APPLIED **ESG** HANDBOOK

a guide for responsible sourcing









a guide for responsible sourcing



Embaixada da Suécia Brasília



APPLIED ESG HANDBOOK

a guide for responsible sourcing Swedcham's ESG Committee publication with support from the Swedish Embassy in Brazil

Production: Estúdio Anadarco www.anadarco.com.br contato@anadarco.com.br Coordination and writing: Karin Vecchiatti Translation: Carlos Braga

April 2024

SWEDISH EMBASSY IN BRAZIL Ambassador: Karin Wallensteen Head of Economic Affairs, Commerce and Promotion: Jonas Montpaz

SWEDCHAM BRAZIL Executive Director: Jonas Lindström Event manager: Viviane Ringbäck Intern: Josephine Lindberg

ESG COMMITEE - SWEDCHAM Coordinator: Karin Vecchiatti Many thanks to those who participated in debates and helped create this handbook: AAK: Bianca Miranda ABB: Verena Goncalves. Edmilson Pereira Alfa Laval: Albert Varadi Atlas Copco: Fabio Amiti, Carlos Ribeiro Autoliv: Patricia Coimbra, Mirian Araúio Elecrolux: Renata Silva, João Zeni Epiroc: Georgia Silva, Debora Bonadio Quant: Ricardo Perroni, Edileide Peruna, Maximiliano Cerveny Scania: Patricia Acioli, Fabricia Morais Tetra Pak: Fernando Paraizo

Special thanks to: Aline Feistler Sweden Alumni Network Brazil

SWEDISH-BRAZILIAN CHAMBER OF COMMERCE

Rua Oscar Freire, 379 Sao Paulo, SP - 01426-001 (11) 3066-2550 www.swedcham.com.br brazil@swedcham.com.br



TABLE OF CONTENTS

Preface 6

Why give attention to responsible sourcing? 9

A new business model 10 Shared responsibility and generating value 12

CHAPTER 1 Pillars of a responsible sourcing program 15

1. Local-Global Synergy 17

- 1.1 The importance of international guidelines 19
- 1.2 Reducing risks to businesses, industries and society 24

2. Shared responsibility:

training, monitoring, adjusting 27

- 2.1 Establishing clear and effective communication 28
- 2.2 Defining coherent performance evaluation 29
- 2.3 Contributing to the resolution of non-copliance 31
- 2.4 Encouraging suppliers 32

3. Validating a responsible sourcing program 35

4. A word about human rights 36

CHAPTER 2 Natural resource management 40

1. Decarbonizing supply chains 42

- 1.1 Lowering GHG emissions in inputs and raw materials 43
- 1.2 Attention to suppliers' production processes 44
- 1.3 Reducing GHG emissions in logistics 45
- 1.4 Participating in the free energy market 46
- 1.5 Following the Carbon Disclosure Project 47

2. Redesigning the extraction and consumption of natural resources 48

2.1 Nature as a stakeholder: a new
definition of quality 48
2.2 Conservation requires responsible
socio-environmental relations 54
2.3 Transparency and cooperation in
raw material management 56
2.4 Products with the lowest possible impact 58

3. Collaborative governance 62

PREFACE

Swedcham's ESG Committee has been working to share information among companies, helping to implement production processes and business practices that meet important agendas: environmental sustainability, social responsibility and ethics in governance. One of the topics the Committee has been focusing on is responsible sourcing.

Responsible sourcing covers sustainable procurement, transparency in business relations, supplier training, redesign of natural resource extraction and consumption, among many other topics covered in this Handbook. The subject is broad and the following pages certainly dot not address all of its aspects. But they bring enough information to show that these issues will redefine various value chains in the comming years.

Cases are part of Swedish multinational companies, mainly industries, but they can surely inspire other businesses, regardless of size or industry. Recommendations can be adapted in different industries and locations.

The invitation is made for organizations to considerably reduce negative impacts and encourage positive and sustainable aspects throughout their supply chains.

Enjoy your reading!

Karin Vecchiatti ESG Committee - Swedcham The following Swedish companies operating in Brazil participated in the making of this Handbook through interviews, roundtables and sharing of public documents. Each of them contributes to the implementation of responsibility in their supply chains.



Introduction

WHY GIVE ATTENTION TO RESPONSIBLE SOURCING?

Why give attention to responsible sourcing?

The climate crisis and the need to develop an economy that does not exploit nature and people has stimulated the development of programs, actions and regulations demanding that companies build strategies capable of handling a large variety of challenges such as:

- reducing greenhouse gas emissions;

- reducing the dependence on fossil fuels in production cycles;

- eliminating land misuse and reducing occupation;

- reducing waste generation;

- accomplishing circular economy strategies;
- removing products that are toxic to human and wildlife;
- investing in technologies with greater energy efficiency;
- using more renewable energy sources;
- protecting biodiversity, among many others.

One of the ways for organizations to achieve tangible results in tackling the climate crisis is to promote significant changes throughout their supply chains. Improvements in this agenda can be achieved as organizations look beyond their facilities and create shared responsibility among customers and suppliers. When companies realize that a good part of environmental and social problems result from the way global supply chains were built, tangible improvements can be carried out through responsibility strategies.

Responsible sourcing strategies can be important tools for analyzing and carrying out programs to mitigate the climate crisis and promote social justice. Responsible sourcing strategies may also help create an institutional environment that helps enforce sustainability standards and requirements. This is what this handbook is about: the building of more sustainable supply chains, both from a social and an environmental point of view.

A new business model

The investment required for a transition towards a green economy may currently seem quite high. But the costs of the climate crisis will be even greater if organizations do not adapt to required changes.

Turning companies' attention to creating responsible sourcing programs can encourage players from different supply chains to develop new management metrics that are not limited to financial results, but that also evaluate business success based on stewardship, i.e., parameters of care and attention to various stakeholders, nature being one of the main ones.

In this sense, responsible sourcing is not the subject of a single department or company. It depends on shared responsibility in a value chain. Such responsibility needs to be demanded, managed, standardized, executed and improved by several players: from suppliers, traders, manufacturers, service providers and logistic systems, to buyers, retailers, investors, employees and consumers.

Responsible sourcing can be understood as commercial transactions that present the most positive social, environmental and governance impacts possible on all consecutive and interconnected stages of a system of goods and services, from the buying of raw materials and the extraction and use of natural resources until final disposal (when needed).

For the most part, a responsible sourcing program is currently a voluntary commitment by companies to consider and emphasize social and environmental aspects in their relation with suppliers. The greatest asset of such programs, however, may be their ability to function as a "check and balance" system between companies themselves, their investors and other stakeholders, redefining the rules of competition, metrics of success and reputation.

While developing a responsible supply chain, one company influences the other and new rules of the business game are implemented through agreements that, at first, may seem small and specific, but end up being very effective. Implementing this type of "rule" is certainly not new for several industries. Initiatives such as the *Forest Stewardship Council, Aluminum Stewardship Council, Electronic Industry Citizenship Coalition*, among many others, are some examples of how different industries have created mechanisms to engage players around shared responsibility and attention to their suppliers. These are examples of how it is possible to establish and implement best practices, thus generating not only greater environmental responsibility, decent labor and transparency, but also certification processes that help ensure compliance with these requirements. In this sense, responsible sourcing is a business transaction model capable of meeting the demands of the contemporary world, while implementing responsibility, stewardship, and incorporating new values into the scope of commercial transactions.

