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Procurement Sustainability - Tracking Scop 3 Emissions

Driving low-carbon value chains through responsible procurement

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Agenda

- What is Sustainable Supply Chain?
- Importance of Sustainability in Supply Chain
- Evolution of Sustainability Supply Chain
- Climate Action & Scope 3 Emissions
- Why Scope 3 Matters?
- What are Scope 3 emission?
- Procurement’s Role in Decarbonization
- Supplier Engagement Framework
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What is Sustainable Supply Chain

A sustainable supply chain is a supply chain that minimizes

- **environmental impact**
- **promotes social responsibility,**
- **ensures economic efficiency**

throughout every stage—from sourcing raw materials to delivering finished products and managing end-of-life disposal.

✓ Protects the environment
✓ Respects and uplifts people
✓ Remains economically viable
✓ Uses technology for transparency and efficiency
✓ Builds resilience for the future

Importance of Sustainability in Supply Chain

Benefit Area	Key Impact
Environment	Reduced carbon emissions, waste, energy use
Economics	Cost savings, operational efficiency, innovation
Risk Management	Compliance, resilience, reduced reputational risk
Social Impact	Ethical sourcing, improved worker conditions
Business Growth	Customer trust, investor confidence, market access

Sustainability in the supply chain is no longer optional—it's a **strategic necessity**.

It enhances performance, builds resilience, meets stakeholder expectations, and prepares organizations for a low-carbon future.

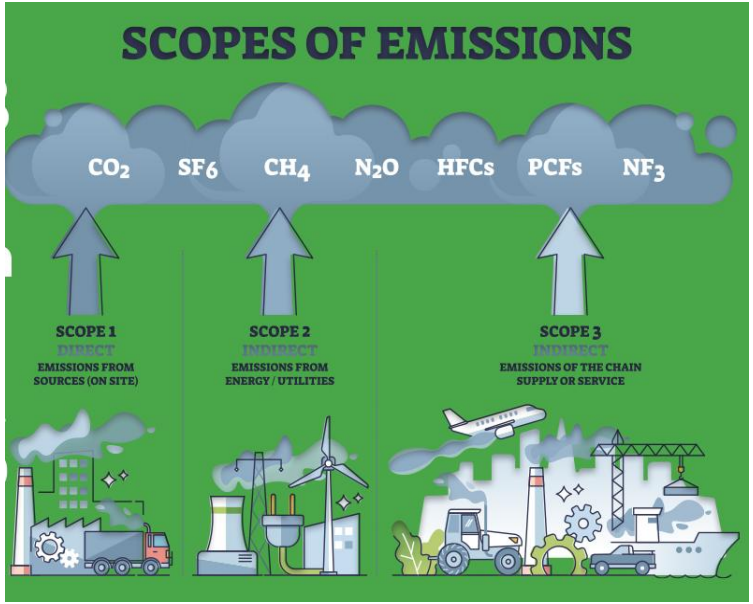
Evolution of Sustainability Supply Chain

Early Stage (1980s–1990s)	• Focus: Compliance & Cost Efficiency (pollution control, regulatory adherence)
Integration of Environmental Management (Late 1990s–2000s)	• Focus: ISO Standards & Operational Environmental Controls (waste and emission control)
Rise of Corporate Social Responsibility (CSR) (2005–2015)	• Focus: Social Compliance, Ethics & Transparency
Sustainable Procurement & Circularity (2015–2020)	• Focus: Product Life Cycle (LCA), Circular Economy, Resource Efficiency
Climate Action & Scope 3 Emissions (2020–Present)	• Focus: Carbon Reduction, Science-Based Targets, Supplier Collaboration
Future Stage: Regenerative & Resilient Supply Chains (Emerging)	• Focus: Beyond Neutrality → Net-positive impact, AI, digital supply chains

cost & compliance → responsibility → circularity → carbon reduction → regeneration

Climate Action & Scope 3 Emissions (2020–Present)

- **Focus: Carbon Reduction, Science-Based Targets, Supplier Collaboration**
- Most emissions lie in **Scope 3 (value chain)** → strong focus on tracking & reduction.
- Companies are now required to map and measure emissions across multi-tier supply chains.
- Key developments:
  - Science Based Targets initiative (SBTi)
  - Digital carbon tracking tools
  - Supplier decarbonization programs
- Use of digital tools, AI, and blockchain for supply chain traceability
- ESG metrics integrated into procurement decisions



Why Scope 3 Matters

- Typically, 70–90% of a company's total emissions lie in Scope 3.
- Increasing regulatory expectations (CSRD, SEC Climate Rule, ISSB).
- Helps identify high-impact opportunities for decarbonization.
- Builds resilience and cost efficiency across the supply chain.

