, integration with environmental systems.

Department of Quality, Processing and Market Development:

Labelling operations, enterprise coordination.

Institute of Strategy and Policy on Agriculture and Environment:

Operational models, assessment tools.

Other Relevant MAE Units

- Department of Forestry and Forest Protection
- Plant Protection Department
- Local sub-departments

II. NATIONAL ORIENTATION AND EXISTING POLICY FRAMEWORK

II.4. Private sector practices

Role of the Private Sector in Carbon Labelling



Enterprises are key actors in product-level GHG assessment, disclosure, and benefit from branding & market advantages.



Export-oriented sectors (textiles, food, electronics, furniture) face rising demands for PCF disclosure & ESG compliance from major markets.



Some leading companies apply LCA, ISO 14067, GHG Protocol, PAS standards, and use third-party verification.



Major firms in steel, cement, power joined ETS & carbon market trainings to prepare for domestic market operation.



Participation is uneven: large/FIE firms are more proactive; most SMEs lack capacity and resources.



Support measures are needed to enable broader private sector engagement in voluntary, market-driven carbon labelling.

III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.1. Identification of relevant stakeholders and sectors

Stakeholders



Ministry of Industry and Trade (MOIT)

Expertise in energy labelling and MEPS, crucial for carbon standards for energy-consuming products.



Ministry of Agriculture and Environment (MAE)

Manages Vietnam Green Label; experienced in life-cycle environmental impact assessments.



Certification, verification, and testing organizations (e.g., Bureau Veritas, TÜV NORD, SGS, Intertek)

Provide third-party verification to ensure credibility of carbon labels.

Priority Sectors

(based on Decision 1011/QD-TTg & Decision 13/2024/QD-TTg)



Chemicals

High emissions from energy and fossil-based materials.



Electronics

Significant energy and chemical use.



Textiles & garments

Long, emission-intensive processes.



Pulp & paper

Energy and water intensive, major emissions.



Food processing

High energy use in cooking, cooling, packaging.



Beverages

Energy intensive distillation, sterilization, refrigeration.

III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.2. Readiness and Capacity: A Survey of Vietnamese Enterprises for a Carbon Labeling Program

Readiness for product-level carbon footprinting in Vietnam's private sector remains low.



Large export-oriented firms (stone, wood, electronics, food, textiles) have started exploring ISO 14067/GHG Protocol, mainly due to pressure from importers in the EU, North America, and Japan.



Carbon labelling use is limited; SMEs lack technical knowledge, clear benchmarks, and struggle with CFP vs. facility GHG inventories.



Digital tools and pilot verifications by certification bodies (e.g., TUV Nord) are emerging, but absence of standardized systems and databases hampers scale-up.



Main challenges: high verification costs, low internal technical capacity, difficulty tracking supply chain data.

Survey Preparation & Implementation



Survey targeted enterprises from the 2023 List of Key Energy-Consuming Establishments.



Standardized survey form included:

- General enterprise info (sector, revenue, products, markets)
- Awareness of GHG concepts & standards
- Current GHG practices & commitments
- Drivers, opportunities, barriers
- Needs for technical & policy support

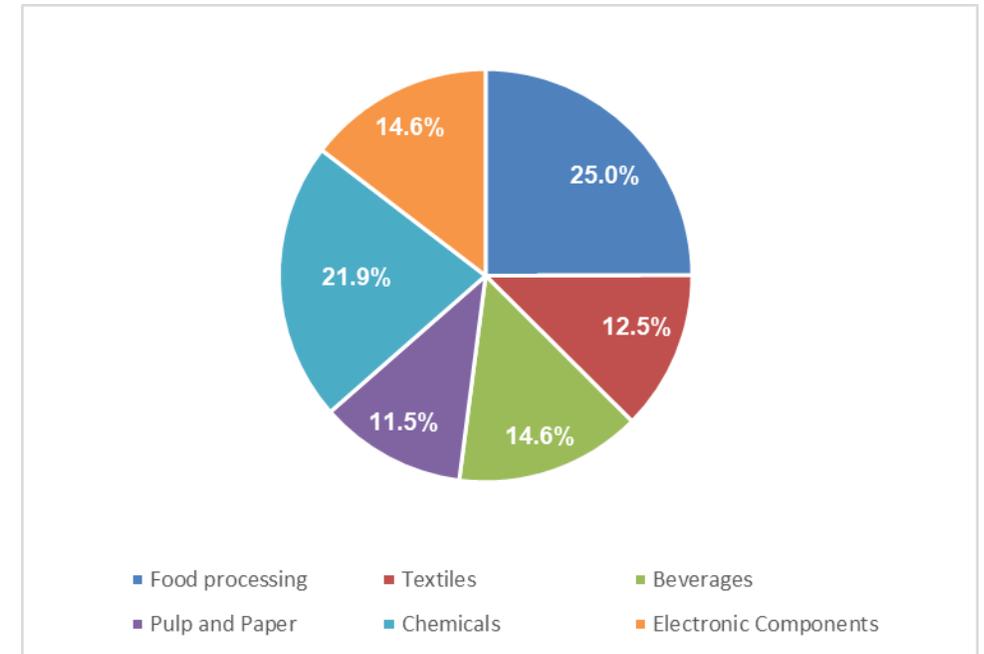
Survey conducted via Google Forms and paper forms, with technical support provided to ensure data quality.

III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

Survey Participation Overview

- 500 enterprises were invited to participate in the survey.
- 96 enterprises responded, reflecting a response rate of ~19%.
- Participants represent a wide range of processing industries.
- The survey provides an initial snapshot of business awareness and actions related to GHG emissions.



Distribution of surveyed enterprises by business sector

III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

Characteristics of Enterprises and Operating Context

Enterprise Types

- Majority are limited liability companies, reflecting Vietnam's economic structure.
- FDI enterprises (22.9%) play a major role in heavy industries and exports.

Enterprise Size

- Large enterprises dominate the survey, consistent with their major share of GHG emissions.
- SME participation is lower but essential for energy efficiency efforts.

Sectoral Insights

- Food processing and chemicals show strong capacity for emissions reduction.
- Textiles, electronics, pulp & paper, and beverages also represented.

Target Markets

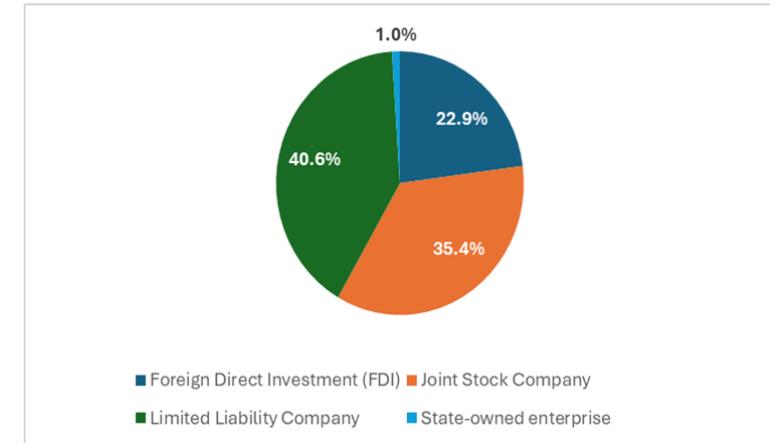
- Enterprises increasingly serve both domestic and export markets to boost value and flexibility.
- Export volumes vary widely - from no exports to 300,000+ tons/year.

Export Highlights

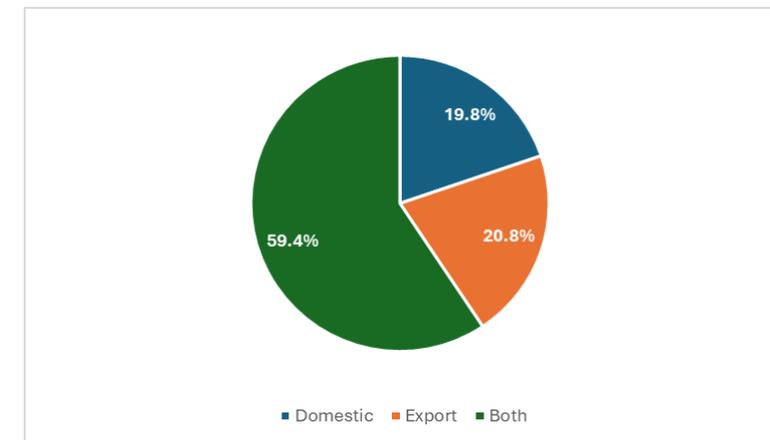
- Fertilizers: 319,000 tons/year
- Electronics: 70 million units/year
- Cans and lids: 800 million units/year

Regulatory Coverage

- Most surveyed enterprises fall under current energy and GHG emission regulations, indicating strong alignment with Vietnam's environmental policy framework.



Type of enterprise participants



Target markets of the enterprises

III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

Awareness of Climate Change and Related Concepts

General Awareness

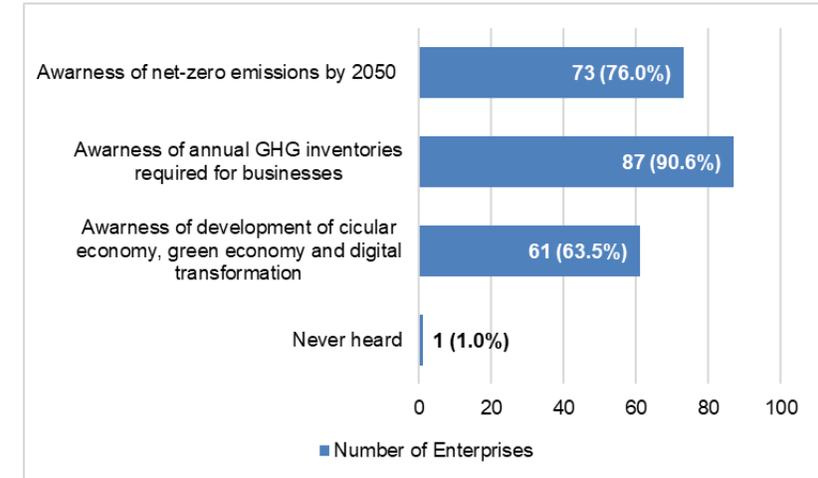
- Most enterprises are aware of national climate change policies, though information access remains limited in some areas.
- Understanding of Climate Concepts:
 - High awareness for:
 - GHG Inventory (97.9%)
 - Carbon Market (64.6%)
 - Carbon Labelling (61.5%)
 - Carbon Footprint (58.3%)
 - Lower awareness for:
 - Emission Standards (e.g., ISO 14067, GHG Protocol): 45.8%
 - ESG Strategies: 37.5%
 - LCA: 31.3%
 - CBAM: 27.1%
 - Only 2.1% had never heard of these concepts

Sources of Information

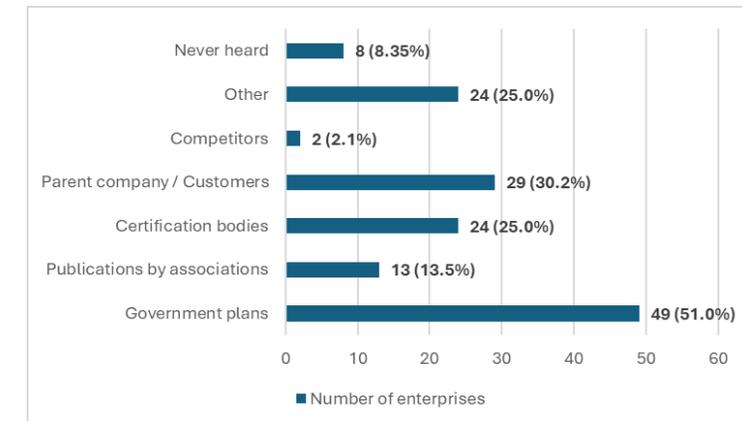
- Enterprises mainly learn from:
 - Government communication channels
 - Industry associations
 - International clients and partners
 - Media and online platforms

Key Insight

- There is a notable gap between general policy awareness and deep understanding of technical standards and tools, highlighting the need for targeted training and outreach.