Shared responsibility and generating value

Reformulating supply chains through responsible sourcing is being driven by organizations who want to improve their environmental, social and governance performance and, therefore, demand improvements in the companies they do business with. Taking care "solely" of internal operations becomes an outdated strategy given the complexity of interrelations between companies and other stakeholders. After all, internal operations necessarily depend on external products and services and, ultimately, will provide products and services to other organizations. It seems important to monitor how these transactions take place and parameters such as transparency, traceability, environmental sustainability and fair labor become quite important.

Responsible sourcing integrates social, environmental and

- ethical considerations into the supply chain, demanding
- commitment and monitoring the social and environmental
- performance of all players.

Aware of these changes, ten Swedish companies¹ operating in Brazil contributed to this Handbook by suggesting procedures capable of fostering responsible sourcing in their value chains. Their contributions are divided into two main topics. The first one addresses the structure (or pillars) needed for implementing a responsible sourcing program; the second one details measures required for the sustainable management of natural resources.

Articulation, adaptation and investment in these topics are important for developing a responsible sourcing program, whether in a company, an industry or among various different industries. What underpins this process are three precious lessons for organizations:

- mapping and understanding the value chain(s) they are part of;
- identifying and mitigating environmental, social and governance risks;
- capitalizing opportunities for improvent

¹ AAK, ABB, Alfa Laval, Atlas Copco, Autoliv, Epiroc, Electrolux, Quant, Scania, Tetra Pak.

Part 1

PILLARS OF A RESPONSIBLE SOURCING PROGRAM

Pillars of a responsible sourcing program

- 1. Local-global synergy
- 2. Training, monitoring, adjusting
- 3. Validating a responsible sourcing program
- 4. A word about human rights

The basis for creating a responsible sourcing program is building close, transparent, fertile and sustainable relations with business partners. Defining a code of conduct, collecting data, analysing risks, implementing training sessions, monitoring and correcting non-compliance through adjustments, and encouraging good practices are basic strategies for any program.

Defining a Code of Conduct for Suppliers is the first step in building a responsible supply chain. The Code of Conduct for Suppliers is a document in which the client company defines the principles and standards expected from its suppliers. The signing of a contract between customers and suppliers usually reinforces the commitment to the Suppliers' Code of Conduct. The Code of Conduct not only establishes rules for business relations, but also defines the quality of products and services based on governance parameters, environmental policies and social activities.

A well-written Suppliers' Code of Conduct takes into account the fact that environmental standards and legal frameworks vary widely from one country to another. Differences in the quality of infrastructure, legislation or business practices can also vary greatly within the same country. Therefore, it becomes a great challenge to maintain the same ethic and conduct standards, as well as good environmental and social practices, wherever companies operate.

Companies must face the great challenge of maintaining the same standards of ethics and conduct, of good environmental and social practices, wherever they do business.

Quant provides industrial and building maintenance services, operating in different segments and fields. In Brazil, the difference in regions and contexts is quite relevant when it comes to infrastructure and working conditions. It is therefore a great challenge for **Quant** to maintain the highest requirements with its suppliers, especially since its operations are temporary in customers' plants, and terms are determined through contracts.

Employee safety is a non-negotiable factor at **Quant**. Wherever it operates, the highest safety requirements must be maintained in order to achieve zero accidents. In addition to workplace safety, suppliers are evaluated according to process quality management quality, deadlines, internal management of sub-suppliers, availability of support and risk management.

1. Local-global synergy

1.1 The importance of international guidelines

1.2 Reducing risks to businesses, industries and society

The climate crisis is a global issue that requires a broad

perspective applied to local solutions. This demands a deep

understanding of local contexts in constant dialogue with

(global) problems that affect everyone.

An important point of view that leads to the development of codes of conduct is the need to create relations based on trust and risk mitigation. Such an approach is needed to solve problems that are common to different stakeholders in contexts such as:

- environmental management and nature conservacy, including conservation of biodiversity and decarbonization of production processes;

-respect for human rights;

-ethical principles that guarantee business integrity and commitment to transparency.

The idea of connecting local to global issues (and vice versa) can be explained by the principles that Alfa Laval has established between 2016 and 2017 to create responsible relations with its suppliers. Alfa Laval's Business Principles for Suppliers are divided into four pillars:

In the **Environmental** pillar, **Alfa Laval** analyzes suppliers' environmental policy, pollutant emission, and the use of hazardous substances. It also considers whether suppliers have emergency plans and are able to manage environmental risks. Increasingly, suppliers must control and/or seek to eliminate hazardous substances in production processes, packaging materials and purchased articles (products, spare parts, components and materials). Compliance with applicable laws, regulations and environmental standards is a basic condition for companies to have Alfa Laval as their client.

Regarding **Social Responsibility**, **Alfa Laval** establishes criteria related to human rights, freedom of association, forced labor, child labor/youth labor, working hours and wages, discrimination, health and safety. Suppliers shall ensure the provision of safe and healthy working facilities and appropriate measures to protect employees against work-related risks. These social themes, plus protection against fires and severe pollutant discharges into the environment, are considered critical themes by **Alfa Laval**.

Within the scope of **Business Integrity**, **Alfa Laval** expects suppliers to fight bribery and corruption, to develop fair business and competition, and to be in compliance regarding conflict minerals. Suppliers shall maintain the highest standards of integrity in all business interactions, regardless of location. Any and all forms of corruption, such as bribery, extortion or embezzlement, are strictly prohibited.

Finally, in the **Transparency** pillar, **Alfa Laval** expects suppliers to maintain a straightforward relation, valuing the

disclosure of information and communication, including with subcontractors, and to be attentive to inspections and corrective actions.

1.1 The importance of international guidelines

International guidelines favor the development of a globallocal perspective in organizations. Following such guidelines helps organize targets and metrics, making it easier to define and evaluate activities. They also help various organizations move in the same direction while searching for solutions. Even companies that do not supply directly to multinationals may use these guidelines to define criteria for evaluating business partners.

Some of the main International Guidelines followed by companies participating in this handbook and, therefore, contribute to the definition of their Suppliers' Code of Conduct are:

- The United Nations Global Compact (GC)

- The United Nations Universal Declaration of Human Rights

- The United Nations Guiding Principles on Business and Human Rights

- Declaration of the International Labor Organization (ILO) on Fundamental Principles and Rights at Work

- OECD Guidelines for Multinational Enterprises

Atlas Copco, for example, considers that among the principles used to improve the performance of business partners throughout the supply chain are international guidelines that also conduct the group's activities:

1.1.1 Elimination of all forms of forced and compulsory labor (GC 4, ILO 29)

Business partners must not be subjected to any forced or involuntary labor. This situation is not tolerated in any way. It includes any work or service performed by a person under threat and for which he or she did not voluntarily offer assistance. This rule also prohibits business partners from requiring employees to deposit money or original documents such as passports, educational certificates and similar paperwork during the employment period.

1.1.2 Prohibition of child labor (GC 5, ILO 138)

Atlas Copco does not accept child labor. Business partners need to take preventive measures to ensure that they do not hire employees below the minimum employment age. This means that, unless local law stipulates an upper age limit, no person below the age of completing compulsory education or under the age of 15 (or 14 when permitted by ILO Convention No. 138) may be hired. For authorized minors, management is responsible for providing working conditions and hours and the minimum wage appropriate for their age in accordance with local laws. The minimum age for performing dangerous working activities is 18 years old.

