

Consumption: Retail, Apparel and Household

Sustainable Development Sector Analysis Framework

March 2021



This is a methodological document aimed at clarifying how Mirova takes into account sustainable development issues in the framework of the environmental, social and governance analysis of each sub-sector of activity.

An affiliate of:

Companies in Retail, Apparel and Household industries are exposed to a wide set of sustainability matters ranging from social issues in the supply chain to environmental pollution resulting from manufacturing processes and raw materials sourcing. While social risks are now common knowledge (such as labor and human rights violations in manufacturing plants and on cotton farms), an increased awareness and scrutiny on the environmental consequences can be witnessed, most particularly regarding water use. Indeed, some chemicals used and the improper disposal of wastewater into local water sources have tremendous negative consequences on biodiversity and water quality.

The growing demand for Retail, Apparel and Household products, a consequence of the rising average income, further magnifies these negative externalities. Considering the frequency of renewal and disposal of such products, especially in textile, managing the end of life phase has become a top-agenda issue. Considerably aware of the “real price” of their consumption habits, consumers are now expecting these companies to provide products with minimized negative impacts both on the environmental and social pillar.

Unlike most of Mirova’s exposure sectors where products and services have a direct positive contribution to the Sustainable Development Goals, the Apparel, Retail and Household industry offers limited sustainability opportunities. Nevertheless, companies are expected to transform their business into a more circular one, manufacturing eco-friendlier products (e.g. organic cotton certified, eco-design, eco-efficient for appliances) or certified fair trade.

Sectors: Apparel accessories and luxury goods, apparel retail, catalogue retail, department stores, footwear, general merchandise stores, home improvement retail, home furnishing retail, household appliances, internet retail, leisure products, specialty stores and textiles



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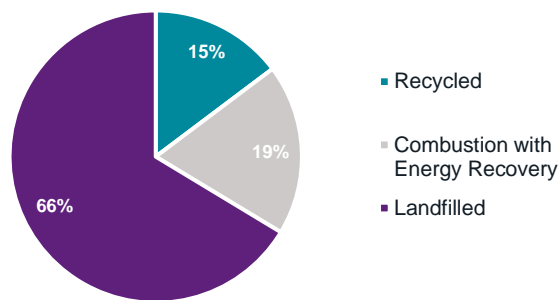
Sustainability Opportunities

Eco-design and the Circular Economy

The scale of potential sustainable opportunities unlocked by the industry remain small. Of course, companies can considerably reduce their negative impacts on the environment and society, yet, listed companies have and can barely develop products that can be directly identified as positively contributing to one of the Sustainable Development Goals.

To be considered sustainable, companies would need to adopt a circular business model through innovation and collaboration. Thus, reconsidering the current linear system is key for these companies. To date, most figures available suggest the shift towards sustainability has not yet started or remains at its premises. Be they manufactured with non-renewable or renewable resources, Retail, Apparels and Household products are mostly disposed and not recovered. In most geographies, landfill or incineration continues to be the preferred waste management methods.

Figure 1: Textile Waste Management in the USA (2018)

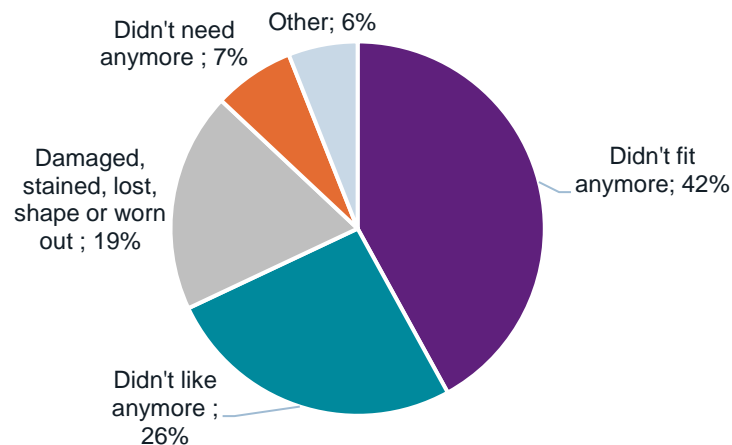


Source: Mirova, (EPA, 2021)

While globalization can be accounted for numerous other positive outcomes, it is undeniable that the induced economies of scale have largely contributed to retail product prices to shrink (except for the luxury sector). Unsurprisingly, increasing affordability of textile and retail products has accelerated the disposal and renewal rate. For example, clothing utilization in China has decreased by 70% over the past 15 years (Ellen MacArthur Foundation, 2017).



Figure 2: Reasons for Disposal/Donation/Sale of Clothing in the UK



Source: Mirova, (WRAP, 2016)

As mentioned above, the major opportunity to be highlighted for companies in the industry remains the reach of a large-scale circular business model. In order to increase the circularity of their business models, companies have different levers mostly relying on the integration of eco-design principles. The difficulty met by most of these companies is the necessity to rethink most pillars of their current business models. Indeed, circular economy sometimes might be in direct contradiction with the original business model (fast, cheap, often).

In order to transition, companies can:

- **Increase the percentage of recycled materials in their products.**

Increasing the percentage of recycled materials is the first step to transition towards a more circular business model, making sure that some of the materials are reintroduced in the new products. According to the Ellen MacArthur foundation in 2017, the textile industry relies on more than 97% virgin feedstock. When it comes to home furniture or appliances, the average percentage of recycled materials used in the process is also very low.

- **Increase the durability of their products.**

Alongside committing to manufacturing higher-quality products (via choose of fabric, time spent on seam finish or special attention to some fragile part of the products), companies also have different tools to leverage on durability. For example, through different marketing strategies can be considered as a powerful tool to ensure "durability". Solutions to be considered can also be short-term rentals or developing secondhand alternatives.