Enterprises' awareness on national climate change policies



Medium of awareness for enterprises



III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

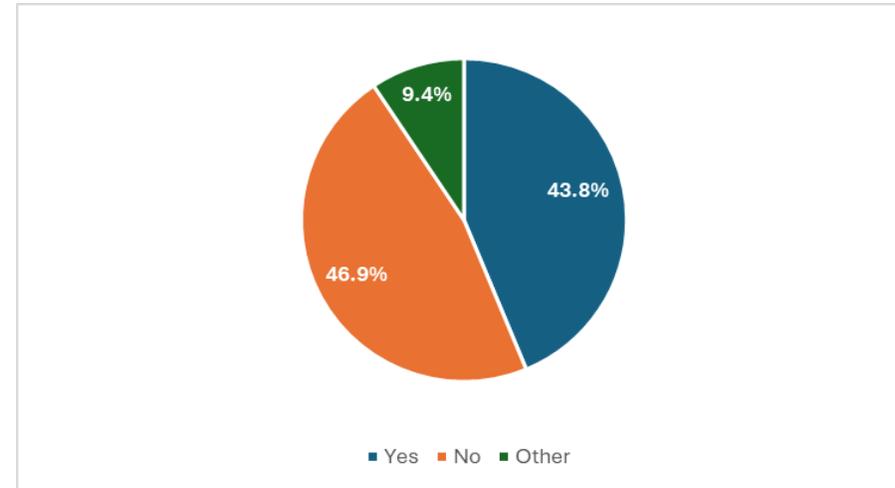
Level of Implementation of GHG Inventory and Carbon Labelling

Current Status of GHG Inventory and Carbon Labelling

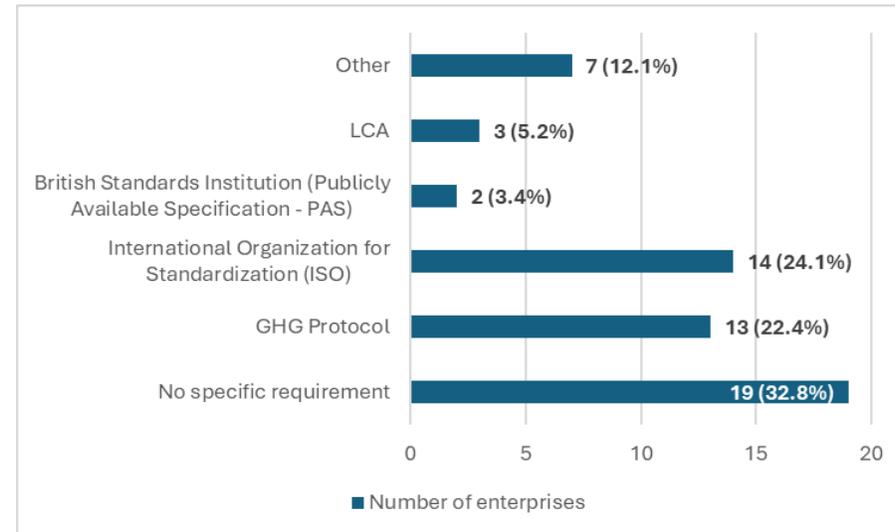
- A growing number of enterprises in Vietnam have begun implementing GHG inventories, signaling early-stage integration of climate-related practices into business operations.
- However, carbon labelling remains limited and inconsistent, primarily due to the absence of a clear legal framework and national guidance.
- Most enterprises are still exploring or are limited to emission accounting only, without standardized or certified labelling processes.

Drivers and Motivations for GHG Inventory

- Enterprises are motivated by a diverse range of factors, not solely regulatory requirements:
 - Government regulations (34.4%) remain a key driver.
 - Corporate Social Responsibility (CSR) (31.3%) and cost reduction goals (22.9%) reflect growing internal incentives.
 - Customer demands and market access (18.8%) are influencing companies to assess and disclose emissions.
 - Participation in carbon standards or group-level requirements (14.6%) also play a role.
- This shift shows a transition from a compliance-based to a proactive, value-driven approach to climate action.



Enterprises practicing emission assessment



Carbon labelling standards followed by enterprises

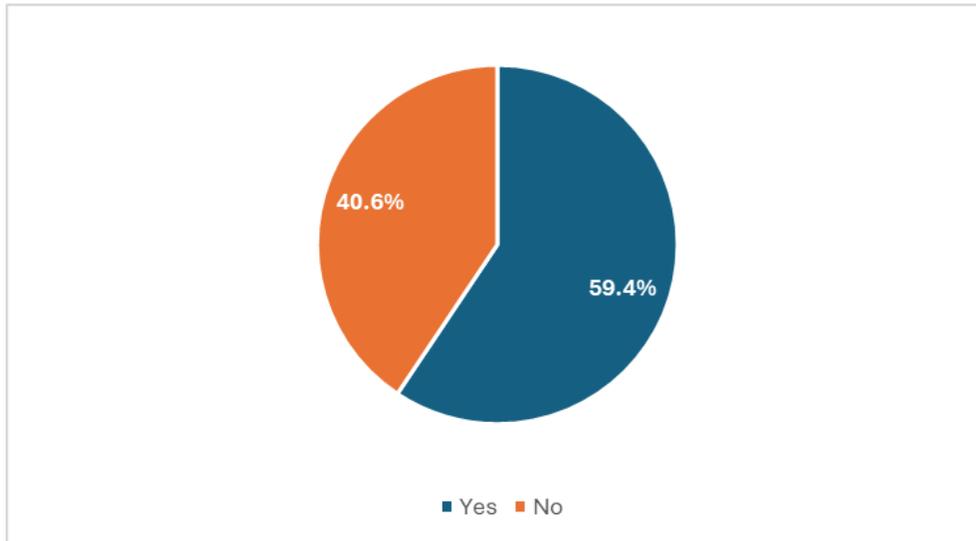
III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

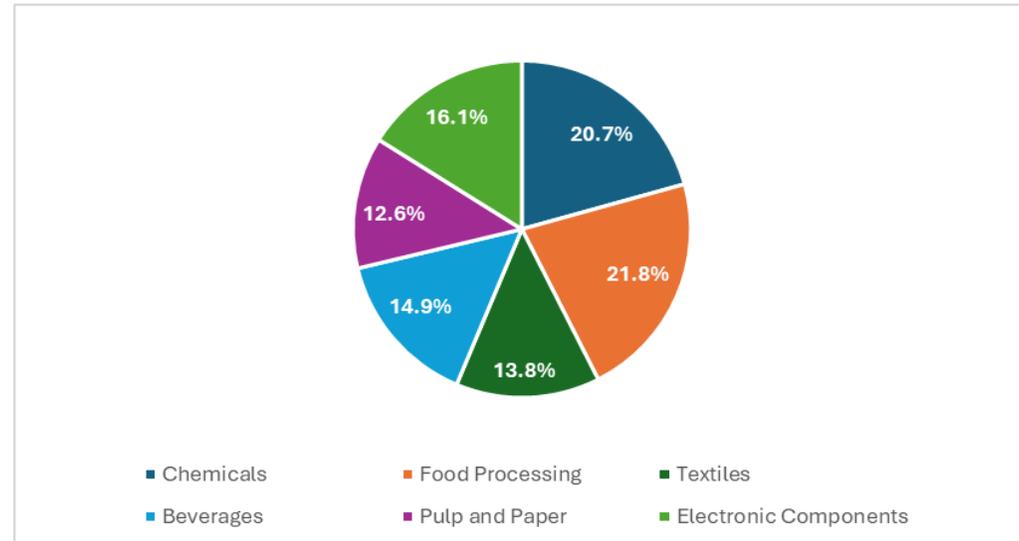
Level of Implementation of GHG Inventory and Carbon Labelling

Integration into Supply Chain and Sectoral Trends

- An increasing number of enterprises are beginning to integrate GHG emissions criteria into procurement and supplier selection, demonstrating a move toward green supply chain management.
- Certain sectors such as food processing and chemicals show higher levels of implementation, likely due to their high emissions profiles and exposure to international markets.



GHG emissions criteria in purchasing a raw material/product



Sector-wise share of enterprises doing GHG assessment

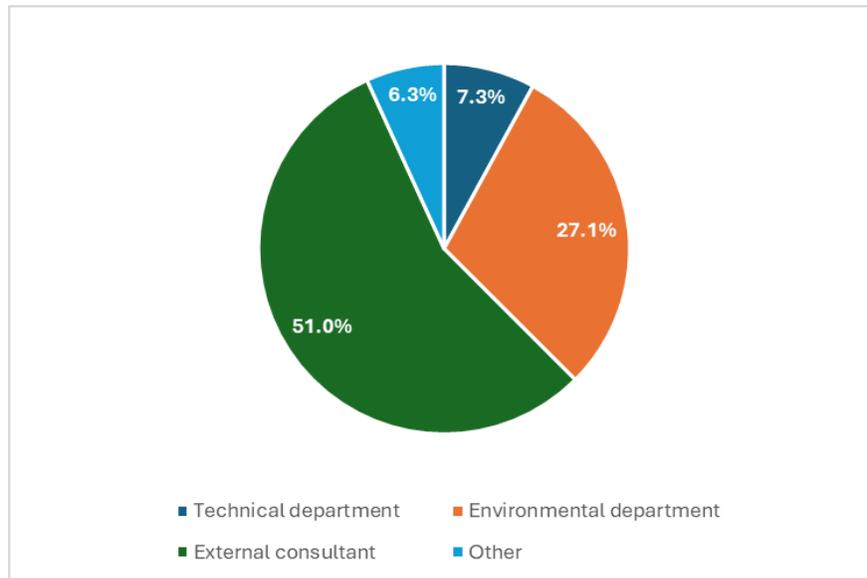
III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

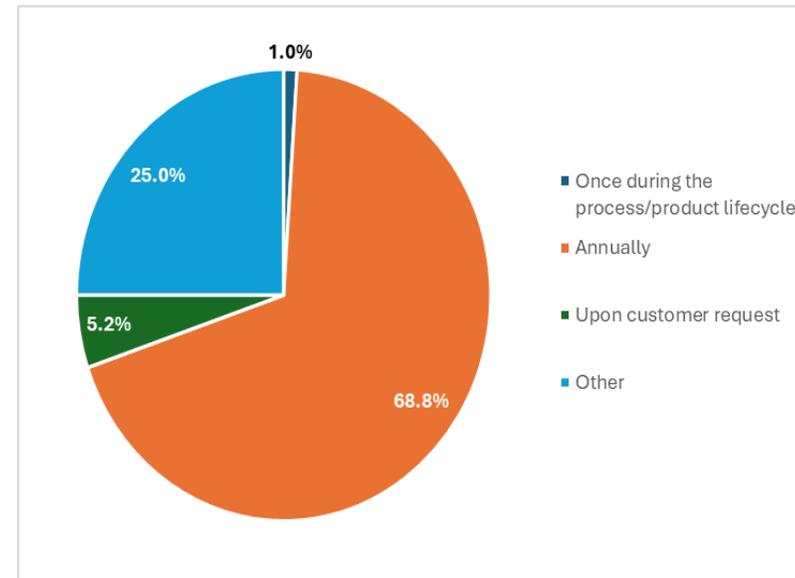
Level of Implementation of GHG Inventory and Carbon Labelling

Institutional Arrangements and Frequency of Assessment

- Enterprises assign GHG inventory responsibilities in various ways:
 - Some rely on in-house teams, while others hire external consultants or use a hybrid model. This reflects the limited technical capacity within many firms and the need for specialized support.
- The frequency of GHG assessments varies:
 - Some conduct assessments annually or regularly, while others do so on-demand (e.g. customer requests) or lack a fixed schedule.
 - This flexibility reflects different levels of maturity and responsiveness to market dynamics.



Responsibility for GHG inventory within enterprises



Frequency of GHG assessment within enterprises

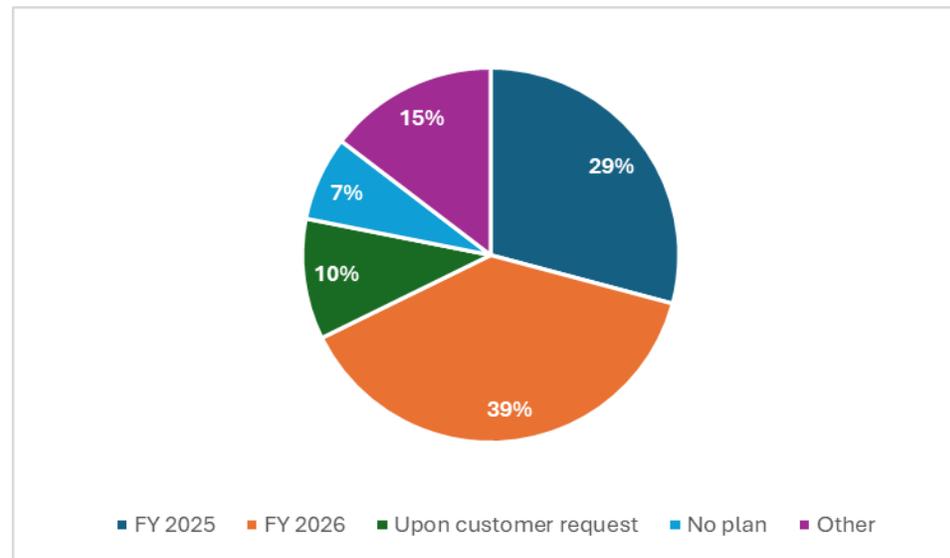
III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

Level of Implementation of GHG Inventory and Carbon Labelling

Future Intentions and Planning

- A growing number of enterprises have expressed intent to conduct GHG inventories or carbon labelling in the near future.
- This reflects increasing awareness and alignment with:
 - Domestic regulatory developments (e.g. draft laws on GHG management)
 - International market expectations, such as EU CBAM or ESG requirements from buyers and investors.
- Enterprises are gradually developing roadmaps for emissions assessment and disclosure as part of their sustainability strategies.



Enterprises' plans or GHG inventory or assessment

III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

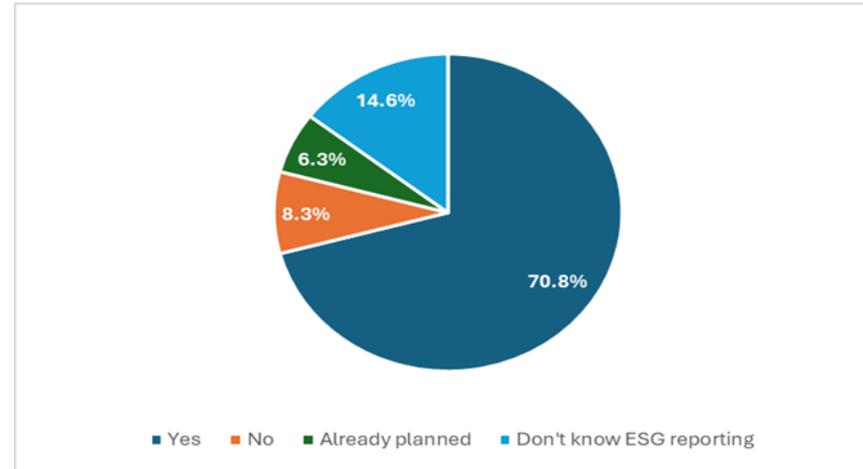
Current Status of ESG Reporting

ESG Reporting and Its Link to Carbon Labelling

- ESG reporting is closely linked to carbon labelling, as both aim to improve transparency about environmental impacts and corporate sustainability performance.
- Integrating carbon labelling into ESG frameworks helps companies:
 - Better communicate sustainability efforts,
 - Align with regulatory and market expectations,
 - Enhance their competitiveness in domestic and global markets.