1.1.3 Integrity (PG 10, OECD 9)

Business partners need to avoid all forms of corruption, including extortion and bribery. Using false documents or illegal practices is not allowed. The use of undeclared production units or suppliers is also prohibited. **Atlas Copco** requires cooperative management and free access to business partners' facilities, including manufacturing facilities. Partners must confirm their commitment to fair competition and agree not to enter into discussions or into contracts with competitors regarding pricing, market sharing or other similar activities.

1.1.4 Support and respect for human rights (PG 1 and PG 2)

Business partners must support and respect human rights. They must confirm that they are not complicit in human rights abuses. They must comply with the main international ethical guidelines governing the Atlas Copco Group.

1.1.5 No discrimination related to employment and occupation (PG 6, ILO 111)

Business partners must support equal opportunities, fairness and diversity and ensure that all employees are treated strictly in accordance with their skills and qualifications in any employment-related decisions, regardless of ethnic group, religion, gender, age, nationality, disability, personal relationship, union membership and/or political opinion.

1.1.6 Safe and healthy working environment, conditions and facilities (ILO 115)

Business partners need to make employee safety a priority. Working facilities and factory conditions need to be ideal for employees to perform their duties in a safe and healthy environment, including fire prevention. To minimize risks, appropriate policies to protect the health and safety of each employee, training and clear job descriptions are needed. Facilities must protect the dignity of employees and meet personal hygiene needs. Business partners must take appropriate measures on behalf of their employees to ensure safety and prevent accidents and illnesses resulting from poor workplace conditions. This includes the availability of first aid equipment, for example. It is expected that business partners follow international regulations, national legislation and local guidelines for working hours and wages.

1.1.7 Freedom of association and effective recognition of the right to collective negotiation (PG 3, ILO 87)

Partners need to confirm that employees are free to communicate openly with management to settle wages and workplace issues. Employees have the right to choose whether or not they wish to be represented by unions for the purpose of collective negotiation. **Atlas Copco** does not tolerate discrimination against any employee who exercises these rights.

1.1.8 Initiatives to promote greater environmental responsibility and climate action (PG 8, OECD 5)

Business partners must preferably have an environmental management system or at least commit to the development of an environmental policy or system that guarantees the continuous improvement of their own environmental performance. This includes striving to minimize the environmental impact of production, digitalization, product use, transportation and waste disposal. All business partners must demonstrate actions to address the climate challenge. A preventative approach to environmental challenges and the development and diffusion of environmentally sustainable technologies are also recommended. Business partners must conduct their operations in a manner that protects and preserves the environment, giving attention to water use and wastewater treatment. Business partners must address and minimize negative environmental effects resulting from the development, manufacturing, distribution, use and disposal of products and services. They must also confirm their commitment to the development and promotion of environmentally sustainable products, processes and design technologies.

1.1.9 Compliance with Atlas Copco Declarable and Prohibited Items Lists

Atlas Copco's list of prohibited items identifies substances that cannot be used in parts, products or raw materials delivered to Atlas Copco or in production processes. The list of declarable items contains substances whose use must be limited, and the content of any substance listed in the items delivered to Atlas Copco must be declared. Conflict minerals are also included in the declarable list. Business partners must ensure their compliance with these lists, monitor updates and inform Atlas Copco if any substance included is a problem.

1.2 Reducing risks to businesses, industries and society

Following international guidelines regarding labor practices, human rights, environmental protection and safeguarding businesses against corruption translates into better management of environmental and social risks along supply chains. Such practices result in greater quality and productivity for suppliers and may generate less negative impact on production processes and throughout a product's life cycle.

For many companies, the term "risk" mainly means risks to their business – financial risk, market risk, operational risk, reputational risk, etc. Companies are concerned about their market position in relation to their competitors, as well as their image and long term survival. So when they look at risks, they typically address risks to themselves. International guidelines, however, refer to the likelihood of adverse impacts on people, the environment and society that are caused by companies, to which they contribute, or to which they are directly linked. In other words, it is an outward-looking approach to risk.²

The journey to establish ethical and transparent, environmentally and socially responsible commercial relations has the important benefit of reducing risks, both for companies and for society. It is a two-way street. Proximity to suppliers leads to reducing risks; reducing risks leads to greater responsibility in production processes.

² https://www.oecd.org/investment/due-diligence-guidance-for-responsible-business-conduct.htm

Defining a code of conduct for suppliers is certainly an important step in this process. However, it is also essential to emphasize that its consolidation does not simply happen by signing a contract. Ensuring that the Code of Conduct is implemented in a productive way requires dialogue, training, investment, analysis, agreements and strengthening ethical business practices.

Implementing a responsible sourcing program can be challenging at first, both for customers and suppliers. But when well conducted, the process is capable of considerably reducing risks for many stakeholders throughout the entire supply chain.

Attention required to implement the Supplier Code of Conduct shows that challenges throughout the process of building a responsible supply chain are not necessarily dealt wtih by suppliers alone. In this sense, being close to suppliers by monitoring responsible sourcing principles is important, not only because it generates data for subsequent risk assessment, but also because it contributes to the joint resolution of problems.

A tool to approach suppliers, evaluate their performance and ensure compliance with the Supplier Code of Conduct is the *S-Rating* methodology proposed by **Scania**. *S-Rating* begins with suppliers completing a self-assessment questionnaire (SAQ) covering topics such as: Health and Safety, Human Rights and Working Conditions, Environment, Ethics and Management. This material is then used to assess sustainability risk based on a score. The SAQ is both a document-based evidence collection tool and a database.

Results obtained in the SAQ are combined with sustainability risk indexes of the country/region in which the supplier is located. In cases where the risk appears high, an audit is carried out, which can be conducted by third parties or by certified SA 8000 Scania auditors.

S-Rating is obtained by combining:

- Performance in SAQ (supplier sustainability risk)

- Country risk factors

- Audit scoring, when necessary.

Final S-Rating assigns the supplier an A/B/C rating. The classification is used as a selection criterion in sourcing decisions.

Here in Brazil, Scania manages around 450 S-rating suppliers which operate in areas such as the production of metal parts, engine parts, raw materials such as steel, iron and aluminum and also suppliers that provide services in installations and general services, logistics and operational systems.

2. Shared responsibility: training, monitoring, adjusting

- 2.1 Establishing clear and effective communication
- 2.2 Defining coherent performance evaluation
- 2.3 Contributing to the resolution of non-compliance
- 2.4 Encouraging suppliers

The sense of shared responsibility acquires great importance while companies reach out for supplier training and development. If data collection and information analysis is essential for mapping risks, supplier development can be defined as the monitoring process to reduce these risks. Developing suppliers (and not just demanding results) requires

- establishing clear and effective communication,
- defining coherent performance evaluation
- contributing to the resolution of non-compliance
- encouraging suppliers

Accompanying and monitoring suppliers means developing the best environmental, social and governance practices with these partners, focusing on the idea that leaders in each industry need to act as a reference in the value chain they are part of. By monitoring and helping to develop their suppliers, businesses can improve their own sustainability performance.

