

The Climate Impact of Large-Scale Distributors: Acting on the Supply Chain

Daniele Pernigotti and Arianna Bertoni

Aequilibria S.r.l.-SB, Venice 30175, Italy

Abstract: This work aims to analyse the actions that companies working in large-scale distribution carry along their value chains to minimise impacts on climate change. Companies operating in this field are aware that it is less effective to act directly on the core processes and need to involve the upstream value chain in their carbon reduction strategy. These businesses, in fact, need to focus on the indirect GHG (Greenhouse Gases) emissions and depend on how suppliers manage their impacts. In this sector, virtuous companies collaborate with their suppliers to get involved in a common path of quantifying and cutting said impacts together. This aspect is particularly relevant in the case of large-scale retailers. However, the process is not immediate since the supply chain is usually very dense and diverse, for instance, adopting various approaches that do not always coincide. In any case, the key aspect is mapping these suppliers: one of the tools mostly used for this purpose is the survey, as a quick instrument able to reach hundreds of suppliers at the same time, receiving a fast and standardized response, which can easily be processed to form a comprehensive and harmonized mapping of the results as the first step for the subsequent implementation of mitigation strategies.

Key words: Climate change, suppliers, value chain, sustainability, large-scale distribution.

List of Abbreviations

CFI	Carbon Footprint Italy
CSR	Corporate Social Responsibility
GHG	Greenhouse Gases
ISO	International Organization for Standardization

1. Introduction

1.1 Introduction to Climate Change and Supply Chains Impact

As we well know, climate change is one of the most complex challenges that humanity has ever faced in its existence. It is now evident how this challenge is becoming more and more compelling and how the efforts must be global, quick, and resolute.

While a large number of companies adopt policies on carbon neutrality and, in general, emissions reduction commitments, it must be emphasised how retailers shall consider a further aspect: to be able to achieve said goals effectively.

Large retail players, in fact, have an impact that is

unloaded along the supply chain. Therefore, it is important that also the policies and commitments are shifted to the value chain. This can happen only by extending the approach provided by the GHG (Greenhouse Gases) accounting standards [1, 2], which forces companies to quantify their Scope 1 and Scope 2 impacts when in the majority of cases, the Scope 3 emissions are the most impactful on climate change.

More precisely, "Scope 3" emissions are indirect emissions which are caused neither directly by the organisation (i.e., "Scope 1") nor indirectly by the energy purchased and used (i.e., "Scope 2"). Within Scope 3 fall all the remaining emissions that can be caused—among others—by the products used, the transportation and the manufacturing.

To bring supply chains to decrease their impacts, however, it is necessary that they, too, decide to act. This article aims to go through actions that three important large-scale distributors have put in place to involve their value chains in their carbon management strategies.

Corresponding author: Daniele Pernigotti, M.Sc., CEO of Aequilibria S.r.l.-SB, research fields: monitoring, reporting,

verification and accreditation on climate change and carbon management.

In particular, the actors considered are:

1. Decathlon International;

2. Despar Italia;

3. Leroy Merlin Italia.

Here below, we will briefly describe the numbers and organizational dimensions of the three companies to understand their general context and the extent of their actions.

1.2 Organisational Size and General Overview of the Companies

1.2.1 Decathlon International

Decathlon is a multinational company, born in France, that has today a global reach. It specialises in the retail of sports equipment, gear, and apparel for a large variety of outdoor and indoor activities.

The company has, globally, 103,161 employees and a revenue of \notin 13.5 billion. In Italy, Decathlon counts 125 stores, but the company operates in 59 more countries worldwide and handles around 1.24 billion items.

However, the most important figure for this research is the number of suppliers: comprehensively, they are 1,285, of which 930 are considered "Rank 1" (suppliers of finished products and components that are in a direct contractual relationship with Decathlon), and 355 are "Rank 2" (suppliers of Rank 1, without a direct contractual relationship with Decathlon) [3].