Current Practice of ESG Reporting in Enterprises

- A number of enterprises have already begun implementing ESG or environmental reporting, but awareness and implementation remain uneven across industries.
- Sectoral differences are significant:
 - Chemicals, food processing, and electronics lead ESG adoption, driven by international supply chain pressures.
 - Sectors like textiles and pulp & paper show lower engagement, suggesting the need for capacity building and technical support.
- This trend highlights the importance of awareness-raising and targeted training for broader ESG adoption.



Enterprises practicing ESG or environmental reports

Sector-wise enterprises practicing ESG or environmental reports

	Yes		Already planned		No		Don't know ESG reporting	
	Number	Proportion (%)	Number	Proportion (%)	Number	Proportion (%)	Number	Proportion (%)
Chemicals	15	22.1	2	33.3	2	25.0	2	14.3
Food Processing	15	22.1	3	50.0	3	37.5	3	21.4
Electronic Components	12	17.6			1	12.5	1	7.1
Beverages	11	16.2			1	12.5	2	14.3
Textiles	8	11.8					4	28.6
Pulp and Paper	7	10.3	1	16.7	1	12.5	2	14.3



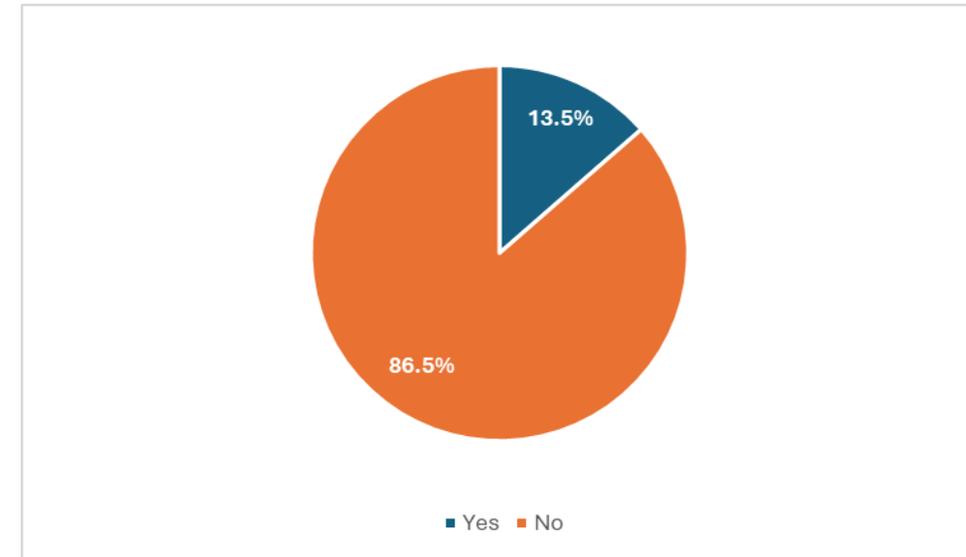
III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

Current Status of ESG Reporting

Initiatives Related to GHG and Carbon Footprint

- Only a small proportion of enterprises have organized programs or events related to GHG assessment or climate change.
- Among those that did, activities included:
 - Conducting GHG inventories,
 - ISO 14067 trainings,
 - Carbon footprint verification,
 - Purchasing carbon credits,
 - Developing GHG mitigation plans,
 - Setting net-zero targets, sometimes guided by parent corporations..
- This trend highlights the importance of awareness-raising and targeted training for broader ESG adoption.



Enterprises that have organized GHG related events/activities

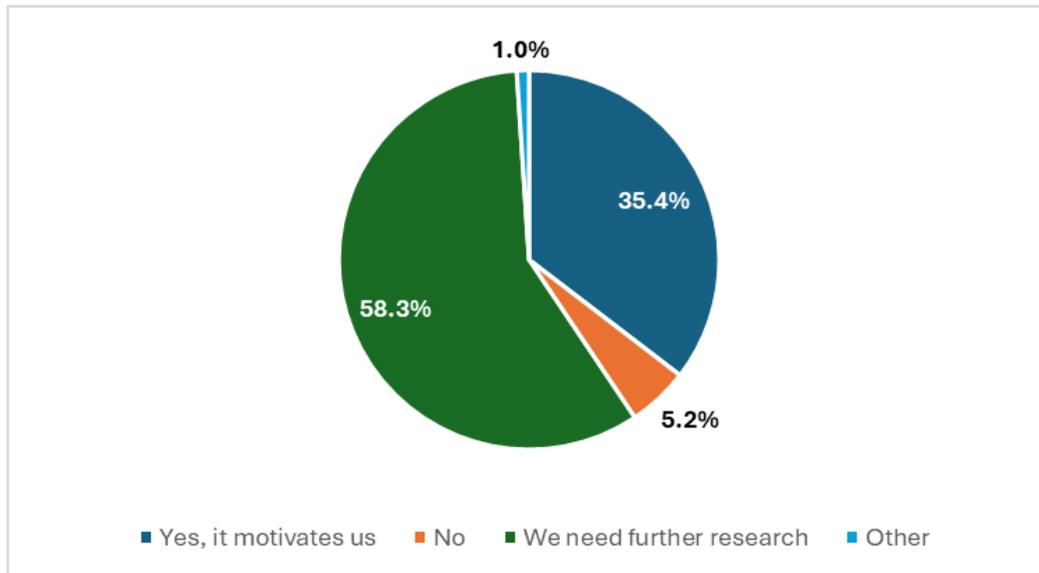
III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

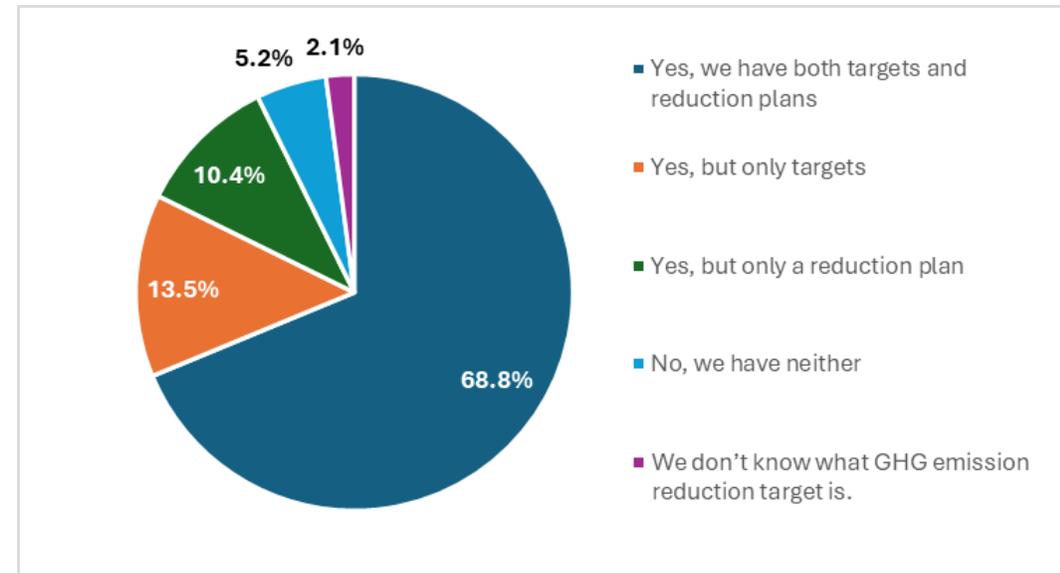
Opportunities, Barriers, and GHG Emission Reduction Targets

Enterprise Perceptions and Readiness for GHG Reduction

- Many enterprises are still evaluating the implications of ESG and carbon neutrality commitments on their operations.
- While awareness of GHG reduction is increasing, actual readiness and implementation capacity remain limited.
- Enterprises acknowledge the importance of emission reduction, but the transition from intention to action is inconsistent across sectors.



Perceptions over GHG assessment enabling business operations



Status of GHG assessment targets in enterprises

III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

Opportunities, Barriers, and GHG Emission Reduction Targets

Key Drivers Behind GHG Reduction Efforts

- Motivations for setting GHG reduction targets extend beyond commercial benefits:
 - Environmental interest (88.5%) and brand image (82.3%) are top drivers.
 - Other motivators include: employee awareness, product value enhancement, cost reduction, and employee satisfaction.
- These findings show that social and reputational values are central to corporate climate strategies.

Motivation for enterprises for GHG reduction targets and plans

	Number of enterprises	Proportion (%)
Enhance company image	79	82.3
Interest in green environment	85	88.5
Improve employee knowledge and perspectives	59	61.5
Enhance product value to the target customer group	56	58.3
Reduce production costs (mainly by saving resources)	50	52.1
Make employees proud of the organization and/or satisfied with their working environment	49	51.0
Influence customer retention	31	32.3
Reduce production errors and waste rates	26	27.1
Increase market share	24	25.0
Increase net profit	22	22.9
Shorten production time	15	15.6

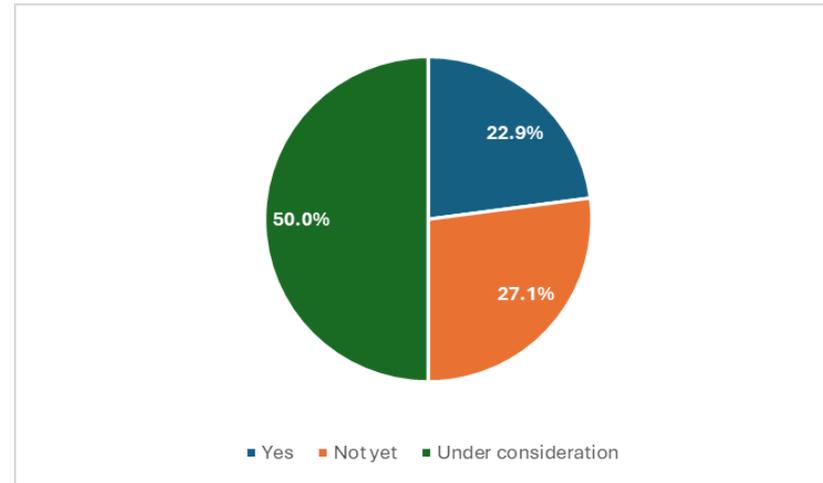
III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

Opportunities, Barriers, and GHG Emission Reduction Targets

Public Disclosure of GHG Performance – Gaps and Sectoral Differences

- Despite having reduction targets, many enterprises have not yet publicly disclosed their GHG performance.
- Common barriers:
 - Awaiting official verification,
 - Lack of technical guidelines or data,
 - Waiting for appropriate timing (e.g., closer to Dec 2025 deadline).
- Sector-wise disclosure varies:
 - Electronics and pulp & paper sectors lead in public announcements.
 - Beverages, food processing, and textiles show slower progress.
- These challenges highlight the need for stronger government support and improved internal enterprise capacity to ensure effective implementation.