2.1 Establishing clear and effective communication

Requirements on the Suppliers' Code of Conduct are not always easily understood. Various points can be defined in different ways by different stakeholders. Requirements may be difficult to understand or may even change over time. Some procedures may help suppliers identify various requirements and monitor compliance. Documented training sessions, contracts, instructions, signs and posters placed at strategic locations in the company's facilities can promote effective communication with professionals who directly relate responsibility areas. It is important to remember that carrying out the required measures depends precisely on these professionals.

Along with data collection, effective communication contributes to reducing risks and evaluating sustainability performance.

Clear communication contributes greatly to compliance assessments. And to achieve this, **ABB** has important recommendations:

To understand and implement the **ABB** Supplier Code of Conduct, it is important that the supplier company formally chooses a manager responsible for ensuring compliance in issues regarding labor, environment, health and safety. This must be a senior, trained and competent person, capable of understanding the various requirements and engaging the right people to ensure full performance of the required policies, systems and procedures relating to sustainability compliance. The responsibilities of this role must be clearly documented and communicated to all managers and supervisors.

Main responsibilities include:

- establishing an appropriate organization for compliance management;

- establishing appropriate systems and procedures to identify, analyze and control compliance risks;

- developing leadership, ensuring responsible management and advising on compliance issues.

The supplier company must also ensure that all necessary certificates and licenses are within their validity periods. These documents should be fully understood and kept within easy access.

2.2 Defining coherent performance evaluation

Clear communication certainly makes performance evaluation easier. A performance evaluation verifies whether suppliers are following what was required by the Suppliers' Code of Conduct. During the on-site assessment, ABB checks relevant documents (such as appointment letters and meeting protocols), registrations, permits, licenses and authorizations to verify compliance with relevant standards, local legislation, international conventions and contractual obligations. ABB also interviews and evaluates the capability of compliance manager, management team members, supervisors and workers, considering their awareness of applicable legal requirements and implications in their responsibility areas. ABB provides self-assessments to suppliers, conducts training, on-site assessments and special projects to support them and monitor their performance, ensuring that everyone is aligned with the same commitments and obligations. The best-rated suppliers become preferred within ABB, contributing to the company's purpose of providing "Energy and Productivity to a Better World".

Sustainability performance is a key indicator of supplier qualification, development, and evaluation processes.

In its supplier evaluation processes, ABB also uses the **EcoVadis**³ platform. Systems like EcoVadis help monitor and improve sustainability performance, as it collects data and standardizes information. It is practically impossible for each company to monitor its suppliers spread across hundreds of industries and regions. After all, each industry has its own regulations and certifications. Without standardization, it is difficult to evaluate the performance of suppliers or compare companies' results in relation to their competitors.

Platforms like EcoVadis help companies establish parameters and drive improvements. The system evaluates seven management indicators based on 21 criteria grouped into 4 themes: environment, labor and human rights, ethics and sustainable purchasing. The methodology offers relevant information for evaluating risk and performance of various industries. It helps select suppliers, train buyers, plan launches, integrate purchasing processes and suppliers, and review programs. It helps reduce risks and costs while promoting improvements.

³ https://ecovadis.com

2.3 Contributing to the resolution of non-compliance

Of the approximately 300 Alfa Laval suppliers in Brazil, roughly 250 are small and medium enterprises, whose acceptance of responsibility requirements has been high. This is due to an approach of not just pointing out problems, but helping to improve. Along this process, Alfa Laval recognizes the difficulty that smaller suppliers have in auditing third parties. Often due to scarce resources or lack of know-how, "supplier's suppliers" are not reached in depth. By seeking to get closer to upstream players in its supply chain, Alfa Laval has been working to demonstrate the environmental and economic gains linked to responsible sourcing.

Alfa Laval also encourages its suppliers to implement an ISO 14000 certification, which facilitates audit processes. If a supplier is not certified, they must complete a form provided by **Alfa Laval** and present identified risks and show improvements as part of the compliance process.

Being of the same mind, **Epiroc** understands that noncompliance must be dealt with proactively and collaboratively, especially with small suppliers who often lack information and support for environmental and social development. **Epiroc** believes that, by sharing knowledge, they are empowering and supporting partners to improve and contribute positively to society. Instead of excluding suppliers that need improvements, **Epiroc** chooses to collaborate so that they can meet the necessary criteria. The company believes that their greatest contribution to the improvement of supply chains lies in helping its business partners move towards a sustainable future. Effective communication also needs to be maintained when non-conformities are identified. This helps promoting principles of responsibility within companies of the same sector.

In addition to monitoring and carrying out projects to correct non-compliance, it is the suggested responsibility of client companies to remain open to communicating these failures. In other words, effective communication also needs to be maintained when non-compliace is identified. In these cases, Alfa Laval encourages suppliers to:

 Ensure that all employees have the right to report concerns regarding compliance with legal requirements or company policies/rules to their employer without fear of reprisal;

> Ensure that workers have a mechanism to report offenses, facilitating open communication between management and workers;

> – Use anonymous mechanisms for managers and workers to report complaints in the workplace;

- Protect whistleblowing confidentiality and prohibit retaliation.

2.4 Encouraging suppliers

As a consequence of performance assessments, encouraging and rewarding suppliers is undoubtedly a strategy that can guarantee the engagement of organizations to responsible practices. Leading companies can and should be a reference in environmental and social sustainability; they should be a model of transparency and governance. This enables establishing standards and creating an institutional environment favorable to responsibility.

The **Electrolux Supplier Award** invites suppliers to nominate initiatives that contribute to Electrolux's sustainability objectives. Entries cover four main areas:

- Compliance with Electrolux's supplier workplace standards.

- Recycled materials - use of recycled materials, including plastic.

- More efficient appliances - development of more efficient parts, such as compressors and motors, to reduce the environmental footprint of an appliance during its life cycle.

- More efficient operations – improving operations to reduce emissions and waste.

In 2021, the winner of the **Electrolux Sustainability Award** was the CMA-CGM Group, an ocean logistics service provider that has improved its sustainability strategy in recent years to fully integrate climate change into its agenda. Its strategy was well developed, with a clear path to reduce CO2 emissions 40% by 2030. The company also has the goal of becoming carbon neutral by 2050.

In 2023, the winner was Nidec Global Appliance - the company proactively shares details and history of its sustainability progress and has implemented an environmental, social and governance materiality steering committee, demonstrating commitment and integration of sustainability into its own business.

How ABB encourages suppliers

Be a standard. Become a sustainability leader before engaging your suppliers.

Communicate your expectations and requirements. Develop your own Supplier Code of Conduct, based on international standards and principles set out in the ABB Supplier Code of Conduct.

Provide assistance to your contractors and suppliers. Invite your supplier representatives to attend your training sessions and learn about your management systems.

Challenge your contractors and suppliers. Ask your suppliers for proof of compliance on their sustainability performance. Perform supplier audits and monitor continuous improvement of your suppliers.

3. Validating a responsible sourcing program

Developing a code of conduct, collecting data for risk assessment, performing training, monitoring and demanding adjustments in cases of non-compliance, when well conducted, create a responsible sourcing program in a company. These initiatives can also be adapted in various industries. A Responsible Sourcing Program is precisely the formalization of these actions, whether within a company, industry or between industries.

- Suppliers are extensions of companies. A Responsible
- Sourcing Program seeks to manage sustainability-related topics throughout the supply chain.