Decathlon has adopted a climate policy at the international level, adhering to the SBTi (Science Based Targets initiative) and committing to reducing CO_2 emissions. The targets approved consist of the 75% reduction of Scope 1 and 2 emissions, together with a strategy to urge major suppliers to define, based on scientific data, a pathway to reduce GHG emissions by 2024.

These goals are connected to the joint commitment of reducing CO_2 emissions by 40% per product sold between 2016 and 2026 across all Decathlon activities (Scope 1, 2 and 3), where Scope 3 accounts for around 90% of the total GHG emissions. This strategy is an expression of the acknowledgement that the majority of a retailer's impacts are unloaded on its supply chain.

1.2.2 Despar Italia

Despar Italia, on the other hand, has a strong national dimension in the Italian context.

Founded in 1932 in the Netherlands, SPAR International is one of the big food retail suppliers, active in 48 countries. In Italy, it counts 12,274 employees (2021 data) and a turnover of more than \notin 4 billion, up 2.2% compared to 2020. Despar Italia currently has a total of 1,374 sales points (433 direct, 941 affiliated).

Despar deals with 16 private label brands which count, altogether, more than 3,600 different products around 4,600 SKUs (Single Stock-Keeping Units): this is connected with an equally large number of private label suppliers. In 2022 there were around 430 brand product suppliers covering various industries (such as grocery, fruits and vegetables, beverages, home care, and personal care).

With such a large number of suppliers, Despar Italia is well aware of the impact that they can have on the environment and the ongoing climate crisis. Hence, the management has undertaken a serious path to involve their brand product suppliers in defining a sustainability and climate policy. The corporate policy is currently in the phase of definition.

1.2.3 Leroy Merlin Italia

The third case study is represented by Leroy Merlin Italia, the national division of the French home improvement and gardening retailer. Leroy Merlin is present and operates in a dozen of countries, which will become around twenty if all the operations of the Adeo Group are considered.

The activities linked to the company's national context are still very impressive. The employees of Leroy Merlin Italia are around 8,500, for a total of 51 retail stores across the country.

The other two important data are related to the supply chain, considering the large impact that this has on the environment. More than 40,000 sale items are

distributed in Italy, and around 800 suppliers cooperate with Leroy Merlin to provide a sustainable range of products. The retailer has developed a survey to involve their suppliers in defining a strong sustainability policy and to gain new perspectives and forms of collaboration towards building a renewed relationship based on shared ethics and values like mutual respect and trust [4].

Since 2015, Leroy Merlin has committed to reporting on its sustainability impacts and benefits. The company also has designed a website dedicated to CSR (Corporate Social Responsibility) issues, which includes all the initiatives, commitments, and achievements related to the sustainable progress of Leroy Merlin.

2. Materials: Understanding the State of the Art

After briefly introducing the companies of our case studies and having caught a glimpse of the scope of their activities, it is now the moment to explore what these companies have put in place to involve the supply chain in their sustainability paths successfully.

We have seen how it has become common and important to adopt sustainability strategies to encompass efforts and achievements.

Companies adopt different measures to involve their suppliers in defining said policies. Two of the three examples we considered decided to use the survey tool to improve knowledge and engage with their supply chain. The third, on the contrary, decided to start from the quantification of their GHG inventory. This instrument provides insight into the GHG emissions of a company along its production processes. Building on that, they have learned that a big part of their impact was not under the organization's control but rather on their suppliers'.

In the next paragraphs, we will delve into the actions each company put in place.

2.1 Actions for Suppliers' Engagement

No matter how they reached it, each of the three

companies became aware of their impacts and decided to implement actions to involve their suppliers. Even if the survey method could be seen as the easiest, it is not necessarily the fastest and considered the most resource efficient.

Hence, we will analyse the scope and reasons beyond each company's decisions.