Public disclosure of GHG performance by enterprises

Sector-wise public disclosure of GHG performance by enterprises

	Not yet		Yes		Under consideration	
	Number of enterprises	Proportion (%)	Number of enterprises	Proportion (%)	Number of enterprises	Proportion (%)
Beverages	7	26.9	2	9.1	5	10.4
Chemicals	6	23.1	4	18.2	11	22.9
Food Processing	6	23.1	2	9.1	16	33.3
Pulp and Paper	3	11.5	5	22.7	3	6.3
Textiles	2	7.7	2	9.1	8	16.7
Electronic Components	2	7.7	7	31.8	5	10.4

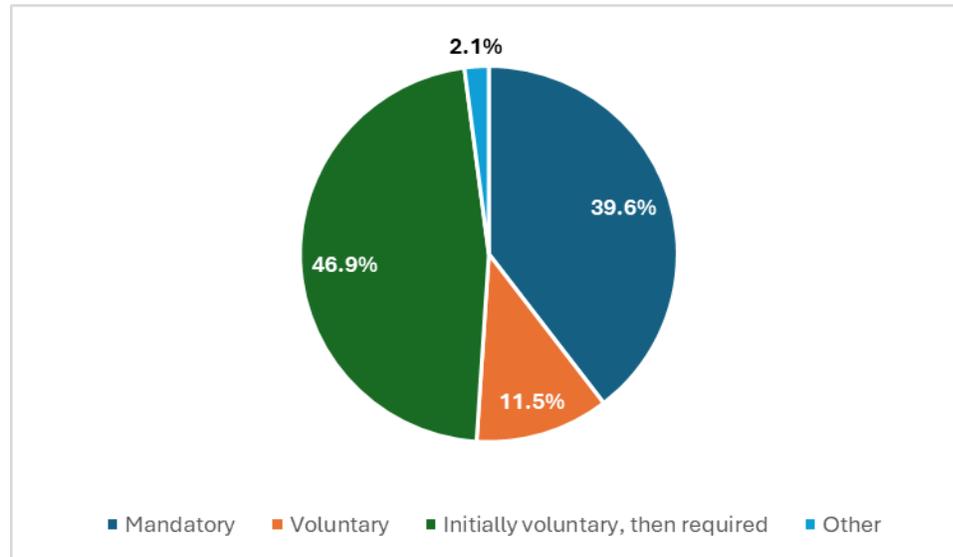
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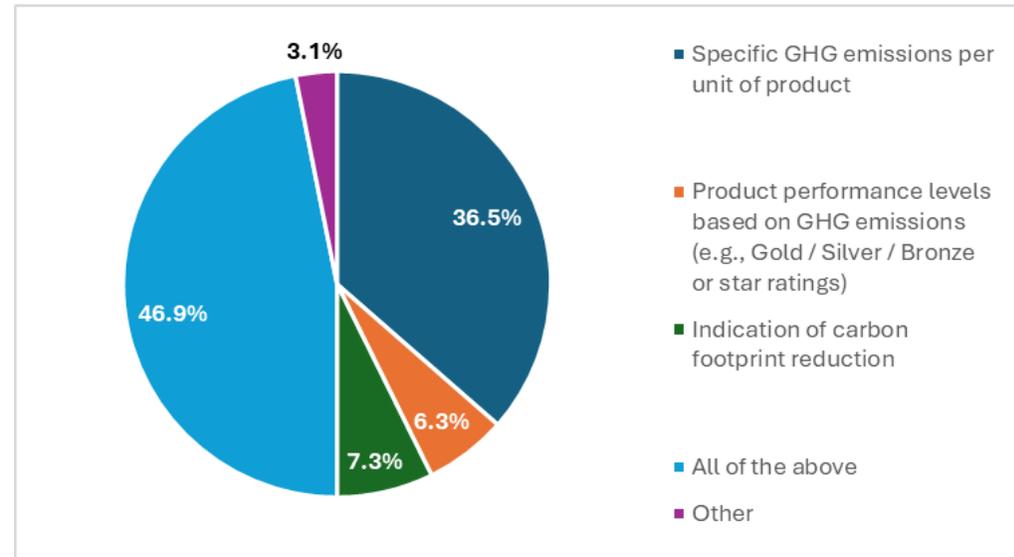
Perspectives on Carbon Labelling and Scope of Control

Growing Awareness of GHG Compliance and Carbon Labelling

- Most enterprises agree that GHG inventory and carbon labelling will become mandatory in the future.
- Enterprises are showing signs of adaptation to upcoming policies and a shift toward greater transparency and sustainability.
- There is diverse opinion on what information should be displayed on carbon labels, indicating the need for standardized guidance to ensure clarity and consistency.



Enterprises' opinions on future GHG compliance



Enterprises' opinions on information on carbon labels

III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

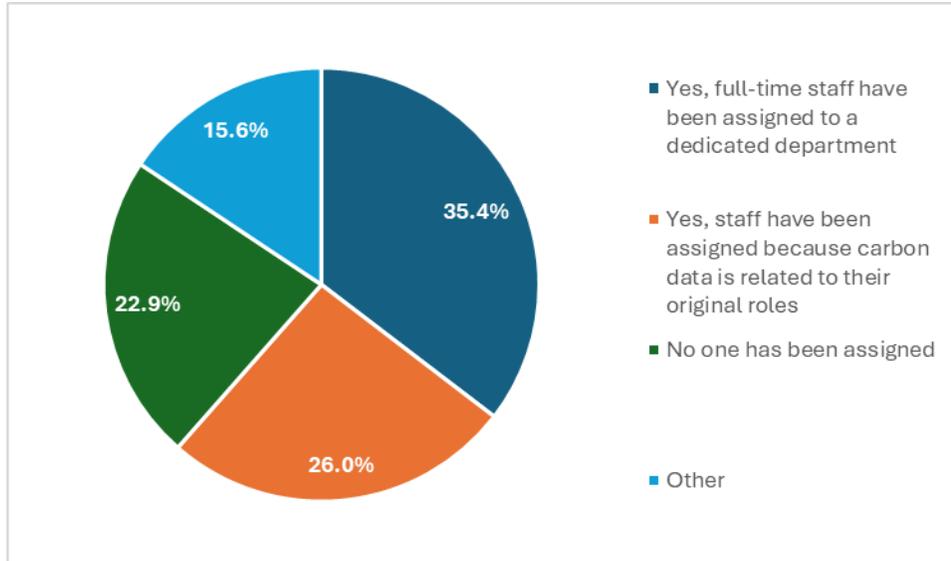
Perspectives on Carbon Labelling and Scope of Control

Expanding Understanding of GHG Assessment Scope

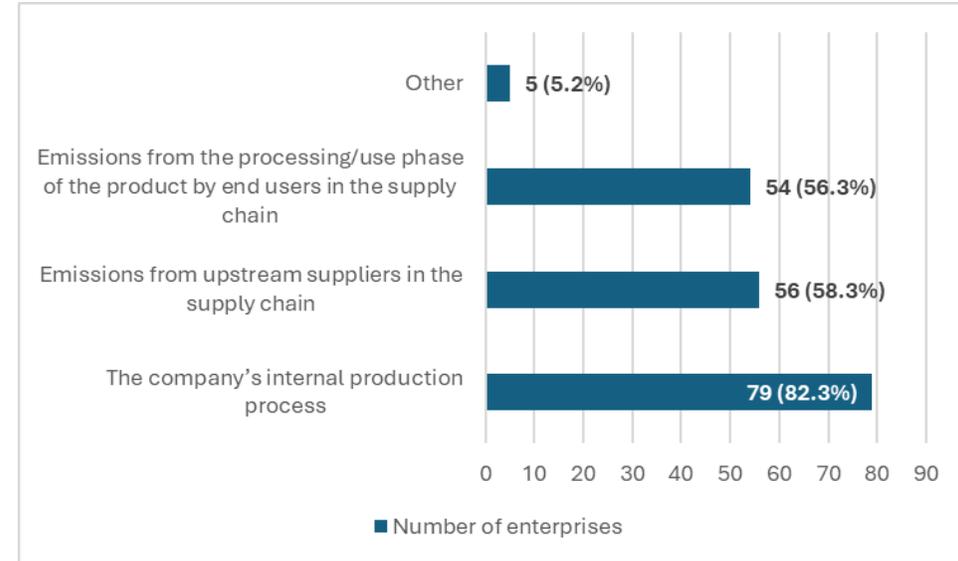
- Enterprise understanding of GHG inventory boundaries is evolving.
- There is a growing trend toward including a broader value chain perspective in emissions assessment and control.
- This reflects increased maturity in corporate approaches to climate responsibility.

GHG Inventory – Human Resources Allocation

- GHG inventory tasks are handled through a mix of internal staff and outsourcing.
- This reflects a transitional phase where enterprises are still building internal capacity to meet emerging reporting and compliance requirements.



Enterprise's approaches on staff allocation for GHG assessment



Enterprise's approaches on staff allocation for GHG assessment

III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

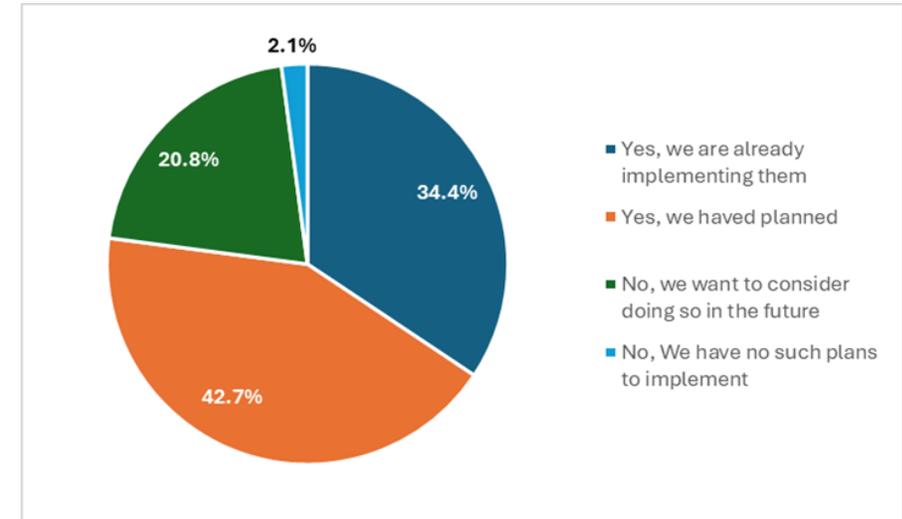
Perspectives on Carbon Labelling and Scope of Control

Expanding Understanding of GHG Assessment Scope

- Enterprise understanding of GHG inventory boundaries is evolving.
- There is a growing trend toward including a broader value chain perspective in emissions assessment and control.
- This reflects increased maturity in corporate approaches to climate responsibility.

Implementation of GHG Mitigation Measures

- Many enterprises have begun implementing GHG reduction measures, especially in:
 - Energy efficiency (replacing equipment, optimizing processes)
 - Switching energy sources (solar, renewables, biomass)
 - Supporting initiatives (tree planting, electric forklifts, digital transformation)
- A few enterprises are leading with long-term roadmaps and smart factory models, while others remain at the inventory-only stage.
- Sector-wise planning varies:
 - Highest planning and implementation: Food processing, Chemicals, Electronics
 - Lower readiness: Textiles, Beverages



Proportion of enterprises with plans to implement measures or projects

Sector-wise enterprises with GHG mitigation plans

	Yes, we have planned		Yes, we are already implementing them		No, we have no such plans to implement		No, we want to consider doing so in the future	
	Number of enterprises	Proportion (%)	Number of enterprises	Proportion (%)	Number of enterprises	Proportion (%)	Number of enterprises	Proportion (%)
Food Processing	11	26.8	8	24.2			5	25.0
Chemicals	10	24.4	4	12.1	1	50.0	6	30.0
Beverages	7	17.1	5	15.2	1	50.0	1	5.0
Textiles	5	12.2	4	12.1			3	15.0
Electronic Components	5	12.2	7	21.2			2	10.0
Pulp and Paper	3	7.3	5	15.2			3	15.0

III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

Drivers, Challenges, and Support in GHG Emission Reduction

Main criteria driving enterprises to take action on GHG emission reduction

Main Drivers

- Top motivations:
 - Social responsibility (62.5% fully agreed)
 - Contribution to national NDC targets (57.3%)
 - Regulatory compliance (56.3%)
- Nearly half see benefits in reducing business costs (47.9%) and improving long-term performance (35.4%).
- Less influence from supply chain pressures, new business opportunities, or headquarters initiatives.

	1	2	3	4	5	Unsure	Total
It can contribute to national targets under NDC	0.0%	2.1%	12.5%	25.0%	57.3%	3.1%	100.0%
It is a social responsibility	0.0%	1.0%	7.3%	27.1%	62.5%	2.1%	100.0%
It is stated in our CSR and disclosed to stakeholders	0.0%	3.1%	21.9%	14.6%	55.2%	5.2%	100.0%
Peer pressure from other companies/sectors	1.0%	3.1%	31.3%	34.4%	15.6%	14.6%	100.0%
It can reduce business costs (e.g., energy savings)	2.1%	2.1%	13.5%	31.3%	47.9%	3.1%	100.0%
It can improve medium- and long-term performance	1.0%	3.1%	20.8%	34.4%	35.4%	5.2%	100.0%
Pressure from suppliers/business partners	3.1%	5.2%	24.0%	36.5%	16.7%	14.6%	100.0%
It can become a new business opportunity	3.1%	3.1%	27.1%	30.2%	28.1%	8.3%	100.0%
Initiatives from corporate group and/or headquarters	1.0%	4.2%	21.9%	28.1%	29.2%	15.6%	100.0%
Requirements from ministries/sectors	1.0%	2.1%	10.4%	28.1%	56.3%	2.1%	100.0%

Note: [5: Strongly agree, 4: Somewhat agree, 3: Neutral, 2: Somewhat disagree, 1: Strongly disagree, Unsure]



III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

Drivers, Challenges, and Support in GHG Emission Reduction

Key Challenges

- Major barriers faced:
 - Lack of information on methods/techniques (58.3%)
 - Limited financial resources (51.0%)
 - Insufficient knowledge of mitigation actions (41.7%)
 - Shortage of human resources (39.6%)
 - Unclear implementation guidance (36.5%)
- Additional issues: low management awareness and low prioritization of climate action.

Challenges faced by enterprises in implementing GHG emission reduction actions

	Number of enterprises	Proportion (%)
Lack of information on methods and/or techniques	56	58.3
Lack of financial resources	49	51.0
Lack of information on climate change mitigation actions	40	41.7
Lack of human resources	38	39.6
Lack of clarity on how to implement them	35	36.5
Lack of management-level understanding	28	29.2
Low prioritization of climate mitigation actions	25	26.0
Unclear of effectiveness	23	24.0
No opinion	16	16.7
Other	2	2.1

III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

Drivers, Challenges, and Support in GHG Emission Reduction

Support from Industry Associations

- Associations mainly:
 - Provide information on policies and regulations (47.9%)
 - Share technical trends and best practices (24.0%)
 - Fully support member climate actions (20.8%)
- High proportion of “No opinion” responses signals weak engagement and communication gaps.

