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Promoting ESG Awareness
+ Risk Literacy in SMEs

PEARL Case Study Template

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Case Study Identification

Case Study Title:

Partner Institution: Steinbeis Augsburg Business School

Country: Germany

Sector /Industry: Manufacturing

SME Profile:

Company size (micro / small / medium): medium, 120 employees

Ownership structure (family-owned, partnership, etc.): recently bought by a Swedish holding

Market scope (local / regional / international): regional and international

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2. Relevant PEARL Curriculum Module(s)

*(**Select one primary module and, if relevant, secondary modules:** Module 1 – Introduction to ESG, Module 2 – ESG Onboarding, Vision and Responsibility, Module 3 – ESG Risk Analysis and Materiality Assessment, Module 4 – ESG Strategy and Implementation, Module 5 – Reporting, Communication and Branding, Module 6 – Sustainable Financing and Funding Options for SMEs)*

Primary Module: 4

Secondary / Supporting Modules (if any): 3

3. Learning Purpose of the Case

What ESG challenge, decision, or dilemma does this case illustrate?

This case illustrates the challenge of gaining transparency and control over ESG risks in a complex international supply chain. The company relies on a diverse supplier base that includes domestic material suppliers, European technology partners, and indirect suppliers in Asia. While transparency and influence are relatively high for some suppliers, visibility and control decrease significantly further upstream in the supply chain.

Participants are asked to analyse the supplier landscape from an ESG perspective. The objective is to identify potential environmental, social, and governance risks across different supplier categories and geographic regions.

Using structured tools, participants assess supplier risks based on factors such as country risk, sector risk, dependency levels, and the company's ability to influence supplier behaviour. Based on this analysis, participants develop a prioritized overview of supplier-related ESG risks and propose targeted control or mitigation measures.

The case therefore focuses on **supplier mapping, ESG risk identification, and the development of practical supplier management actions**.

Why is this case relevant for SMEs?

Many SMEs operate in global supply chains but often have limited transparency and influence beyond their direct Tier-1 suppliers. ESG expectations from customers, regulators, and investors increasingly require companies to understand and manage sustainability risks within their supply chains.

At the same time, SMEs typically have limited resources to conduct complex supply chain assessments or audits. As a result, companies must find pragmatic approaches to identify the most relevant supplier risks and focus their management efforts where they are most needed.

This case reflects a realistic situation in which a medium-sized manufacturing company must establish a structured overview of its suppliers and prioritise ESG risks despite limited direct influence over parts of the supply chain.

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Which competence gaps (knowledge, skills, attitudes) does it address?

This case helps participants develop key competencies related to ESG supply chain management. Participants learn how to analyse supplier structures and identify ESG risks using structured assessment tools. They practise evaluating supplier risks based on country risk, sector exposure, and supply chain dependency.

In addition, the exercise strengthens the ability to translate ESG risk insights into practical management measures, such as supplier codes of conduct, contractual requirements, audits, or supplier engagement processes.

Overall, the case builds both analytical and practical skills required to integrate ESG considerations into supplier management and procurement decisions.

4. Case Context and Background

Provide a concise but concrete description of the SME's situation:

Company Profile

- Medium-sized B2B machinery manufacturer headquartered in Germany
- Products: highly engineered machines for industrial customers
- Business model: design and final assembly in Germany, global sales with focus on India and Indonesia as not EU target markets
- Strong dependency on key components and international logistics
- Limited leverage over some upstream suppliers due to market structure

5. ESG Challenge / Problem Statement

Clearly describe the central ESG-related issue, :

The company faces increasing ESG expectations from its new owner in Sweden as well as from an international procurement platform used by several large customers. These stakeholders require greater transparency regarding environmental, social, and governance practices across the company's supply chain. In particular, the company is expected to demonstrate that it understands potential ESG risks related to its suppliers and has appropriate management processes in place.

At present, the company has only a fragmented overview of its supplier landscape. While relationships with some key European suppliers are well established and relatively transparent, visibility decreases significantly further upstream in the supply chain. This is especially the case for indirectly sourced electronic components and suppliers located outside the European Union. In these areas, ESG-related information is limited and the company's ability to influence supplier practices is constrained.

To address these challenges, the company has initiated an internal effort to create a structured overview of its supply chain and to identify potential ESG risks among its suppliers. The objective is to better understand where risks are most likely to occur and where the company has the greatest leverage to influence supplier behaviour.

Participants are therefore asked to analyse the supplier landscape using the provided tools. The goal is to map the most relevant suppliers, assess potential ESG risks based on country and sector exposure, and evaluate the company's level of dependency and control.

Based on this analysis, participants should identify priority areas within the supply chain and define **three concrete actions that could improve ESG control and supplier risk management**. These actions may include governance measures, contractual requirements, monitoring mechanisms, or supplier engagement initiatives.

The case illustrates a typical situation for many SMEs that must develop pragmatic approaches to manage ESG risks in increasingly complex global supply chains.

6. Data, Evidence, and Inputs

Supplier Landscape Overview – Case Background

The machinery manufacturer relies on a diversified supplier landscape that combines domestic sourcing, European partners, and international suppliers and service providers. Core materials, particularly structural steel and metal components, are sourced from two suppliers (2.000 and 1.500 employees) located in Germany. These suppliers operate within a well-regulated environment and already provide product-related CO_2 footprint data and ESG information. Long-standing contractual relationships, high transparency, and geographical proximity characterize these partnerships, although energy price developments and embedded emissions remain relevant aspects of the supply relationship.