When formalizing a program, the principles of stewardship and shared responsibility are extremely important in all aspects of a less exploitative economy. They are embeded in responsible sourcing programs and can be summarized as:

- maintaining ethical principles in business relations and transparency in corporate governance systems in favor of sustainable development;
- incorporating sustainable development into corporate strategy and decision-making processes;
- respecting human rights and the interests, cultures, values and customs of employees;
- implementing effective risk management strategies based on science and tanking stakeholders risk perception into account:

- aiming to eliminate accidents and seeking continuous improvement in health and safety performance;
- aiming for continuous improvement in environmental performance, mainly regarding energy transition, carbon emissions and climate crisis;
- contributing to the conservation of biodiversity and integrating approaches to planning and land use;
- supporting responsibility in design, use, reuse, recycling and disposal of products;
- aiming for continuous improvement in social performance and contributing to the social, economic and institutional development of communities and countries;
- proactively, openly and transparently engage key stakeholders in the challenges and opportunities of sustainable development, independently reporting and verifying progress and performance. ⁴

4. A word about Human Rights

One of the main international guidelines to influence companies' codes of conduct and their suppliers code is the United Nation's Universal Declaration of Human Rights. Its influence on organizations such as the OECD and the ILO have an impact on various businesses. In the year 2000, UN's Global Compact brought guidelines for companies regarding workers' rights, the environment, human rights and the fight against corruption.

⁴ https://www.icmm.com/en-gb/guidance/mining-metals/2015/demonstrating--value
Regarding human rights, it establishes that companies must support and respect the protection of internationally recognized human rights and must ensure that they are not violating them. In 2011, the UN launched a guide to mobilize the business community around important values related to human rights. It describes the responsibility of these organizations as employers, and covers subjects related to working conditions, working hours, weekly rest periods, vacations and medical leaves, recruitment and contract termination. The publication is very useful for training employees on Human Rights.⁵

Although organizations still have some difficulty understanding the role that human rights have on their daily routines, a growing number of companies are committing to the agenda and more governments around the world are developing national action plans to promote human rights awareness.

Another important reference material for understanding and complying with human rights in organizations is the OECD Due Diligence Guide for Responsible Business Conduct. It aims to provide practical support in implementing the OECD Guidelines for Multinational Organizations by presenting due diligence recommendations in a clear language. Implementing these recommendations helps companies address and prevent adverse impacts related to labor rights, human rights, the environment, corruption, consumers and corporate governance that may be associated with their operations, supply chains and other business relations.⁶

⁵ https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf

⁶ https://www.oecd.org/investment/due-diligence-guidance-for-responsible-business-conduct.htm

In particular, the guide also seeks to promote consensus among governments and stakeholders on due diligence for responsible business conduct. The UN Guiding Principles on Business and Human Rights, as well as the ILO Tripartite Declaration of Principles on Multinational Enterprises and Social Policy⁷ also present due diligence recommendations. It helps companies implement labor, social, environmental standards and human rights standards in accordance with internationally recognized parameters, in order to establish sustainable and inclusive supply chains.

⁷ https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---multi/ documents/publication/wcms_094386.pdf

Part 2

NATURAL RESOURCE MANAGEMENT

Natural resource management

- 1. Decarbonizing supply chains
- 2. Redesigning the extraction and consumption of natural resources

Discounting the threat of nuclear war, there is a progressive consensus that climate change is the greatest systemic risk of all, both due to its unlikely reversibility and the direct and indirect effects on all industries, regions, as well as on the global financial system. (...) The economic impacts of the pandemic and recent wars - which include high inflation, low growth, an imminent debt crisis and the return of hunger in developing countries, do not compare to those yet to come if we do not act immediately to align economic activities and way of life with climate security and nature conservation.⁸

So far, this Handbook has covered the main elements needed to structure a responsible sourcing program. In this second part, it emphasizes a critical aspect of any such program: the relation between companies and the sustainable management of natural resources throughout supply chains.

⁸ https://oglobo.globo.com/economia/esg/noticia/2022/06/artigo-como-mitigar-os-riscos-da-tripla-crise-planetaria.ghtml

This issue needs to be addressed in depth by any responsible sourcing program. A change in business mindset begins with paying attention to nature as an important stakeholder, not only as a supplier of inputs and energy, but above all as a pillar of well-being to all living species on the planet. In this sense, nature is a stakeholder that demands and reacts, and its positions need to be seriously taken into consideration in various operations around the world.

This second part brings examples and considerations on two major needs: the decarbonization of supply chains, involving a decrease in fossil fuel dependence and the redesigning of processes that extract and consume natural resources. The redesigning of such processes requires collective action between companies, as well as between companies and society in favor of establishing quality standards that not only take conservation into account, but also put the regeneration of ecosystems into effect.

The examples presented suggest that when industries accomplish some level of shared responsibility, they connect different stakeholders and are able to build an institutional environment favorable to demanding new sustainability standards.

1. Decarbonizing supply chains

- 1.1 Lowering GHG emissions in inputs and raw materials
- 1.2 Looking for suppliers who improve their processes
- 1.3 Reducing GHG emissions in logistics
- 1.4 Participating in the free energy market
- 1.5 Following the Carbon Disclosure Project
- Suppliers need to disclose their GHG emissions reports to
- contribute to their customers' sustainability goals.

Swedcham's Applied ESG Handbook for Small and Medium-sized Companies published in 2022⁹ presents different strategies for decarbonizing production processes. It emphasizes that measuring the emission of greenhouse gases (GHG) must take place at all stages of a product's life cycle: from the extraction of raw materials to disposal, including emissions generated in energy consumption and in production units.

Since this Sourcing Handbook focuses on relations with suppliers, it approaches five topics related to the decarbonization of supply chains, adding to what has already been covered in the first Handbook: purchasing inputs / raw materials with lower greenhouse gas emissions (GHG); reducing emissions in logistic processes; participating in the Brazilian free energy market; involving organizations in the Carbon Disclosure Project (CDP).¹⁰

⁹ https://www.swedcham.com.br/publico/esg/ESG_manual.pdf 10 https://la-pt.cdp.net/

1.1 Lowering GHG emissions in inputs and raw materials

The production of steel, aluminum, cast iron and batteries are GHG-intensive and represent a significant portion of Scania's global carbon footprint. Combined with efforts to reduce the carbon impact of operations and products, the company is also committed to reducing greenhouse gas emissions throughout its supply chain. In partnership with suppliers, Scania designs an ambitious strategy to lead the industry and eliminate the largest sources of carbon emissions. These four critical inputs are therefore the focus of Scania's supply chain decarbonization strategy.

Based on life cycle analysis, **Scania** identified critical aspects: materials or components with a major climate impact. From then on, the company developed supply chain decarbonization strategies and targets for 2030, including specific targets for each critical factor. The reductions will be achieved through a range of measures, including adopting new technologies, switching to renewable energy and increasing the use of recycled materials..

Scania's goal for 2030 is to use 100% green batteries, 100% green steel, 100% green aluminum and 100% green cast iron in its production. "Green" in these cases involves eliminating the main sources of GHG emissions in the production of these materials through the use of new technologies, green electricity and/or recycled material. In batteries, for example, access to renewable energy in production is very important. In the production of flat

steel, replacing coal with green hydrogen is essential.