Support for enterprises to implement GHG emission reduction actions

	Number of enterprises	Proportion (%)
Proactively provides timely and complete information on policies, rules, and regulations	46	47.9
No opinion	39	40.6
Shares technical trends and best practices from other companies	23	24.0
Fully supports member companies' actions on climate change mitigation	20	20.8
Actively voices member companies' opinions to the government	19	19.8
Plays an important role in decision-making on climate mitigation actions	14	14.6
Other	1	1.0

III. CONSULTATION AND SURVEY IN ENERGY AND INDUSTRY SECTORS

III.4. Key Insights from the Survey

Drivers, Challenges, and Support in GHG Emission Reduction

Needs for Support

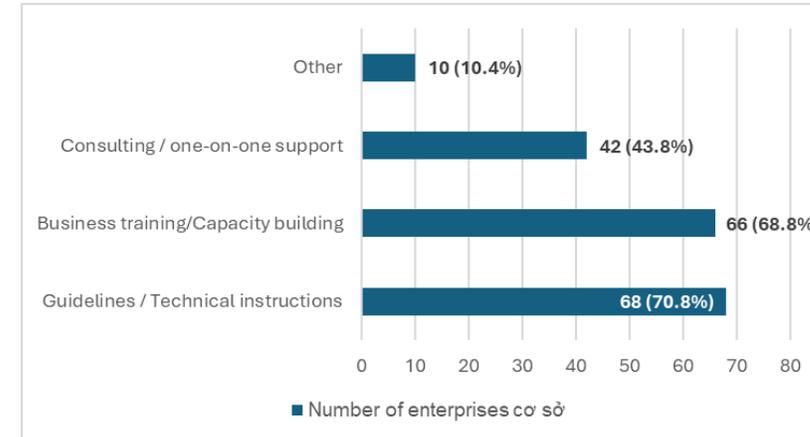
- Strong demand for assistance to comply with Decree No. 06/2022/ND-CP, especially on GHG inventories.
- Enterprises request clearer reporting procedures, standardized guidance, and technical help.

Willingness to Join Carbon Labelling Pilot

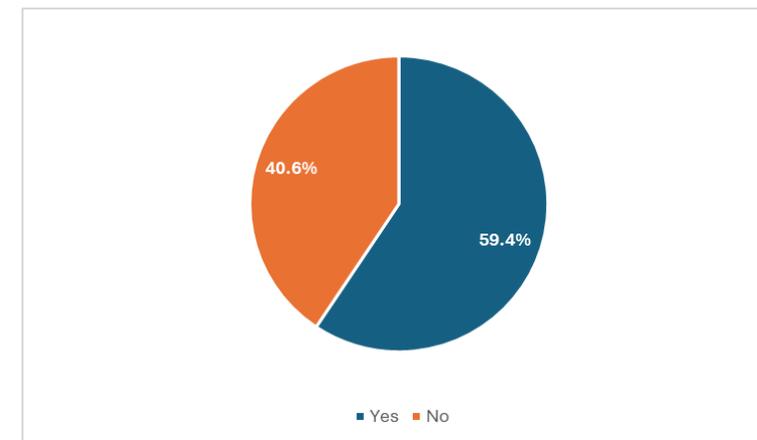
- Many enterprises express readiness to join pilot programs to build capacity and improve transparency.
- Participation varies by sector:
 - Food Processing (24.6% willing)
 - Chemicals (21.1%) Beverages (17.5%)
 - Electronic Components (15.8%)
 - Textiles and Pulp & Paper (10.5%)

Sector-wise enterprises' willingness in carbon labelling pilot program

	Yes		No	
	Number of enterprises	Proportion (%)	Number of enterprises	Proportion (%)
Food Processing	14	24.6	10	25.6
Chemicals	12	21.1	9	23.1
Beverages	10	17.5	4	10.3
Electronic Components	9	15.8	5	12.8
Textiles	6	10.5	6	15.4
Pulp and Paper	6	10.5	5	12.8



Support options for enterprises



Enterprises' willingness in carbon labelling pilot program

IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.1. Overview of global trends carbon labelling

Role of CFP

- Measures and reduces GHG emissions across products, organizations, and supply chains
- Functions alongside carbon taxes, carbon pricing, and carbon markets

Development & Adoption

- CFP systems introduced since 2009
- Early adopters: UK, Japan, South Korea, Taiwan, Thailand

Global Practices

- Over 50 countries/regions with carbon labelling schemes

Trade & Competitiveness

- Developed nations (UK, France, Germany, US, Japan, South Korea) demand CFP data from trading partners
- Developing nations (e.g., Vietnam) adopting CFP to meet trade and climate goals

Market Growth

- CFP management market: USD 11.3 billion (2023) → 30.8 billion (2028) (CAGR 22.2%)
- PCF certification market: projected USD 1.2 billion (2024) → USD 3.5 billion by 2033

Note:

GHG – Green house gas

CFP – Carbon Footprint

PCF – Product Carbon Footprint

CAGR - Compound Annual Growth Rate



IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.1. Overview of global trends carbon labelling

Recent initiatives from selected countries

Country	Initiative / Policy	Key Features	Status / Impact
Spain	Royal Decree (effective Jan 2025)	Mandatory for certain organizations to: <ul style="list-style-type: none"> ✓ Calculate carbon footprint ✓ Develop reduction plans ✓ Publicly disclose footprint & progress reports 	Strengthening legal framework; first mandatory disclosure scheme
Japan	Voluntary GHG Reduction Labelling (MAFF, Mar 2024)	<ul style="list-style-type: none"> ✓ Applies to 23 domestic agricultural products ✓ Producers can self-declare low-emission practices ✓ Part of MAFF's Green Food System (MIDORI) Strategy 	200+ products eligible; 350+ retail outlets by Jun 2024; growing adoption
Taiwan	(i) Issued Climate Change Response Act (Feb 2023)	<ul style="list-style-type: none"> ✓ New rules introduced to promote and expand the application of carbon footprint systems. 	
	(ii) Voluntary Product CFP Management Regulations (iii) Revised GHG Certification & Verification Bodies Regulation (Mar 2025)	<ul style="list-style-type: none"> ✓ Promotes voluntary CFP applications 	
France	Label bas carbone (Low-Carbon Label, 2018)	<ul style="list-style-type: none"> ✓ Certifies GHG reduction & carbon sequestration projects ✓ Framework for monitoring, reporting, verifying reductions 	As of Jan 2023: 376 projects awarded, reducing 1.43 million tCO ₂ e

Note:

MAFF – Ministry of Agriculture, Forestry and Fisheries

IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.2. Key drivers of CFP

1. Impact of CBAM & Carbon Taxes

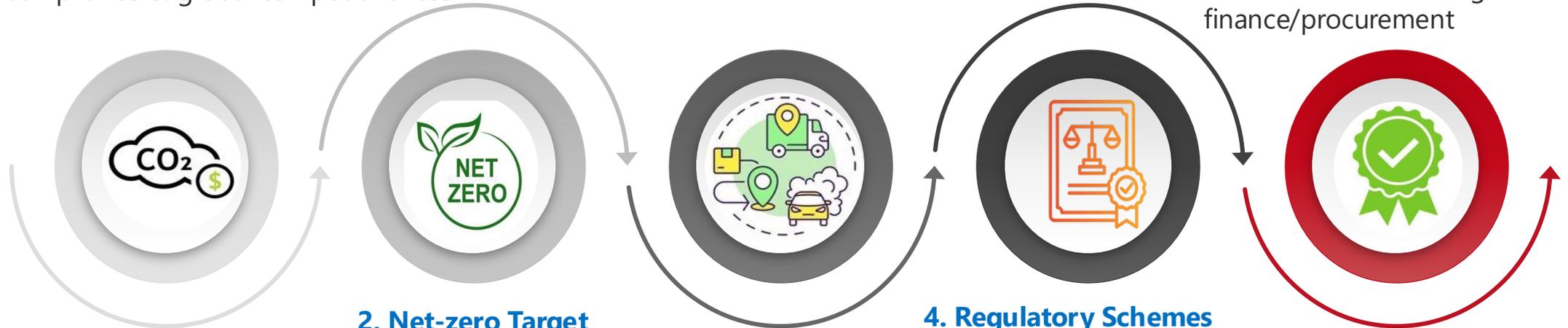
- EU CBAM & carbon taxes drive carbon labelling
- Exporters must disclose CFP to avoid penalties
- Labelling reduces exposure to carbon costs
- Ensures compliance & global competitiveness

3. Scope 3 Emissions

- Indirect emissions from supply chain, use & disposal
- Often largest share of product footprint
- CFP tracks & highlights Scope 3 impacts
- Drives supplier & consumer collaboration

5. Environmental / Green Certification

- CFP critical for green certifications
- Boosts brand image & competitiveness
- Helps exporters (e.g., Vietnam → EU/Japan)
- Builds trust & secures green finance/procurement



2. Net-zero Target

- CFP aligns with Paris Agreement (1.5°C goal)
- Net-zero by 2050 requires emission balance
- Key part of national & corporate strategies
- SBTi & UN Race to Zero guide credible net-zero pathways
- Japan & EU have official net-zero targets

4. Regulatory Schemes

- Organizations must conduct CFP assessments to meet national climate regulations.
- Example: Thailand's CFO program (TGO-managed)
- Must calculate their annual GHG emissions & commitment to verified reductions.

Note:

SBTi – Science-Based Target Initiative
EU – European Union

CBAM – Carbon Border Adjustment mechanism
TGO – Thailand Greenhouse Gas Management Organization

CFO – Carbon Footprint Organization



IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.3. Challenges of Implementing Carbon Footprinting (CFP)

General Challenges

- Accuracy and reliability of emissions data
- Lack of standardized methodologies across sectors/countries
- Limited consumer awareness of CFP labels
- Credibility and trust issues in labelling systems
- Low expertise and knowledge gaps
- Human and financial resource constraints



Country Case Examples



Thailand



- **Key challenges:** low expertise & knowledge gaps
- **Solutions:** international cooperation, IPCC-aligned databases, industry engagement

Japan



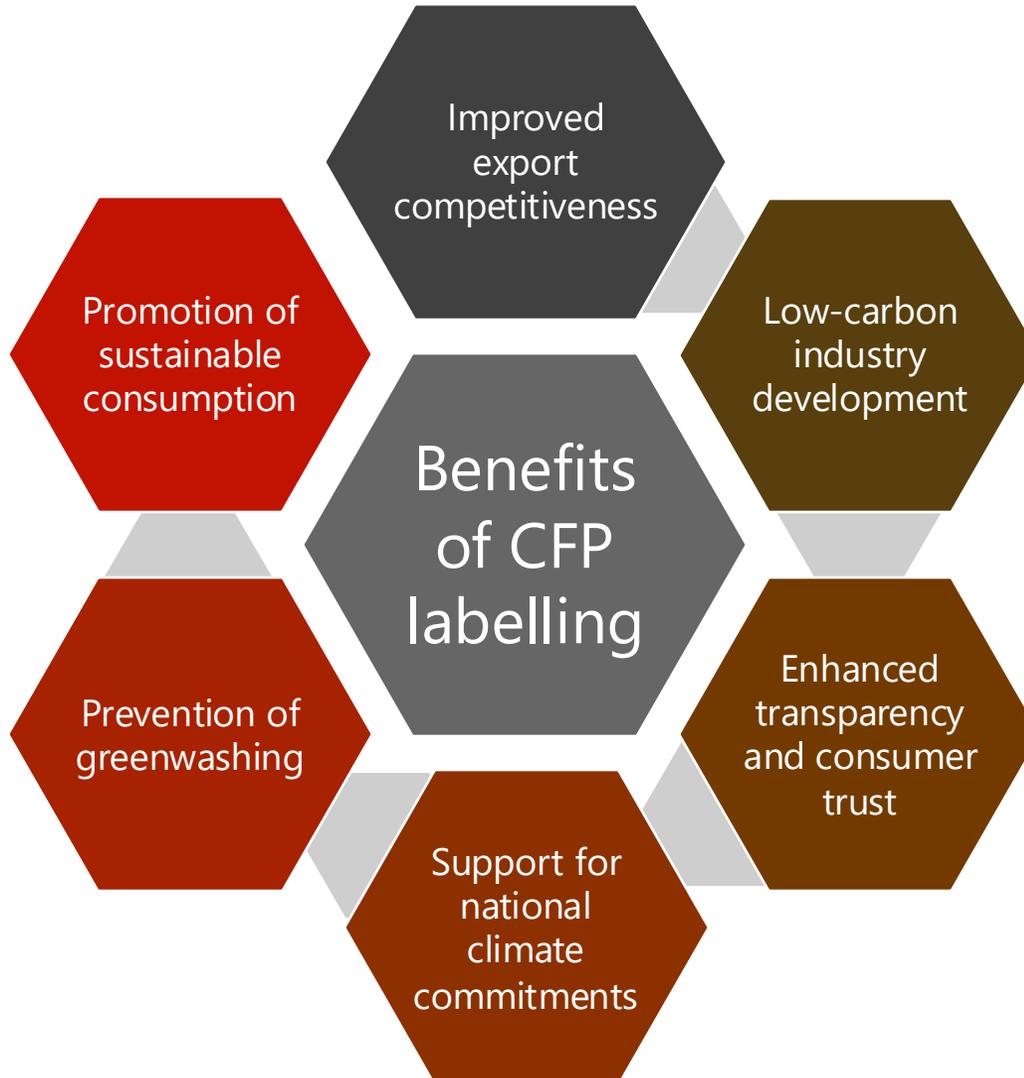
- **Key Challenges:** human & financial resource constraints
- **Solutions:** academic collaboration

Note:

IPCC - Intergovernmental Panel on Climate Change

IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.4. Benefits of carbon footprint labelling



IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.4. Benefits of carbon footprint labelling

Financial opportunities unlocked by CFP

Category	Finance Stream	Short Description & Example
Government	Green Investment & FDI	CFP attracts climate finance & FDI. For example, Thailand's T-VER & BOI incentives have boosted clean energy investment.
	GPP Efficiency	Public procurement of eco-products saves costs & cuts emissions. For example, Korea's GPP (2005) cut 665,000 tCO ₂ e in 2017, saved USD 35.4 million, and created 4,415 jobs.
	Green Industries & Jobs	Growth of low-carbon sectors brings tax revenues. For example, Japan's Green Growth Strategy projects USD 1.23 trillion gain by 2050 from low-carbon industries.
Companies	ESG-driven Investment	Verified emissions attract ESG investors. For example, Access to green bonds, SLLs.
	Climate Finance Access	Reporting opens loans/grants. For example, GCF, ADB, World Bank.
	Lower Capital Costs	Verified CFP earns better loan terms. For example, KBank (Thailand), Mizuho (Japan) link loans to emissions KPIs.
	Green Supply Chains	MNCs prefer low-carbon suppliers with footprint data or labels. Improves contracts & market access.
	Government Incentives	Tax breaks & procurement preferences. For example, Taiwan, Japan, Korea give procurement preferences & tax incentives for carbon-labelled firms.
	Brand & IPO Value	CFP builds trust, boosts IPO performance. For example, ESG IPOs in Japan attract more investors.