2.1.1 Decathlon International

Decathlon International has, as seen before, adopted a climate policy at the corporate level involving all of their local stores and retailers. Adopting serious targets, set through the SBTi, also involves adopting serious quantifications and actions to reach the set objectives.

After having quantified, in 2015, the carbon footprint of the company, one of the main results achieved was the acknowledgement of the impacts as represented along the value chain. They realised that the energy heat and electricity—used by the company accounted for around 50% of the total company's impact, considering Scope 1 and 2 emissions. As a result, to comply with the Paris Agreement, they have started working to put in place actions to reduce them.

In 2017, a further step was made: Decathlon started engaging its supply chain to measure on-field energy consumption. Since a significant share of the impacts came from the suppliers' production phases, Decathlon International decided to include them in its climate strategy. Along with the scientific targets, the company has set itself the goal to accompany its suppliers and partners towards the energy transition by urging them to define their own carbon reduction plan.

2.1.2 Despar Italia

Despar Italia, on its part, conducted in 2022 an extensive survey directed to all of its private label suppliers as a tool for engaging them in its sustainability strategy. It was sent out to 430 suppliers and received a response from nearly 80% – 340 suppliers.

The survey thoroughly addressed sustainability-related actions by the different companies, starting from asking whether they adopted a climate-related policy. Other topics covered were the implementation of GHG quantifications at the product and organisation level, energy consumption and its production from renewable sources, the implementation of lower-impact packaging solutions, and policies for managing food waste.

The results obtained from the survey are deemed satisfactory by the company: suppliers have shown great sensitivity to environmental issues and, in some cases, towards the implementation of actions to improve the Carbon Footprint of Products (CFP).

In particular, 64% of the suppliers have expressed the intention to take future action on sustainability on three major topics:

Actions to quantify, reduce and offset CO₂ emissions;

Transition to renewable energies and energy efficiency actions;

Reducing the use of plastic in packaging and using more sustainable materials.

The survey has had a very positive outcome since it allowed Despar Italia to understand the state of the art, and thus helped towards the definition of a more comprehensive sustainability strategy that could include the whole supply chain.

2.1.3 Leroy Merlin Italia

Leroy Merlin Italia, similarly to Despar, decided to prepare a survey addressed to all of its suppliers. Differently, however, it has been made available on the Supplier Portal instead of being sent out to each one personally. Hence, participation has been lower: around 200 responses were collected, counting for 25% of the supplier base.

The topics covered were also heading in the same direction: among them, there was the adoption of a Climate Change Policy, the quantifications of GHG at the product and organisation levels (Carbon Footprint, GHG Inventories), the usage of energy from renewable sources, the vehicles used for freight transport, and other reduction commitments already undertaken or planned for the future.

Besides the lower participation rate, another concern raised was that only some of the respondents currently adopt effective tools or methodologies for reducing GHG emissions or measuring them. By then, only 30% of the respondents had adopted a business policy regarding climate change—and nearly 40% used energy from renewable sources.

On the other side, many respondents affirmed that they would like to take stronger and more concrete actions in the near future, laying a good foundation for implementing common strategies.

3. Results and Discussion

We just analysed how suppliers have been engaged in the three different case studies to develop a common sustainability path. Let us now see the outcomes of these strategies.

3.1 Decathlon International

As a result of the quantification of its GHG inventory, Decathlon International has been allowed to detect the main impacts along the supply chain.

Therefore, since 2017, the supply chain has been involved with establishing production constraints that allow reducing consumption and dependence on fossil fuels. These criteria are constantly evolving to achieve the most appropriate design for the emergence of climate change:

• Achieving 90% of renewable energy consumption by 2026;

• Using zero coal-fired boilers (for "Rank 1" suppliers) by 2026;

• Engaging 90% of suppliers on the definition of SBTi targets;

• Implementing energy efficiency measures.

Thanks to the prior work on GHG quantification, Decathlon recognised the importance of synergy with its suppliers and understood how the company's turnover is strictly linked to protecting the "playing field": the Planet.