A strategically important part of the value chain is the supply of electronic control systems. The company depends on a single French supplier (500 employees) for these control units. Due to deep technical integration, certification requirements, and system compatibility, switching to alternative suppliers would involve significant effort and cost. While the supplier demonstrates a basic level of ESG maturity, transparency regarding upstream sub-suppliers remains limited, making visibility beyond Tier 1 incomplete.

Electrical and electronic components represent another distinct part of the supply chain. These parts are procured indirectly through a lot of different Asian trading companies, while the actual manufacturing takes place in China. The company has no direct contact with the original manufacturers and therefore nearly zero influence over upstream production conditions. ESG-related data availability for these components is inconsistent, and transparency along the extended supply chain is low. This segment of the supplier base is characterized by geographical distance, indirect procurement structures, and restricted steering options.

In addition to component sourcing, the company operates assembly and sub-manufacturing units (each about 20 employees) in Bosnia, India, and Indonesia to serve regional markets. These units are run through subsidiaries or long-term local partners. Regulatory frameworks, labor standards, and enforcement practices differ across these countries, requiring tailored governance approaches. Local workforce management, occupational safety, and compliance with national regulations are operationally relevant aspects of these activities.

Domestic service providers form another group of suppliers. Security services and cleaning services are sourced exclusively from providers based in Germany. These services operate within a regulated labor environment and are typically contracted on a long-term basis. They are operationally necessary but have limited strategic relevance for the core business and limited impact on the overall value chain.

Logistics and transportation are handled by a global logistics partner headquartered in Turkey. This partner is responsible for the international transport of machines and components to customers worldwide. While the cooperation is essential for global market access, transparency regarding subcontractors, fleet composition, and transport-related emissions is limited. The logistics partnership connects the company to a broader network of transport providers across multiple regions.

Overall, the company's ability to steer and influence suppliers varies significantly across the supply chain. Steering capabilities are strongest for German-based material suppliers and service providers, moderate for European Tier-1 suppliers and international assembly units, and lowest for indirectly sourced electronic components originating outside the European Union.

7. Suggested Tools from the PEARL Toolbox

Indicate which PEARL tools can be applied in this case and how?

- Supply Chain Risk Check (M3)
- Supplier Mapping with Matrix (M4)

Supplier	Country Risk	Sector Risk	ESG	Issue Description	Likelihood	Impact	Overall Risk	Existing Controls	Recommended Action
German Steel Supplier	Low	Medium	E	CO_2 emissions from steel production	Medium	High	Medium	Supplier ESG reporting	Request carbon reduction roadmap
German Metal Supplier	Low	Medium	E	Energy intensive manufacturing	Medium	Medium	Medium	Long-term contract	Monitor emission intensity
French Electronics Supplier	Low	Medium	G	Limited transparency of Tier 2 suppliers	Medium	High	High	Supplier relationship	Request supplier mapping
Asian Electronics Supply Chain	High	High	S	Limited transparency regarding labor standards	High	High	Very High	None	Introduce supplier screening process
Assembly Unit Bosnia	Medium	Medium	S	Occupational safety and labor compliance	Medium	Medium	Medium	Internal management	Conduct ESG audit
Assembly Unit India	Medium	Medium	S	Local labor standards enforcement	Medium	Medium	Medium	Internal policies	Implement local ESG monitoring
Assembly Unit Indonesia	Medium	Medium	S	Worker safety and working conditions	Medium	Medium	Medium	Local partners	Introduce training programs
Logistics Partner Turkey	Medium	Medium	E	Transport emissions and subcontractor transparency	Medium	Medium	Medium	Logistics contract	Request emissions reporting
Cleaning Services Germany	Low	Low	S	Labor standards in facility services	Low	Low	Low	Contractual compliance	Maintain monitoring
Security Provider Germany	Low	Low	S	Labor conditions and working hours	Low	Low	Low	Contract clauses	Maintain monitoring

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8. Suggested Solution

Supplier Name	Country	Tier	Material / Service	Strategic Relevance	Dependency Level	ESG Control Options
German Steel Supplier	Germany	Tier 1	Structural steel components	High	Medium	Contract clauses, ESG reporting, audits
German Metal Supplier	Germany	Tier 1	Metal parts and assemblies	High	Medium	Supplier code of conduct, audits
French Electronics Supplier	France	Tier 1	Control units and electronic systems	High	High	Long-term contract, ESG clauses, supplier engagement
Asian Electronics Trading Companies	Various Asia	Tier 2/3	Electronic components	Medium	Low	Supplier screening, procurement guidelines
Assembly Unit Bosnia	Bosnia	Internal unit	Assembly operations	Medium	Medium	Internal ESG standards, safety training
Assembly Unit India	India	Internal unit	Assembly operations	Medium	Medium	ESG governance framework, audits
Assembly Unit Indonesia	Indonesia	Internal unit	Assembly operations	Medium	Medium	Supplier policies, local compliance monitoring
German Cleaning Services	Germany	Tier 1	Facility services	Low	Low	Contractual labor standards
German Security Provider	Germany	Tier 1	Security services	Low	Low	Code of conduct
Global Logistics Partner	Turkey	Tier 1	Global logistics	High	Medium	Emissions reporting, subcontractor transparency

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9. Expected Learning Outcomes

After working on this case, which KSAs will learners be able to develop?

After working on this case, learners will be able to:
Identify key ESG impacts of a concrete manufacturing SME and structure them logically (inside-out).
Assess key ESG risks affecting business performance and customer access (outside-in).
Create a justified longlist and shortlist of ESG topics and explain exclusions based on case assumptions.
Draft a first materiality assessment output suitable for internal alignment and stakeholder communication.

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