Note:

- T-VER - Thailand's Voluntary Emission Reduction
- BOI - Board of Investment
- GPP - Green Public Procurement
- ESG - Environmental, Social, and Governance
- GCF - Green Climate Fund
- ADB - Asian Development Bank
- SLL - Sustainability-linked loans
- IPO - Initial Public Offering
- MNC - Multinational Companies
- KBank - Kasikornbank
- KPI - Key Performance Indicators



IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.5. International Cooperation on Carbon Footprint Labelling



Carbon Trust (UK) - China

- Active in 40+ countries supporting CFP initiatives
- Partnership with CSCAC (China), registered with SAMR
- Launched labelling services in China covering:
 - CFP, Carbon reduction
 - Low-carbon & carbon neutrality
 - Low-carbon packaging & Carbon-neutral packaging
- Enhances credibility of carbon claims & supports global supply chains
- Helps China meet carbon neutrality goals



Carbon Footprint International Alliance (CFIA)

- Members: Italy, Korea, Costa Rica, Los Angeles (USA), Thailand, New Zealand
- Aims for consistent & credible CFP quantification and reporting
- Links national programs using similar standards for CFP quantification & verification
- Maintains a shared portal for registered CFPs



Thailand–South Korea Cooperation (2014–15)

- Mutual recognition of PCF labels via local authorities
- Reduced duplication and promoted standardization & innovation



Members of CFIA

*CSCAC - China Standard Conformity Assessment Co., Ltd
SAMR - China's State Administration for Market Regulation



IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.6. Case study

Criteria for selection of case study countries

Region	Country	Criteria for Selection
Asia	Thailand	Advanced carbon labelling system; strong regional, environmental, and market similarities with Vietnam.
	Japan	Provided detailed insights on national carbon labelling system (one of the few out of ~15 countries contacted).
	Taiwan	Government-led, structured, and institutionalized carbon labelling initiative.
Developed	UK	Extensive experience in exporting to global markets; highly relevant for Vietnam's export-driven economy.
	France	Retail-driven model, contrasting government-led schemes; offers insights into private sector engagement.



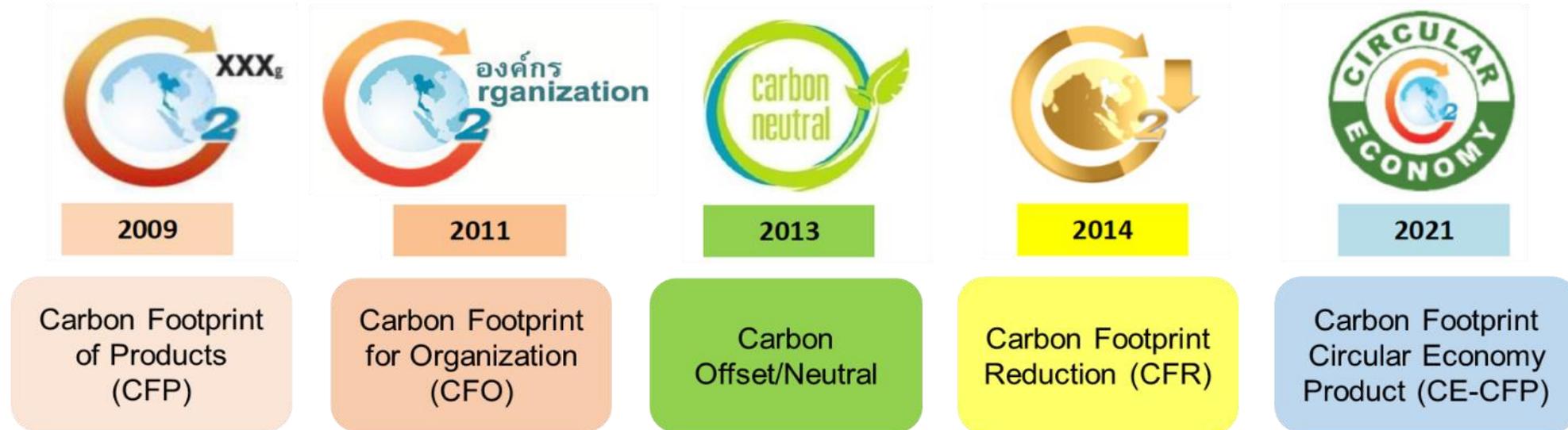
IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.6. Case study - Thailand

- Net-zero target: 2050–2065
- First SE Asian country with voluntary CFP labelling (2009)
- TGO (2007, under MONRE) → official certifier & GHG hub
- In partnership with TIIS → promotes low-emission tech & consumer awareness



Different types of carbon labels in Thailand



Note:

SE – Southeast

TGO – The Thailand Greenhouse Gas Management Organization

MONRE – Ministry of Natural Resources and Environment

GHG – Greenhouse Gas

TIIS - Technology and Informatics Institute for Sustainability



IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.6. Case study - Thailand

Label types, products and sectors

Label type	No. of companies	No. of products	No. of sectors	Key sectors
PCF	1,228	11,530	22	Food, beverages, packaging, electronics, automobiles, etc.
CFR	204	1,557	17	
CFO	2,702	-	22	
CE-PCF	80	461	22	



Unique Features

- ✓ Centralized governance under TGO
- ✓ Integrated management of labels, carbon markets, ETS → avoids duplication
- ✓ Regular updates for market & consumer needs
- ✓ Active regional & global cooperation (South Korea, CFIA)

Key takeaways



- ✓ Align with international carbon initiatives
- ✓ Update labels to match market changes
- ✓ Ensure clear governance to build trust & reduce overlap

Note:

ETS – Emission Trading Scheme



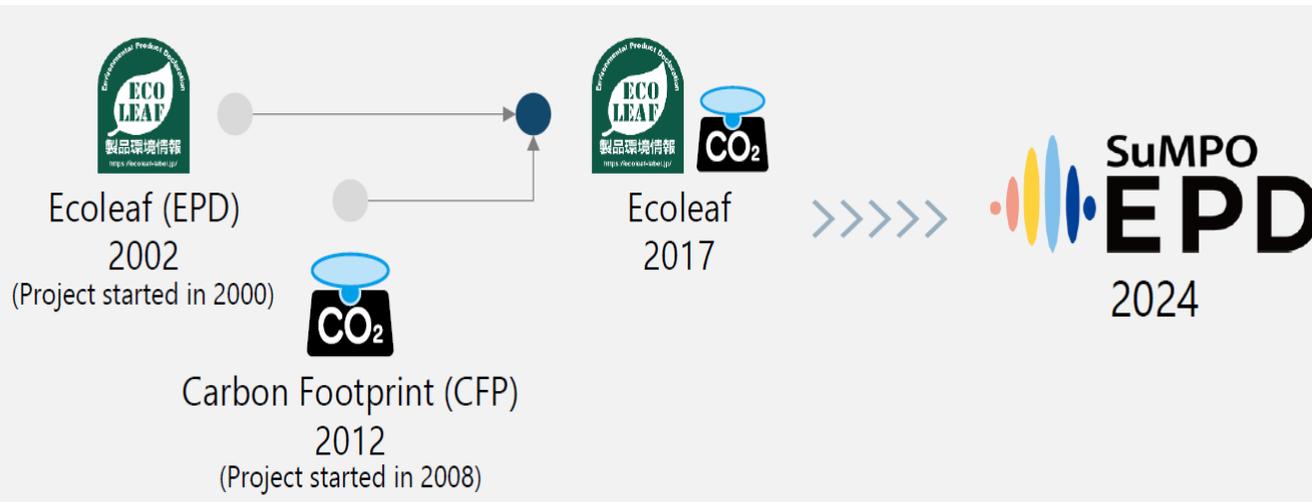
IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.6. Case study - Japan

- Targets: Net-zero by 2050 & 46% GHG reduction by 2030
- Managed by SuMPO (non-profit, 20+ years EPD experience)
- Program began in 2002 (Ecoleaf) → now SuMPO EPD Japan
- Covers construction, electronics, textiles, automobiles
- Nearly 2,900 active declarations (2025)

Type of verification systems

Method	Process	Authority
Product-by-Product	Company applies → Licensed verifier evaluates → Review Panel confirms	JEMAI-selected verifier + Review Panel
System Certification	Audit of company's internal PCF system → Review Panel validates	JEMAI-registered certification body



SuMPO Standards & PCRs

- ✓ Follows ISO 14025, 14040/44, 14067
- ✓ Developed ~70 Product Category Rules (PCRs)
- ✓ Focus on construction & electronics sectors



Note:

SuMPO - Sustainable Management Promotion Organization

EPD - Environmental Product Declarations

JEMAI - Japan Environmental Management Association for Industry



Evolution of Japan's environmental labelling program

IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.6. Case study - Japan



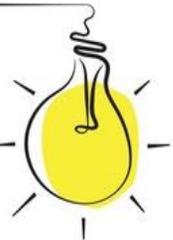
Verifier Accreditation

- ✓ Prior PCF experience required
- ✓ Training: 2-day course + exam + 2 extra sessions
- ✓ Ongoing: Submit assessments + annual quality checks by SuMPO

Unique Features

- ✓ Transition from government → JEMAI → SuMPO (independent body)
- ✓ Integrated environmental & carbon footprint in one EPD scheme
- ✓ Transparent verifier accreditation & quality assurance
- ✓ Sectoral strength in construction & electronics
- ✓ Strong focus on sustainability, transparency & global alignment

Key takeaways



- ✓ Begin with voluntary approach to encourage participation
- ✓ Prioritize high-emission/export sectors (construction, electronics)
- ✓ Apply dual verification system (product + system-level)
- ✓ Plan gradual transition to an independent professional body

IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.6. Case study - Japan

- 2008: Sustainable Energy Policy → aimed to promote nationwide energy conservation and carbon reduction
- EPA launched carbon labelling system (11th country worldwide to do so)
- 2009: Label design contest → official launch in April 2010
- Taiwan Carbon Footprint Information Platform (2009, regularly updated)
- 530 certified products (2024) → beverages, condiments, food, chopsticks, personal care, tissue, credit cards, e-buses



Unique Features

- ✓ Aligned with national carbon reduction targets
- ✓ Two-tier labelling (footprint + reduction)
- ✓ Public information platform ensures transparency & engagement
- ✓ Strong consumer outreach → e.g., label design competition

Key takeaways



- ✓ Link carbon labelling directly to national climate goals
- ✓ Develop a public platform for data transparency & consumer education

Carbon Footprint Label -
total GHG emissions across
product life cycle



Carbon Reduction Label -
awarded if emissions are reduced
on already-labelled products

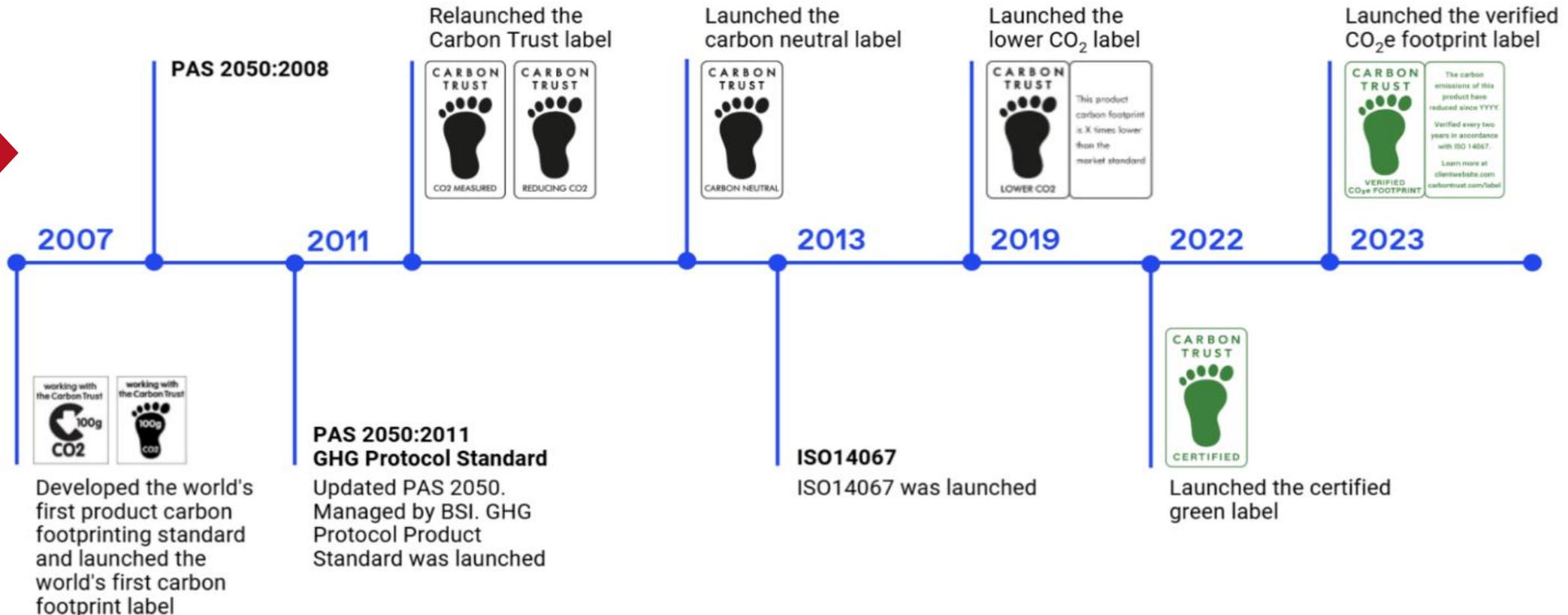
IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.6. Case study - UK