Hence, the company decided to engage in the challenge of climate change to answer the call of the Paris Agreement and—most importantly—chose to bring its supply chain along.

3.2 Despar Italia

Despar Italia, on its part, drew from the results of its survey to further engage some of its most virtuous suppliers. After presenting its sustainability strategy to all of its collaborators, some of them have been selected to implement studies of Carbon Footprint for the products, in accordance with the Standard ISO (International Organization for Standardization) 14067 [5], sold by the brand label to give evidence on the product packaging of this activity through the Carbon Footprint Italy label¹ [6].

Moreover, the company decided to include sustainability constraints for new and old suppliers: they inserted an addendum to the commercial contracts that will be signed with private label suppliers from 2023 onward – for both new and old partnerships. The purpose of this clause is to require increasingly challenging actions to be performed to start or continue collaboration and to give a clear and precise time frame to reach the target. By doing so, Despar sets a minimum threshold of sustainability that must be respected, bringing the game to an equal level for all.

3.3 Leroy Merlin Italia

Likewise, Leroy Merlin Italia drew from the results of its survey to consider new forms of collaboration. Although no concrete and specific actions have yet been initiated, Leroy Merlin is working on the possibility of initiating co-partnerships to achieve more sustainable results along the supply chain.

4. Conclusions

Even the retail sector has started to embark on a serious path to reduce GHG emissions, as already implemented by many other "carbon intensive" companies, or as is also happening in the automotive sector. Although each company chooses their path to proceed with the involvement of suppliers, the direction is the same.

Other large companies, such as ENEL, systematically request the quantification of the Carbon Footprint of Products from their suppliers, and this suggests a scenario of a greater diffusion of this tool from a top-down perspective.

However, it also leaves great spaces for collaboration along the supply chain between companies that decide to act on climate change, opening up to new ideas and synergies that must only be discovered.

These reduction actions will generate a double benefit, as the reductions in direct GHG emissions of large-scale retail manufacturers will be quantified as also benefiting large-scale retailers as indirect emissions.

References

- ISO. 2018. ISO 14064-1:2018 Greenhouse Gases—Part 1: Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals. Ginevra: International Organization for Standardisation (ISO).
- [2] WBCSD, WRI. 2004. GHG Protocol Corporate Accounting and Reporting Standard.
- [3] Decathlon International. 2021. Tomorrow Starts Today.
 2021 Non-financial Reporting Declaration. Villeneuve d'Ascq, France.
- [4] Leroy Merlin Italia. 2022. Bilancio partecipato dei benefici prodotti. Attività 2021. Rozzano (MI), Italy. (in Italian)
- [5] ISO. 2018. ISO 14067:2018 Greenhouse Gases—Carbon Footprint of Products—Requirements and Guidelines for Quantification. Ginevra: International Organization for Standardisation (ISO).
- [6] Carbon Footprint Italy. 2020. The Italian Programme Operator of Carbon Management. https://carbonfootprintitaly.it/en/.
- [7] ISO. 2019. ISO 14064-3:2019 Specification with guidance for the verification and validation of greenhouse gas statements. Ginevra: International Organization for Standardisation (ISO).

¹ *Carbon Footprint Italy* is the national program operator for communicating the quantification and reduction of GHG emissions of products and organisations, after having received a

verification, performed according to ISO 14064-3:2018 [7], by an independent Body, accredited according to ISO/IEC 17029:2019 [8] and ISO 14065:2020 [9].

The Climate Impact of Large-Scale Distributors: Acting on the Supply Chain

- [8] ISO. 2019. ISO/IEC 17029:2019 Conformity Assessment—General Principles and Requirements for Validation and Verification Bodies. Ginevra: International Organization for Standardisation (ISO).
- [9] ISO. 2020. ISO 14065:2020 General Principles and Requirements for Bodies Validating and Verifying Environmental Information. Ginevra: International Organization for Standardisation (ISO).