In 2023, **Scania** announced decarbonization targets for its supply chain, making it mandatory that by 2030 all purchases of raw materials such as steel, aluminum and cast iron and batteries for operations in Europe be ecological, i.e. clean.

Movements in this direction are already happening. At the end of 2023, **Scania** released its first purchase order for H2 Green Steel in a joint target with SSAB, a manufacturer of high-strength steels. In a partnership with Northvolt, **Scania** developed a battery cell designed specifically for heavy transport, with world-class performance and an exceptionally low carbon footprint.

1.2 Attention to suppliers' production processes

Globally, Alfa Laval has projects to intensify the purchase of raw materials from steel mills that emit less greenhouse gases (GHG) into the atmosphere. Several of these suppliers are moving closer to zero emissions as they have changed their production processes, something that requires a large investment. In the steel industry, both Alfa Laval and other companies have demanded the development of technologies that eliminate the use of mineral coal in their processes. Brazilian steel mills that supply Alfa Laval have not yet invested in technology to eliminate carbon emissions, but several are increasingly using recycling: instead of using virgin raw materials, these companies have been using recycled materials, which also contributes to reducing emissions and less consumption of natural resources.

To reduce greenhouse gas emissions over the next ten years, a Brazilian steel mill that supplies **Alfa Laval** aims to expand

the use of ferrous scrap metal as a raw material for steel production. Its goal is also to expand forestry area for the production of charcoal (which works as a bioreducer in the production of crude iron) and to increase the use of renewable energy through solar parks. The company also invests in initiatives to increase energy and operational efficiency in its units, in new technologies and open innovation.

1.3 Reducing GHG emissions in logistics

The control of GHG emissions at **Electrolux** identified that the company emits more GHG in the distribution of its products than through energy consumed in the Group's operations. Approximately 300,000 metric tons are discharged annually through the global transport of products by sea, air and land. Since 2015, the company has reduced land and sea transport emissions by 12% and 29%, respectively, aiming to achieve climate neutrality in its logistics by 2030.

In addition to creating a global forum to discuss progress and actions to reduce logistics GHG emissions, **Electrolux** has also initiated several pilot projects with logistics partners to test renewable fuels and electric trucks around the world. Continuous analysis evaluates the impacts of transport on GHG emissions and compares the benefits of using railroads and other combined modes of transportation for decision-making. The company shares its knowledge with suppliers, offers tools to assess its environmental footprint, defines appropriate improvement activities and rewards progress and proactivity.

1.4 Participating in the free energy market

In Brazil, **Autoliv** encourages its suppliers to join the free electricity market, capable of contributing to sustainability in energy generation. Joining the free energy market allows Group A customers, who are connected to medium and high voltage, to purchase electricity from alternative sources in relation to the local utility.

Generally, this group includes large manufacturers or commercial establishments. Thus, a company can negotiate with its (potential) energy supplier aspects such as the price and quantity of electrical energy to be consumed, its source (it may or may not be renewable) and other commercial conditions.

Among the benefits of purchasing on the free market are the potential for savings and the possibility of purchasing energy from renewable sources, which reduces the company's CO_2 emissions. (The word possibility is important, as not all companies opt for renewable sources).

The renewable energy certification program in Brazil mainly uses the international REC Standard seal, known as I-REC. The International Renewable Energy Certificate is an international mechanism with a set of rules to certify energy that is produced from a renewable source. Companies that generate energy and meet the I-REC requirements can seek certification and then sell certified energy to organizations who want to offset their scope 2 emissions. These certificates contribute to goals related to the companies' decarbonization strategy and their reputation in general.

1.5 Following the Carbon Disclosure Project (CDP)

The Carbon Disclosure Project (CDP) is a non-profit organization that coordinates the global disclosure system for investors, companies, cities, states and regions to manage their impacts related to GHG emissions.

In 2021, **Electrolux** guaranteed the decarbonization commitment of 281 of its main suppliers by disclosing their GHG emissions. In addition, it defined supplier GHG reduction targets in alignment with the CDP. These suppliers correspond to 78% of Electrolux's direct expenditure on materials and inputs. The decarbonization commitment was also signed with 14 global logistics companies, which correspond to 30% of Electrolux's total logistics. Based on these actions, Electrolux was named Supplier Engagement Leader by the CDP in 2021.

The company also revised its 2030 goals, considering 2021 as the base year. The new goals foresee an 80% reduction in scopes 1 and 2 (reaching a total reduction of 97% compared to 2015) and 42% in scope 3, already considering logistics and other issues involving partnerships and cooperation with the supply chain.

2. Redesigning the extraction and consumption of natural resources

2.1 Nature as a stakeholder: a new definition of quality2.2 Conservation requires responsiblesocioenvironmental relations2.3 Transparency and cooperation in raw material management2.4 Designing products with the least negative impact

The second subject that deserves attention regarding the management of natural resources in more responsible supply chains is the urgent need to redesign their processes of extraction and consumption. It is important that companies present new definitions of quality in their processes and products, taking sustainability into account, promoting responsible socioenvironmental relations in the communities where they operate, encouraging transparency and cooperation and investing in the design of sustainable products, guaranteeing their credibility through agreements, round tables and certifications.

2.1 Nature as a stakeholder. a new definition of quality

The focus on reducing GHG emissions in production processes and the need to redesign the extraction and consumption of natural resources encourages organizations to take one of their most important stakeholders into account: nature itself. Considering that all organizations are in some way connected to natural resources through their supply chains, then each and all also have nature as an important stakeholder. The relationship with this interested party needs to be redefined, mainly by companies that have large dependence on raw materials such as soil, forests, water and minerals. In these cases, tracking inputs helps ensure that their extraction or production does not cause damage to ecosystems and people and helps establish a new definition of quality on products.

Forging a new definition of quality based on sustainability criteria requires working with teams responsible for the supply of raw materials, transportation, logistics and customers. Integrating this network helps define quality through the maximization of the positive impacts on the extraction and processing of raw materials. In other words, having nature as a stakeholder requires redefining the quality of products based on the positive impacts that their extraction and processing can generate.

Through its *Better Sourcing* program, **AAK**, a global supplier of special oils and fats based on vegetable oils, is committed to collaborating with its suppliers to ensure that raw materials are produced sustainably, protecting biodiversity and ecosystems and reducing the company's environmental impact, while safeguarding people's human rights and sources of income. To work holistically with the challenges it faces, **AAK** interacts with its supply chains through three interconnected approaches:

- in-depth understanding of the supply base;
- action plans engaging suppliers;
- evaluation and monitoring of the developed plan.

In-depth understanding of the supply base

Every company needs to deeply understand its supply base. Investment in mapping, traceability and monitoring of its raw materials, seeking to understand the circumstances that define countries, regions, jurisdictions, and production is crucial. Traceability and monitoring contribute to risk assessment and help companies identify and prioritize the most important issues, aiming at generating positive impact. Understanding risks, requeriments and gaps.

Preparation of an Action Plan engaging suppliers

Risk mitigation activities and priorities are defined in stages. Planning involves the development of relations with suppliers, farmers (for example, through training and education), as well as activities that the company carries out beyond its supply base.