- Carbon Trust: Not-for-profit, est. 2001 by UK government to drive low-carbon transition
- 2007: First carbon footprint label launched
- Based on PAS 2050 standard (developed with BSI + DEFRA) → life cycle GHG measurement from raw materials → disposal
- Expanded globally → 37,000+ products verified, used in 40+ countries
- Collaborations: China, Africa, Mexico, Malaysia, Netherlands, Singapore



Carbon Trust's Carbon Footprint Labels timeline



Note:
PAS – Publicly Available Standard
BSI - British Standards Institution
DEFRA - Department for Environment, Food and Rural Affairs

IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

6. Case study - UK



Unique Features

- ✓ Scalable framework, applied in 40+ countries
- ✓ Developed PAS 2050: global reference for LCA-based GHG accounting
- ✓ Label use requires public emission reduction commitments
- ✓ International benchmark for carbon labelling credibility



Note:

PAS – Publicly Available Standard
LCA – Life Cycle Assessment



Key takeaways



- ✓ Adopt standardized methods like PAS 2050 for consistency & comparability
- ✓ Design scheme to be export-ready for global markets
- ✓ Require emission reduction commitments alongside labelling

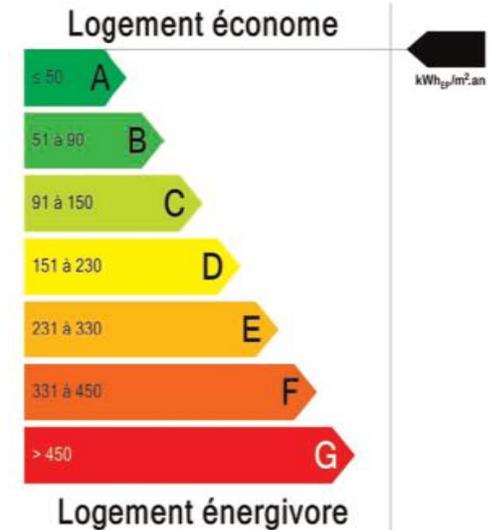
IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.6. Case study - France

- Initiatives began in 2008
- Retailers Casino & Leclerc pioneered product carbon labels
- Grenelle 2 law (2010): world's first legal framework for carbon labelling
- Voluntary rollout: 2011 (all products)
- Mandatory: 2012 (specific categories)



Indice carbone



Bilan carbone

Carbon labels in France

Retailer	Label Name	Format & Features	Basis
Casino	Indice Carbone	<ul style="list-style-type: none"> • Leaf logo • GHG emissions in gCO₂e/100g • "Indice Environnement" shown above barcode 	PAS 2050 methodology
Leclerc	Bilan Carbone	<ul style="list-style-type: none"> • Color-coded bar chart • Visual indicator of emission levels • Designed for easy consumer comparison 	Proprietary model, aligned with national policy

IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.6. Case study - France



Unique Features

- ✓ First country to mandate carbon labelling by law
- ✓ Combined retailer-led innovation + government regulation
- ✓ Introduced visual, consumer-friendly formats



Key takeaways



- ✓ Establish a legal framework for carbon labelling
- ✓ Promote public-private innovation before enforcement
- ✓ Use visual & simple formats for consumer engagement
- ✓ Start voluntary, move toward mandatory standards

IV. INTERNATIONAL EXPERIENCE AND CASE STUDIES

IV.7. Key Considerations for Implementing Carbon Footprinting

Voluntary schemes

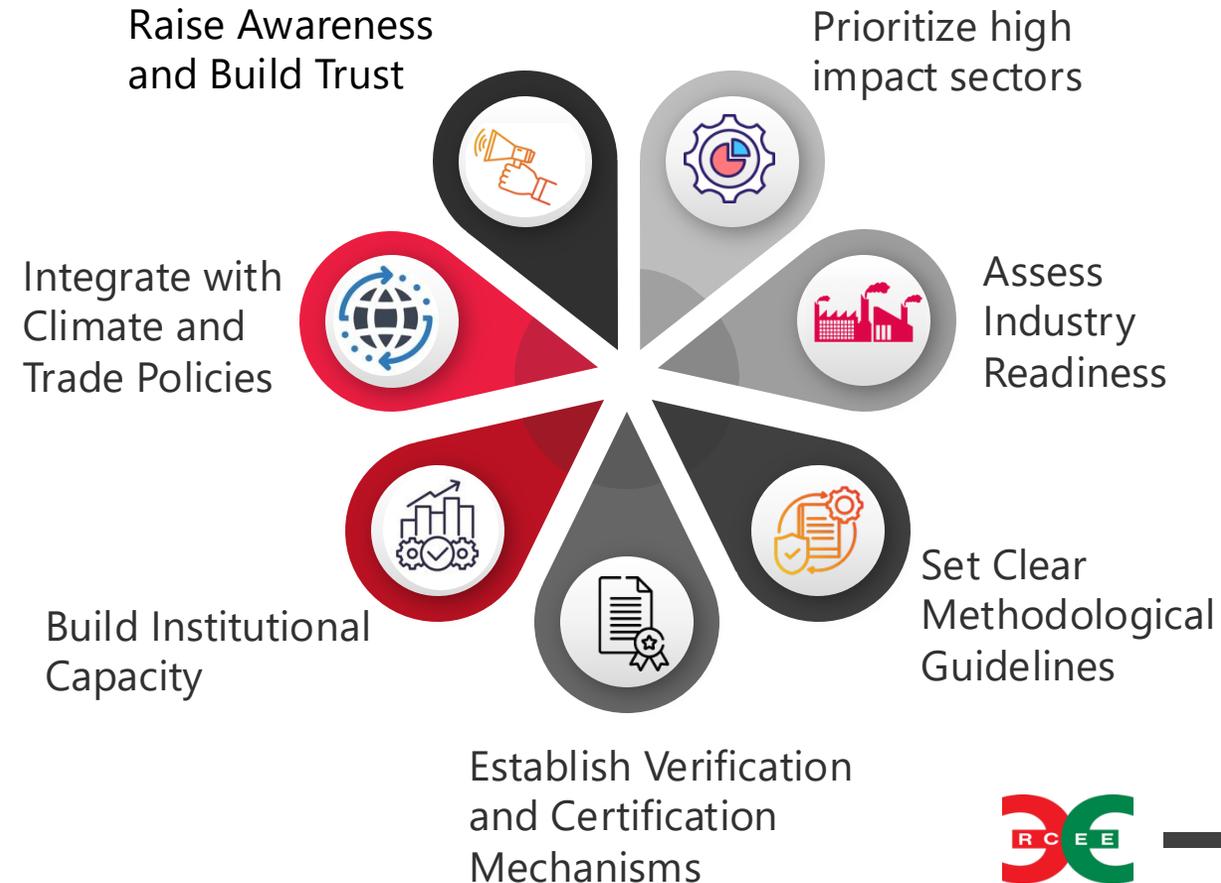
- Launched by governments or NGOs
- Optional for enterprises
- Improve brand image & access promotional policies
- Ex: UK, Japan, Thailand, Taiwan

Approaches to Carbon Footprint Labelling

Regulatory / Compliance Schemes

- Mandated by law or policy (national or subnational)
- Often target high-emission sectors or industries
- Require mandatory participation
- Ex: France, Spain, EU CBAM-linked policies

Key Considerations



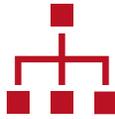
V. GAP ANALYSIS AND NEEDS ASSESSMENT

V.1. Analysis of Challenges and Gaps



Legal and Policy Framework

- **No legal mandate:** Vietnam lacks a clear legal framework for voluntary carbon labelling or Product Carbon Footprint (PCF).
- **Coordination gaps:** Overlapping mandates across ministries (MAE, MOIT, MOST) risk regulatory inconsistency and duplication.
- **Global misalignment:** No domestic regulations aligned with international requirements like the EU CBAM, creating risks for exporters.



Institutional Capacity

- **Lack of lead agency:** No existing independent body with technical mandate or infrastructure to implement carbon labelling.
- **No verification system:** Absence of a national system to accredit and validate third-party PCF verifiers.
- **Weak industry engagement:** Industry associations are not systematically engaged in guideline development or standard setting.



Market Readiness

- **Low enterprise capacity:** Enterprises lack readiness to calculate and verify Scope 1 & 2 emissions using international standards.
- **No local emission factors:** Reliance on international databases leads to inconsistencies; no Vietnam-specific PCF standards or LCA methodology.
- **Unclear administrative process:** No defined procedures for label application, review, or cost-sharing mechanisms, limiting enterprise participation.

V. GAP ANALYSIS AND NEEDS ASSESSMENT

V.2. Capacity Building Needs and Opportunities for Technical Assistance

Capacity Building Needs



Regulatory Improvements

- Develop a legal foundation for voluntary carbon labelling via new or amended decrees.
- Align regulations with NDC targets and future carbon markets.
- Provide clear guidance on labelling criteria, PCF standards, certification, and agency roles.



Institutional Strengthening

- Establish an independent agency under MAE to manage the carbon labelling system.
- Set up technical and accreditation committees with industry and government stakeholders.
- Improve cross-ministry coordination (MAE, MOIT, MOC, etc.) to prevent regulatory overlaps



Technical and Industry Support

- Create sector-specific PCF guidelines based on ISO 14067, PAS 2050, and GHG Protocol.
- Build a national emission factor database and PCF data-sharing infrastructure.
- Provide guidance on selecting suitable PCF software for enterprises.



Awareness and Stakeholder Engagement

- Train enterprises, agencies, and verifiers on PCF processes and MRV systems.
- Promote multi-sectoral engagement via working groups and communication campaigns.
- Raise awareness to build trust and support scheme adoption.

Opportunities for Technical Assistance and Training



Key Technical Assistance Areas

- Develop PCF methodologies and sectoral guidelines using adapted PEFCRs.
- Support national GHG emission factor and PCF data infrastructure.
- Align MRV systems with frameworks like PACT's Pathfinder.



Institutional Support

- Assist in creating an administrative agency: structure, review procedures, verifier accreditation.
- Provide technical support for scheme governance and integration with climate policies.



Targeted Training Programs

- Enterprises: GHG accounting, cradle-to-gate PCF, data collection, verification prep.
- Third-party verifiers: Audit tools, reporting aligned with ISO 14064/67, GHG Protocol.
- Industry associations: Develop guidelines and default emission factors.
- Government officials: Scheme design, monitoring, inter-ministry coordination.



Outreach and Communication

- Design and promote a clear, credible carbon label.
- Conduct awareness campaigns targeting exporters, regulators, and consumers.
- Encourage early participation during the pilot phase.

VI. RECOMMENDATIONS AND ROADMAP FOR IMPLEMENTATION

Tentative timeline for carbon labelling scheme in Vietnam

			2025	2026	2027	2028	2029	2030
Carbon labelling scheme for Vietnam	Capacity building	Training for relevant stakeholders						
	Institutional set-up	Establishment of verification system (certification + accreditation) for the pilot program						
	Technical track	Impact assessment of voluntary carbon labelling						
		Pilot scheme of the voluntary carbon labelling.						
		Evaluation of the pilot carbon labelling scheme						
	Policy framework	Decision on voluntary carbon reporting mechanism (voluntary carbon labelling)						

Recommended roadmap for carbon labelling program in Vietnam

Timeframe	Action Area	Recommendations
Short Term (2025–2026)	Legal & Institutional Setup	Issue formal decision to initiate voluntary carbon labelling; establish administrative agency.
	Capacity Building	Train enterprises, verifiers, and government officials on PCF and labelling procedures.
	Technical Infrastructure	Develop basic PCF guidelines, templates, and pilot verification mechanisms.
	Pilot Implementation	Launch pilot with 2–3 products in priority sectors and monitor results.
Medium Term (2027–2029)	Financing	Propose cost-recovery mechanisms and explore funding sources for the pilot.
	Scheme Expansion & Standardization	Expand to new sectors like cement, steel, and food; refine methodologies.
	Institutionalization of Verification	Establish accreditation criteria and increase the verifier pool.
	Integration with Public Policies	Introduce carbon label criteria in public procurement and trade promotion.
	Digital Infrastructure	Build a web-based MRV system and ensure data interoperability.
	International Cooperation	Align with regional and global labelling systems and participate in platforms like PACT.
	Long Term (2030 onward)	Mandating & Policy Embedding
Market Alignment		Link PCF to national ETS and climate reporting systems.
Global Harmonization		Establish mutual recognition with programs like EU PEF, Japan PCF, etc.
Broader Policy Integration		Embed PCF into product regulations, ESG, and trade documentation.
Full Lifecycle Accounting		Move from cradle-to-gate to cradle-to-grave PCF approach.