What are Scope 3 Emissions?

Scope 3 emissions include indirect emissions from:

- Purchased Goods & Services (Category 1) – The largest category for most organizations.
- Capital Goods (Category 2) – Construction materials, machinery, infrastructure.
- Fuel- & Energy-related Activities (Category 3)
- Upstream Transportation & Distribution (Category 4)
- Waste Generated in Operations (Category 5)
- Business Travel + Employee Commuting (Categories 6 & 7)
- Downstream Emissions – Product use-phase, end-of-life, distribution.

Procurement’s Role in Decarbonization

- Embed sustainability criteria into RFPs, code of conduct and supplier scorecards.
- Use Science-Based Targets and require supplier SBTi alignment.
- Run supplier engagement programs (training, decarbonization roadmaps).
- Integrate low-carbon alternatives and circular materials.
- Partner with logistics providers to reduce transport emissions.
- Boost data transparency via digital platforms
- Renewable procurement

Challenges in Tracking Scope 3

- Limited supplier data availability
- Inconsistent data quality
- Lack of standardized emission factors
- Supplier capability gaps
- Absence of user-friendly tools
- Cost and resource constraints

Supplier Engagement Framework

- Segment suppliers based on **spent and emissions impact**
- Use **sustainability questionnaires** and enforce **supplier codes of conduct** with carbon requirements
- Include **contractual clauses** for emissions reporting and reduction targets
- Provide **incentives** (preferred supplier status, long-term contracts, faster invoice processing).
- Offer **training, toolkits, and capacity-building** support for suppliers.
- **Collaborate** on emission reduction projects
- **Measure performance annually** and drive continuous improvement

Digital Tools for Scope 3 Tracking

- ERP-integrated carbon tracking tools (SAP, Oracle, Coupa, etc.).
- Specialized sustainability platforms
  - Persefoni
  - CDP Supply Chain
  - Sustain.Life
  - EcoVadis (supplier ESG scoring)
- Lifecycle assessment (LCA) databases and emission factor libraries (OpenLCA / SimaPro)
- AI-based supply chain modeling for hotspot identification.

Case Study: AstraZeneca - Scope 3 Emissions Strategy

2030 & 2045 Climate Targets

➢2030: Reduce absolute Scope 3 emissions by 50% from 2019 baseline.

➢2045: Achieve 90% reduction in absolute Scope 3 emissions from 2019 baseline.

Supplier Engagement Program (Launched 2022)

➢Introduced clear environmental requirements for all suppliers:

Annual ESG reporting via *EcoVadis*.
Emissions disclosure through *CDP*.
Science-based target setting aligned with *SBTi*.

➢Requirements formalized in “Expectations of Third Parties.”

Supplier Prioritization & Engagement

•Suppliers classified by spend and category.
•Focus on high-spend + high-emission categories.
•One-on-one engagement with priority suppliers.

Progress & Data Quality

•38% of Scope 3 reporting based on actual supplier emissions data (2022).
•Represents an 18% increase from 2019.

Programmatic Communication

•Annual **supplier conferences** to cascade expectations and sustainability goals.

Case Study: Bayer AG - Scope 3 Emissions Strategy

Target: 25% reduction in Scope 3 emissions by **2029** (vs. 2019).

Progress: 12.7% reduction achieved by **2024**.

Sustainable Procurement:

- Integrates environmental criteria into procurement decisions.
- Prioritizes sustainability-focused suppliers.
- Strengthened Supplier Code of Conduct with decarbonization requirements.

Supplier Engagement:

- Collaborates with suppliers to reduce emissions from purchased goods & services.
- Encourages suppliers to disclose climate programs and set reduction targets.

Case Study: Sustainability Assessment Framework – Key Steps

- Framework designed based on **UNGC guidelines** and **ISO 20400** standards
- **Digital portal developed** with support from the IT team
- **Questionnaire structured into 5 sections:**
  – Management System
  – Environment
  – Health & Safety
  – Human Rights (including labour rights)
  – Anti-corruption
- **Two types of questions:**
  – **Scoring questions:** Yes/No (e.g., legal compliance and monitoring)
  – **Non-scoring questions:** Multiple choice (e.g., external certifications – DJSI, FTSE4Good, EcoVadis, etc.)