Assessment and monitoring - driving impact beyond supply base

Suppliers must support and sign the **AAK** Group Policy and Code of Conduct for Responsible Vegetable Oil Sourcing. **AAK** evaluates its suppliers through questionnaires, certifications, good production practices, technical visits, due diligence and satellite monitoring of plantations. These actions aim to increase understanding and engagement with suppliers and farmers' commitment to sustainable environmental and social development.

All **AAK** suppliers must be members of Sedex¹¹, a sustainability data platform that evaluates supply chains, allowing companies to assess risks, report data and comply with legislation. As members of the platform, suppliers are audited by SMETA (Sedex Members Ethical Trade Audit), an audit that helps companies understand working conditions, health and safety, environmental performance and ethics in their own operations or at a supplier's facilities. Generating data, the platform allows companies to track a supplier's progress.

Audits are carried out by auditing companies approved by the Sedex Platform and are accompanied by Corrective Action Plans that contribute to improving suppliers' performance. The SMETA audit is designed to help protect workers from unsafe conditions, overwork, discrimination, low pay and forced labor. By being part of this platform, suppliers undertake to present labor information, including that of third parties.

In-depth understanding of the supply base, developing an action plan involving suppliers and promoting assessment and monitoring are actions that result in both reduced risks and responsible sourcing.

At **AAK**, these actions result in a good supply of all vegetable oils such as: shea almond, palm oil, coconut oil and soybean oil.

¹¹ http://sedex.com

For the best supply of shea

For more than 60 years, AAK has been a buyer of shea seeds, a crop suitable for agroforestry systems. Grown mainly in West Africa, shea is an important source of income for communities, especially for women living in this region. Since 2009, AAK has worked closely with shea traders, as well as women's groups, to help improve living conditions and ensure good business practices. Present mainly in the Kolo Nafaso region, currently almost 320 thousand women are involved in the AAK program that contributes to poverty reduction, local female empowerment and ecosystem recovery.

For the best supply of palm

The main challenge for the palm oil industry is to purchase raw materials from deforestation-free cultivation areas, while still ensuring full respect for human rights. Eradicating unsustainable production requires continuous change of market practices and in the value chain. To encourage this process, **AAK** has cofounded (2003) the Roundtable on Sustainable Palm Oil (RSPO), an organization that is now the industry standard for certified sustainable palm oil.

For the best supply of coconut oil

Coconut tree cultivation is a long-term activity, as the species take just over a decade to fully mature. **AAK** operates on the following fronts to provide the best supply of coconut oil:

- Improving farmers' livelihoods and maintain their interest in coconut cultivation by improving access to resources

- Modernizing the coconut industry
- Increasing the income of small farmers
- Improving the livelihoods of small farmers
- Improving supply chain traceability
- Preventing deforestation and mitigate climate change
- Strengthening the company's participation in The Sustainable Coconut Partnership.

AAK is a founding member of The Sustainable Coconut Partnership network, which aims to improve farmers' livelihoods, decrease the carbon footprint of coconut cultivation and processing, and increase supply to meet growing global demand.

For the best supply of soybeans

Soybean oil is one of the most versatile commodities, with a large number of applications, especially in the food industry. The biggest consumers are China, USA, Argentina and Brazil. Along with India, these countries are also the world's largest producers.

Soybean oil is a relatively small raw material for **AAK** when compared to other products. However, since there are sustainability risks in soy production, especially related to deforestation, the company is committed to helping build 100% traceable and deforestation-free supply chains by 2025.

In Brazil, **AAK** is attentive to producers who are signatories to the Soy Moratorium (*Moratória da Soja*), an initiative that aims to ensure that soy, produced in the Amazon region and sold by its signatories, is free from deforestation that occurred after July 22, 2008. Governance and operation are the responsibility of the Soy Working Group (GTS) made up of companies associated with the Brazilian Association of Vegetable Oil Industries (ABIOVE) and the National Association of Cereal Exporters (ANEC).

All soy purchased at AAK Brasil is certified RTRS – *Round Table on Responsible Soy,* founded in 2006 in Zurich, Switzerland. RTRS is an international non-profit association that promotes the growth of production, trade and use of responsible soy

2.2 Conservation requires responsible socio-environmental relations

While aiming at the simultaneous consumption and conservation of natural resources, given examples demonstrate that supply chains need to simultaneously work on responsible socio-environmental relations, as well as on transparency and cooperation in the management of raw materials.

When trying to simultaneously consume and protect natural resources, experiences around the world show that success is achieved when they are able to combine economic growth, social inclusion and environmental preservation.

In responsible sourcing programs, raw material quality is based on the responsible extraction and consumption of natural resources, as well as on guaranteeing human rights. It is also based on responsible socio-environmental relations that lead to prosperous, inclusive and collaborative economic connections. Quite often, a good part of natural resources used by industries are extracted from areas that are socially fragile or economically vulnerable. These communities quite often endure poverty, weak institutional interaction, little influence on power authorities.

Only recently have some companies begun to look at these factors and understand how their operations could maintain, worsen or improve such circumstances. An important point is that institutional changes are necessary to strengthen originally fragile structures. Preserving natural resources in a productive economy requires strengthening institutions and social unity for this purpose. And the participation of private companies necessarily needs to move in this direction, promoting inclusive and collaborative governance arrangements.

This requires investment in long-term processes that promote the interaction of various players in critical areas such as:

- governance of natural resources that offer political and economic opportunity for all;
- inclusive and diverse economic development, setting up and encouraging the permanence of decentralized and diversified productive structures, with small and mediumsized companies, with a high-yielding connection to local services and opportunities;
- investments aimed at collective interests (of the local population).¹²

¹² https://humana.net.br/mecanismos-financeiros-e-desenvolvimento-territorial-modelos-de-gestao-e-programas-de-transferencia-de-renda-para-uma-nova-relacao-entre-empresas-e-comunidades/

2.3 Transparency and cooperation in raw material management

Natural resources are the basis of industrial processes. Nowadays there is a need to build supply chains that extract fewer natural resources and consume them in the most efficient way (producing more with less). Mapping the path and processes of these materials throughout supply chains is a major challenge for any industry. It is, however, a necessary challenge that helps create new definitions of quality and value of raw materials, contributing to the redesign of extraction and consumption of natural resources.

New definitions of raw material quality also require new definitions of value in production processes.

The measures required to redesign processes of extraction and consumption of natural resources can be greatly reinforced as organizations help to promote transparency and cooperation between different players in a supply chain. Beyond the individual actions of a company, this requires joint activities among different organizations.

Leading companies in their industries show that their participation in associations that aim to establish rigorous standards of responsibility is an important step in the sustainable management of natural resources. Dialogue between companies that depend on the same raw materials is crucial to encourage stakeholders to continually promote good environmental and social practices.. Metals and minerals are extremely important natural resources for many different industries. In the coming years, they will be even more demanded due to the electrification of transport and the increase in digital technology. This poses major challenges to mining, an activity known for its high negative impacts, both environmentally and socially. These are social and environmental impacts related, for example, to the extraction of natural resources necessary for the manufacturing of batteries. Mining raw materials for batteries, such as cobalt and lithium, has a significant negative impact on the environment and communities and has been associated with poor working conditions and human rights violations, such as child labor.

Several industries have been mobilizing in recent decades to ensure sustainability in supply chains that use metals and minerals, something that demonstrates the importance of combined activities between organizations, whether in the same industry or not. Some examples are *Responsible Mining Initiative*, *Initiative for Responsible Mining Assurance, Responsible Mineral Assurance Process.*

Dialogue between different organizations also helps to develop requirements in which sustainability is a key element in the procurement strategy. It helps manage supply chains focused on identifying, assessing and mitigating risks related to human rights and natural resources.