VI. RECOMMENDATIONS AND ROADMAP FOR IMPLEMENTATION

VI.1. Short term actions



Legal Mandate Formalization

- Issue a formal decision recognizing carbon labelling as part of Vietnam's GHG mitigation strategy under LEP 2020.
- Clarify roles of MAE, MOIT, MOST, MOC in managing the scheme.
- Ensure coherence with Decree 06/2022/ND-CP and NDC targets.



Establish Independent Administrative Agency

- Set up an agency under MAE for managing certification and coordination.
- Form an interim task force (DCC) to define structure, recruit staff, and develop processes.
- Create Technical Standards Committee (TSC) and Accreditation Committee (AC) with multi-stakeholder involvement.



Develop Methodological Guidelines for Pilot Sectors

- Select 2–3 pilot products based on export relevance and carbon intensity.
- Customize international methodologies (ISO 14067, PAS 2050, PEFCR) to Vietnam's conditions.
- Define system boundaries, scopes, data quality, and verification rules.



Build Emission Factor & Supply Chain Data Infrastructure

- Compile Vietnam-specific emission factors for key sectors.
- Launch a web-based data platform with secure, user-friendly access.
- Align with existing MRV systems and ensure traceability and updates.



Pilot Implementation of Carbon Labelling Scheme

- Invite enterprises in pilot sectors to voluntarily participate.
- Require third-party verification of PCF; use certified energy auditors initially.
- Issue carbon labels after structured review and approval process.



Capacity Building & Training

- Train enterprises on PCF calculation, data collection, and verification preparation.
- Train verifiers on ISO 14067, GHG Protocol, sector-specific reporting.
- Provide manuals, templates, and toolkits to support pilot implementation.



Monitoring & Evaluation (M&E)

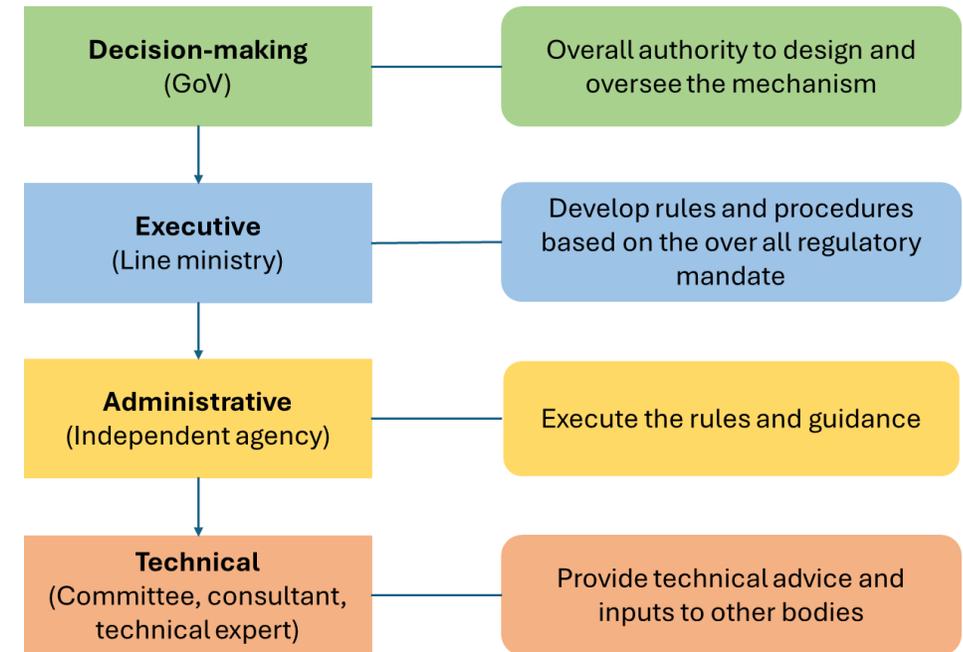
- Define KPIs (e.g., number of verified products, certification time, stakeholder feedback).
- Maintain a feedback loop to refine methods, structures, and tools.
- Use findings to inform medium-term scaling and scheme refinement.

VI. RECOMMENDATIONS AND ROADMAP FOR IMPLEMENTATION

VI.1. Short term actions

Proposed roles and responsibilities of key entities

ENTITY	RESPONSIBILITY
MAE	<ul style="list-style-type: none"> Develop rules and implementation procedures based on the overall regulatory mandate proposed by the GoV. Identify and allocate resources/budget for the administrative agency Offer potential incentives for the carbon labelled products through coordination with other line ministries in both export and domestic market
INDEPENDENT ADMINISTRATIVE AGENCY (UNDER THE MAE)	<ul style="list-style-type: none"> Design the carbon label as necessary Develop the methodological approach needed for PCF and create technical guidelines through TSC Liaise with the industry associations to establish an inventory of emission factors and other inputs for PCF guidelines Develop guidelines for accreditation of the third-party verifiers through the accreditation committee Enforce and implement the carbon labelling scheme for identified target sectors through the carbon label certification committee Plan annual activities and prepare the budget for the scheme and mobilize resources Report on the implementation progress to the MOIT
INDUSTRY ASSOCIATIONS	<ul style="list-style-type: none"> Be part of the technical standards committee under the Administrative Agency and offer assistance in developing the technical guidelines for PCF calculation, default emission factors, and MRV requirements
THIRD-PARTY	<ul style="list-style-type: none"> Get accredited for verification of PCF under the Independent Administrative Agency
ENTERPRISES	<ul style="list-style-type: none"> Verify the carbon footprint calculations submitted by the enterprises Calculate the PCF and file the application along with third-party verified supporting documents for labelling approval. Display carbon labels on all products/services, after issuance.



Legal framework for carbon labelling scheme

VI. RECOMMENDATIONS AND ROADMAP FOR IMPLEMENTATION

VI.2. Medium Term Actions

Expansion to Additional Sectors and Products

- Refine guidelines and certification procedures based on pilot lessons learned.
- Prioritize new sectors (e.g., steel, cement, food processing) with high carbon intensity and export exposure.
- Expand national PCF data infrastructure to cover additional emission factors and supply chain modules.

Institutionalization of Third-Party Verification

- Establish a formal accreditation system for PCF verifiers with clear criteria and audit standards.
- Scale the verifier pool via structured training and partnerships with international accreditation bodies.
- Ensure consistent, transparent verification across sectors.

Integration into Public Procurement and Trade Promotion

- Incorporate carbon labels into public procurement criteria and regulations.
- Develop incentives: preferential tendering, tax benefits, and branding support.
- Seek recognition of carbon labels in FTAs and export standards to boost competitiveness.

Issuance of National Guidance on PCF Software Tools

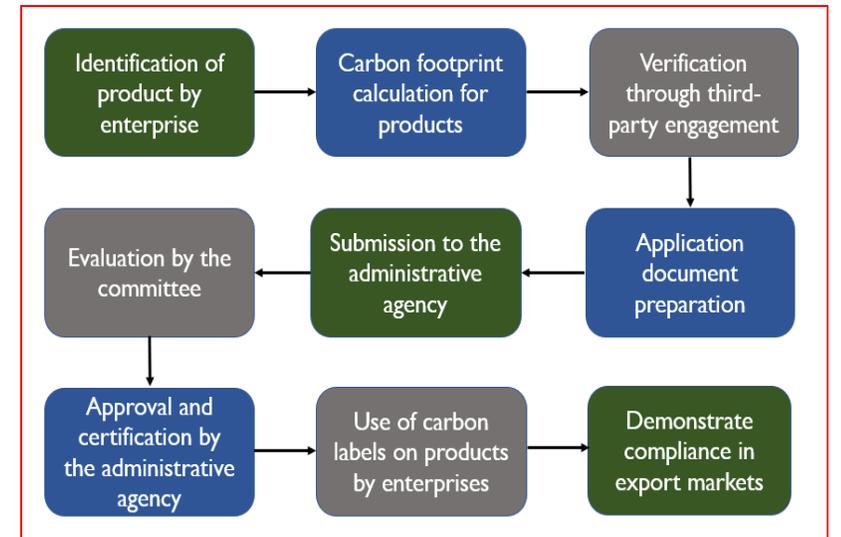
- Evaluate leading PCF software platforms for alignment with GHG Protocol and sector guidelines.
- Publish guidance to help enterprises choose appropriate tools for data management and reporting.
- Standardize methodological application and improve data quality.

Enhancement of MRV and Digital Reporting Infrastructure

- Develop a web-based MRV platform with standardized templates, guidance, and validation features.
- Ensure interoperability with national GHG inventory and ETS systems.
- Enable secure access and traceability for accredited verifiers.

Deepening International Cooperation and Alignment

- Collaborate with global initiatives (PACT, WBCSD, ASEAN SCP).
- Align technical specifications with EU CBAM requirements.
- Conduct regional benchmarking to facilitate mutual recognition and improve market access.



Step-wise procedure for issuance of carbon label for product

VI. RECOMMENDATIONS AND ROADMAP FOR IMPLEMENTATION

VI.3. Long-Term Actions (5+ years)

Mandating Carbon Labelling for Key Sectors

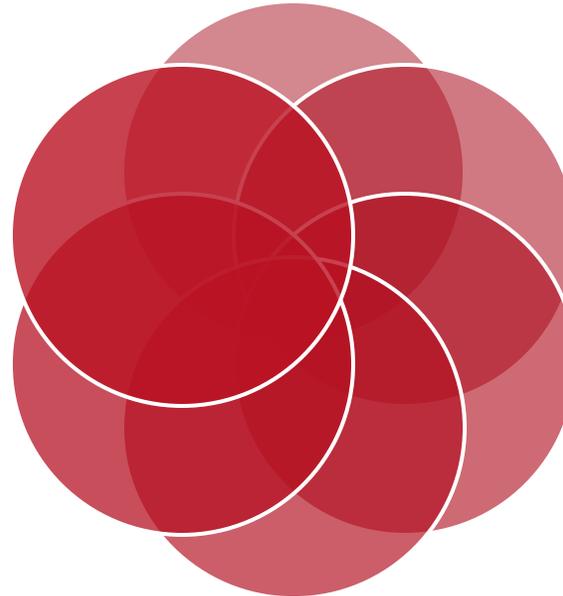
- Transition from voluntary to mandatory carbon labelling for high-emission/export-critical sectors
- Issue regulatory circular defining scope, product categories, and compliance requirements
- Standardize disclosure formats, timelines, and verification procedures

Sustainable Financing & Cost Recovery

- Implement tiered fee structure based on company size and sectoral impact
- Leverage PPPs and climate finance (e.g. GCF, JCM) for infrastructure and capacity
- Allocate funds from ETS or green budgets to sustain the program

Expansion of PCF Data Ecosystem

- Evolve from cradle-to-gate to full lifecycle (cradle-to-grave) PCF approaches
- Connect PCF data with circular economy and waste management systems
- Establish regional PCF data gateway for ASEAN and global supply chain integration



Integration with National Carbon Market & Climate Policy

- Align PCF/MRV with ETS to enable benefit sharing (credits, allowances, incentives)
- Feed verified PCF data into BTRs to support UNFCCC reporting and climate commitments

Harmonization with International Labelling Schemes

- Establish mutual recognition with EU PEF, Japan PCF, and LowCarbonSG
- Promote Vietnam's carbon label in export markets to boost credibility and competitiveness
- Engage in regional/global standard-setting platforms

Embedding in Broader Policy and Trade Systems

- Integrate carbon labels into ESG reporting, environmental licensing, product quality laws
- Link labels with export branding and customs systems to boost low-carbon trade

VII. CONCLUSION



Summary of Key Findings

- Vietnam shows growing interest in carbon labelling, but faces legal, institutional, technical, and market readiness gaps.
- LEP 2020 offers a strong policy base, but lacks operational tools for voluntary PCF and labelling.
- Surveys in sectors (textile, electronics, seafood, wood) highlight:
 - Limited access to primary activity data.
 - Absence of Vietnam-specific emission factors.
 - Low internal capacity for PCF calculations and verification.
- International case studies confirm the need for a phased, sector-specific, and standards-aligned approach.



Final Recommendations

- Launch pilot in high-emission, export-oriented sectors (construction, electronics, textiles, food).
- Clearly define scope: sectors, product types, and PCF detail levels.
- Develop GPI & PCRs and ensure public access for transparency.
- Set up a national accreditation system for third-party verifiers.
- Assess financial support needs for SMEs due to verification costs.
- Align with national strategies: Net Zero, NDCs, GPP, ESG.
- Use international best practices (e.g., EU CBAM) to ensure credibility and clarity on data/accountability.



Next Steps

- Launch pilot with 2–3 key products in priority sectors.
- Develop PCF guidelines, interim verification mechanisms, and training.
- Use pilot results to refine methods, structure, and finance models.
- Scale gradually, institutionalize verification, and integrate labels into public procurement/trade promotion.
- Embed carbon labelling into ETS, MRV, and national climate policies.
- Leverage international partnerships to enhance credibility and global market access.

Thank you