Supplier Sustainability Evaluation Process

Pre-Audit Process

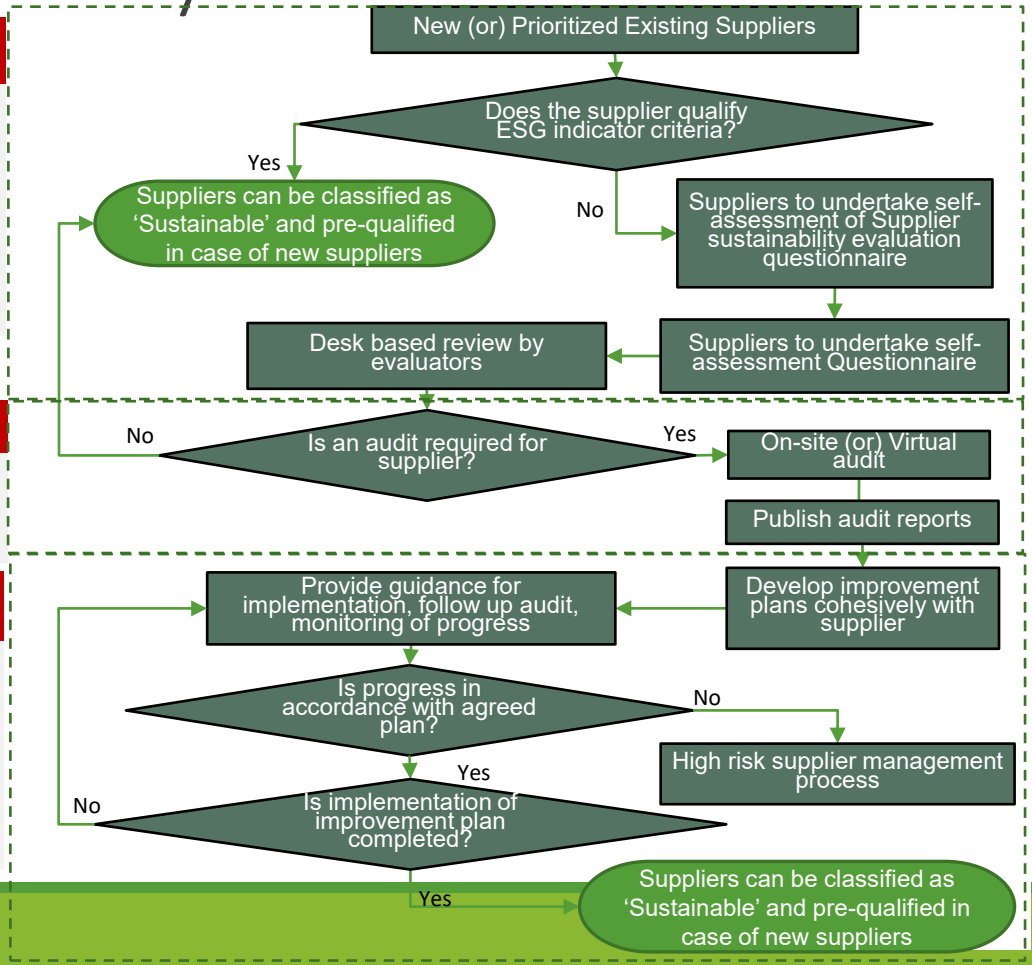
- *Identification and prioritization of suppliers based on spend and risk*
- *Supplier qualification based on ESG criteria*
- *Supplier self-assessment*

Audit Process

- *On-site / Virtual audit*
- *Publish Audit report along with findings*

Post-Audit Process

- *Agreement on Improvement plan*
- *Supplier engagement for completion of plan*
- *High risk supplier management process*



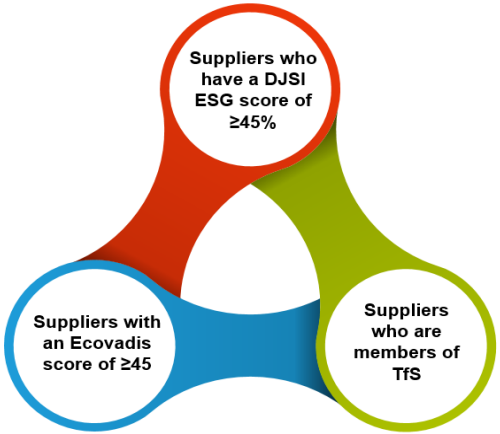
Supplier Risk Screening and Categorization

Supplier Risk Screening Criteria	Percentage of Total Score
Leaders (Acceptable)	≥70%
Sustainable at par with industry (Conditionally Acceptable)	50% - 70%
Sensitive	≤50%

- ***Criteria 1:*** *Suppliers should score above a minimum threshold stipulated for individual categories.*
- ***Criteria 2:*** *Supplier should comply with critical questions.*