2.4 Products with the least possible impact

The fourth topic presented in favor of redesigning the processes of extraction and consumption of natural resources refers to designing sustainable products. It argues how design and certifications can play an important part in the integrity of these new products.

Sustainable products enforce the responsible management of natural and human resources, but it is a fact that they still depend on large investments to gain larger market shares. Investments in research, supplier development, negotiation with clients and ensuring the responsible origin of products are essentital in this process.

Strategies for manufacturing products that help guarantee sustainable origin and increase market shares are presented by **Autoliv** and **Tetra Pak**.

Autoliv follows its "One Product, One Process" (1P1P) philosophy with the aim of driving global product standardization, improving and simplifying processes. 1P1P supports sustainability objectives by reducing the complexity of production by reducing the number of variants and processes, while minimizing waste and the environmental impact imposed by the use of inputs and logistics. An example is the 1P1P laces project for Ecotech seat belts. The project brought a reduction in the number of straps from 9 models to 1 model, helping to consolidate raw materials and suppliers. For the company, reducing complexity supports

the objective of improving the sustainability of its products and processes.

Another example is that in its global units and also in Brazil, Autoliv stopped using solvent-based paints, purchasing only water-based paint. In addition to redefining its range of suppliers, it was important to establish clear communication with customers about these changes, as production processes and deadlines also changed. One of the biggest challenges in creating more sustainable products is not only working with suppliers to implement innovations, but also informing customers about the costs and modifications that new processes can bring. Autoliv has also been carrying out research to increase the percentage of recycled materials (such as magnesium and plastics) in its products.

The importance of certifications

Tetra Pak has diligently incorporated responsible sourcing practices into its core strategies, ensuring implementation of these practices across the entire value chain. A key pillar of this approach is the company's dedicated effort to source paperboard that meets Forest Stewardship Council[™] (FSC[™]) standards, along with its investment in Bonsucro certified or recycled renewable polymers and responsibly produced aluminum.

Why Responsibly Sourced Cardboard Matters

Tetra Pak is committed to sourcing products only from sustainably managed and deforestation-free areas. To ensure the origin, traceability and responsibility of cardboard, **Tetra Pak** purchases material certified by the Forest Stewardship Council[™] (FSC[™]) and other controlled sources. Currently, the company uses the FSC Mix seal for its paperboard, allowing a mix of materials from forests certified by FSC-Forest Management (at least 70%) and/or wood controlled by FSC.

Using less plastic and more paper alone is not enough to reduce greenhouse gas (GHG) emissions in line with the goal of keeping the planet's temperature increase to 1.5 degrees Celsius. This is due to the fact that global dependence on wood-based materials can increase the risk of forest degradation and deforestation. Deforestation is one of the main drivers of biodiversity loss and GHG emissions.

Why renewable or recycled polymers matter

Polymers used in food and beverage packaging can be made from plant materials, such as sugar cane, which are renewable if sourced responsibly. In these cases, plant-based polymers can reduce the impact of packaging on climate change compared to traditional packaging materials such as plastics derived from fossil fuels. In this way, the company was first in the food and beverage industry to supply plant-based polymers, using Bonsucro standards for sustainable sugarcane.

In 2015, **Tetra Pak** was globally the first company in its industry to launch packaging made entirely from plant-origin renewable materials (cardboard and plant-based polymers). With this development, the company sold 24% more packaging worldwide (8.8 billion) and 12% more lids (11.9 billion) made with plant-based plastic in 2022 compared to 2021. At the same time, it significantly reduced its carbon emissions (131 tons less equivalent CO_2) compared to the use of regular plastic. All plant-based polymers made from sugar cane – used in plastic layers and packaging lids – are 100% certified by Bonsucro.

Key to Tetra Rex's success was **Tetra Pak's** engagement with suppliers. The company worked closely with its supply chain partners to ensure that the raw materials used, such as biodegradable plastics made from sugar cane and Forest Stewardship Council[™] (FSC[™]) certified cardboard, were sourced in a responsible and sustainable way. This collaboration was critical to ensuring a constant supply of sustainable materials that met rigorous quality and environmental standards.

Tetra Pak also became the first carton packaging player in the food and beverage industry to launch a lid using certified recycled polymers. This helped the company achieve targets for greater use of recycled materials.

Recycled polymers are certified by the Roundtable on Sustainable Biomaterials (RSB) and the International Sustainability & Carbon Certification (ISCC). In accordance with certification requirements, these plastics are made from a mix of recycled and non-recycled materials, with recycled materials being tracked throughout the Tetra Pak supply chain.

Why Responsible Aluminum Matters

Strict responsibility criteria in aluminum sourcing can help protect this scarce raw material, control its use in packaging and help minimize negative impacts on the environment and society. With the growing demand for aluminum around the world, it is necessary to mitigate the environmental and social impacts associated with the extraction and processing of this resource. Contributing to this purpose, **Tetra Pak** is one of the founders of the *Aluminum Stewardship Initiative* (ASI), a global nonprofit organization that has established a global standard and certification addressing GHG emissions, water use, biodiversity protection, human rights and labor. **Tetra Pak** aluminum foil suppliers are required to become members and be certified by ASI.

3. Collaborative governance

A responsible sourcing program is, above all, a model of collaborative governance that translates itself into teamwork across a value chain.

The comprehensive work required to implement responsible sourcing programs and therefore build responsible supply chains is an essential approach in the transition towards an economy that is less exploitative of nature. As the ten participating companies in this Handbook briefly presented, searching for social, environmental, transparency and accountability improvements is an important step capable of creating palpable, efficient and measurable stewardship mechanisms that are essential for this new economic vision. Incorporating the idea of *stewardship* into supply chains is not something abstract: it is based on the development of collaborative governance favoring environmental and social sustainability.

It is important to realize how this approach is especially significant to Brazil, which is capable of being a global leader in the transition towards a sustainable economy. Achieving such leadership is important to the country and the world. Companies who operate here can contribute to this stimulus and benefit greatly from it. There are many players who agree with the idea that the sustainable economic transition may bring opportunities for businesses, especially industries. But they also emphasize that the opportunity for countries with large environmental assets, such as Brazil, could only be achieved if there is simultaneous attention given to social liabilities. There are, therefore, important issues that need to be taken care of.

In Brazil, the transition demands commitment to simultaneously improve living conditions and the quality of the economy. If the country has a range of opportunities in the green economy to increase productivity, generate employment and income, develop strategic industries, attract investments and fulfill international commitments, it needs to simultaneously focus on the development of value-added products in all supply chains, creating jobs and promoting social inclusion, with an emphasis on socio-biodiversity and climate neutrality. Concentrating the transition on exporting commodities without social or valueadded gains could lead to a loss of development opportunities presented by the need for change.

In this sense, the topic of responsible sourcing could not be more important. By paying attention to the responsibility along various value chains, several organizations are participating in the redefinition of values that manage production processes and commercial transactions. The Swedish companies that contributed with this Handbook, the Swedish Brazilian Chamber of Commerce and the Swedish Embassy in Brazil believe in the benefits that this leading role can bring to both countries and to the world.