Percentage of Total Score from Supplier Assessment	Supplier Risk Rating based on Score only	Has the supplier scored above the individual category cut-off?	Does the supplier comply with the requirements of Critical questions?	Final Supplier Risk Rating
80%	Leaders (Acceptable)	Yes	Yes	Leaders (Acceptable)
80%	Leaders (Acceptable)	No	Yes	Sensitive
80%	Leaders (Acceptable)	Yes	No	Sensitive
65%	Sustainable at par with industry (Conditionally Acceptable)	Yes	Yes	Sustainable at par with industry (Conditionally Acceptable)
65%	Sustainable at par with industry (Conditionally Acceptable)	No	Yes	Sensitive
65%	Sustainable at par with industry (Conditionally Acceptable)	Yes	No	Sensitive
45%	Sensitive	Yes	Yes	Sensitive

Sustainability Qualification based on ESG Indices



"Companies with an S&P Global ESG Score that is less than 45% of the S&P Global ESG Score of the highest scoring company in the Assessed Universe of the respective index are disqualified. Only, the remaining companies form the Eligible Universe"

TOGETHER FOR SUSTAINABILITY

Dow Jones Sustainability Indexes

Criteria for TfS membership:

- *Chemical company*
- *Member of public supported of UNGC*
- *Commitent to Responsible Care®*
- *Compliance to applicable laws*
- *Sustainability Ratings - Ecovadis score of minimum 60*

ecovadis

	CSR Performance	Likely Outcome	
85 - 100	OUSTANDING	High Opportunity	• Structured and proactive CSR approach • Policies and tangible actions on all topics with detailed implementation info • Comprehensive CSR Reporting on actions & KPIs • Innovative practices and external recognition
65 - 84	ADVANCED	Medium Opportunity	• Structured and proactive CSR approach • Policies and tangible actions on major topics with detailed implementation info • Significant CSR Reporting on actions & performance indicators
45 - 64	CONFIRMED	Engaged	• Structured and proactive CSR approach • Policies and tangible actions on major topics • Basic reporting on actions or performance indicators
25 - 44	PARTIAL	Medium Risk	• No structured CSR approach • Few engagements or tangible actions on selected topics • Partial certification or possible products with eco-labels
0 - 24	NONE	High Risk	• No engagements or tangible actions regarding CSR • Evidence in certain cases of misconduct (e.g. pollution, corruption)

Innovation ↑ Risk ↓

The information of individual ESG ratings are referred from the respective websites.

Scope 3 Program

Earlier Approach – Activity-Based Method:

- Used quantifiable activity data (e.g., kg of material purchased).
- Activity data multiplied by emission factors from databases (OpenLCA, SimaPro).
- Provided reasonable estimates but relied on secondary data.

Current Approach – Supplier Emissions Data:

- Moving beyond estimates to collect actual emissions data directly from suppliers.
- Enables higher accuracy and better identification of reduction opportunities.
- Supports alignment with science-based targets and supplier decarbonization programs.

Scope 3 Program

- A climate change questionnaire is designed to collect Scope 1 & 2 emissions data.
- The questionnaire is shared with suppliers through a digital portal.
- Suppliers submit their emissions data via the portal.
- One-to-one calls are held with suppliers to clarify data or resolve queries.
- For suppliers lacking capability, a GHG calculation tool is provided along with guidance on how to estimate their emissions.

Scope 3 Program

Code	Field Label	Specifications	Required	Answer	Comment
	Q. 1. Does your organization calculate/measure Greenhouse Gas (GHG) emissions?	**Hint:** If the site conducts greenhouse gas (GHG) emissions measurements, kindly include the annual values of GHG emissions - scope 1, scope 2 and scope 3 emissions in the comment box. Also, please mention the methodology used to calculate GHG emissions. **Suggested attachments to support answer:** GHG emission calculation sheet **Reference links of best practices / tools:** https://www.epa.gov/climateleadership/scope-1-and-scope-2-inventory-guidance https://www.epa.gov/climateleadership/scope-3-inventory-guidance https://ghgprotocol.org/calculation-tools-and-guidance http://Guidelines on Scope 3 emissions: https://pscinitiative.org/resource?resource=779	Yes		
	Q. 2. Has your manufacturing site done scope 3 emission assessment associated with your key supplies?	**Hint:** If yes, please describe methodology used for the assessment in comments section. **Reference Links:** https://pscinitiative.org/resource?resource=779	Yes		
	Q. 3. Has your site implemented program to control fugitive emissions from process vents?	**Hint:** If yes, please mention details in comment box.	Yes		
	Q. 4. Are your GHG emissions verified by third party?	**Hint:** If the GHG emissions are verified by a third party, please provide details of the verifying organization and the corresponding verification certificate. **Suggested attachments to support answer:** Verification document	Yes		

Thank you

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