- **Ensure the end of life: recyclable, repairable.**

Companies can also play a role in designing, developing and offering the necessary infrastructure to recycle their products and increase awareness amongst their consumers on the importance of recycling their unwanted products. Indeed, to date, the industry has not found a relevant model ensuring recycling can be both profitable for the company and the environment.

Alongside recycling, the end of life can also be considered through the repairability features of the products. Awareness and actions have accelerated in recent years particularly for home furniture, appliances, durable goods. Indeed, the European Commission has ratified a new set of regulations named "right to repair" in order to make the repair of domestic appliances easier.

Nevertheless, solutions outlined remains at a very embryonic level and a potential scale up is yet to be tested. The adoption of these solutions is crucial for the future of the industry. Currently, no company under Mirova's universe can be considered as fully circular. However,



with the help of organizations focused on the circular economy, companies have been making steps towards circularity and these actions will be closely followed and encouraged.

Companies' initiatives to transition towards a more circular model is analyzed. As such initiatives, we identified actions implemented to increase durability, repairability, recyclability of their products, yet also measures to improve end-of-life management and alternatives business models such as short-terms rentals, second-hand etc. We also see a sustainability opportunity in educating consumers on the most environmentally-sound way of using a company's products. The company is also expected to contribute to the recycling infrastructures in markets where present. As most of these initiatives are still in their nascent stages and their contribution to business growth is yet to be quantified, it will be rare that companies are deemed significantly exposed to this theme.

KEY INDICATORS

- % of product lines or brands taking into consideration sustainable design
- % of recycled material available in products
- % of products that are recyclable or repairable
- Indicators on product utilization such as amount of time products are used before disposed, frequency that products are re-used before disposed



Exposure to Opportunities

Indicators considered:

- % of product lines or brands taking sustainable design into account
- % of recycled material available in products
- % of products with high recycled material

High exposure	>50%	The analysis of the company's overall strategy together with its R&D focus would complement the quantitative indicators.
Significant exposure	Between 10% and 50%	
Low or no exposure	<10%	
Negative exposure	No companies are currently rated at this level.	

View on Active and Healthy lifestyles

The increasing number of obese and overweight people is causing a global health epidemic. In order to address this issue, two levers are identified (alongside a long-term medical follow-up and support): 1) changing eating behaviors towards food with a more nutritious and healthy profile at moderate amounts and 2) increasing the amount of physical activity.

While stronger focus should be given to the first aspect, the importance of an active lifestyle must not be overlooked in the fight against an increasingly heavier global population.

Through marketing campaigns and use of their products, companies can promote and further encourage physical activity, thereby participating in the encouragement for healthier and more active lifestyles. In this sense, sports companies might be better positioned in doing so, as the primary use and main marketing angle of their products is in the context of sports and physical activity. However, the increasing presence of activewear in fashion trends is blurring the lines, thereby creating a need to emphasize the company's proactive role in encouraging an active lifestyle through its marketing practices to ensure that the sport in question plays the main role in its advertising campaigns.

Exposure to sportswear is considered with great caution. While this will be given a positive consideration, the opportunities rating will still be rated as Low or No exposure.



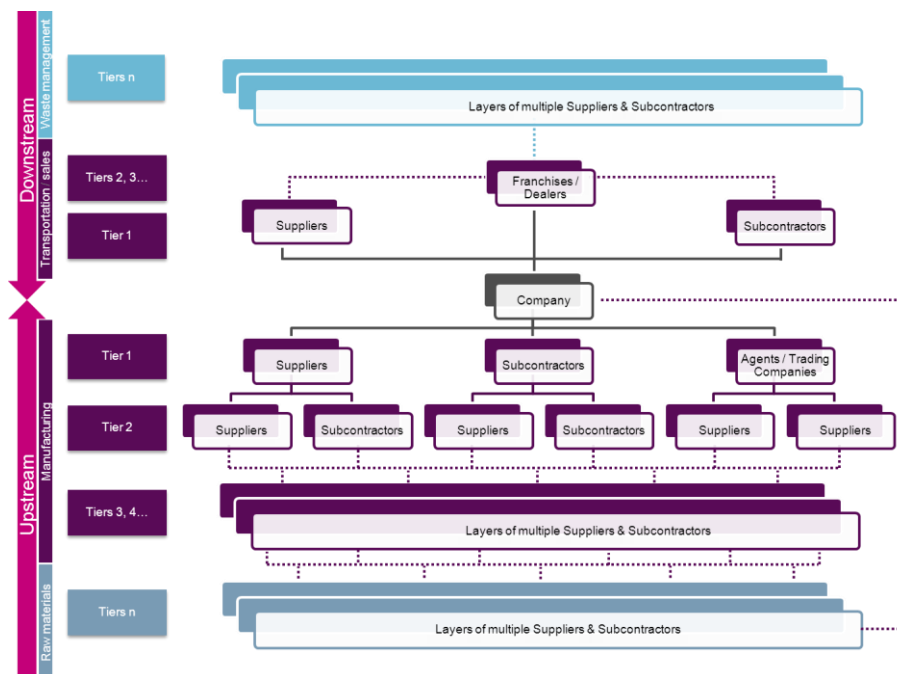
Environmental and Social Risks

Labor Rights in the Supply Chain

It is common practice for companies in the industry to outsource production to markets where labor costs tend to remain low, highly beneficial for such a labor-intensive industry. However, low labor costs are unfortunately often correlated to markets where international labor standards are not fully implemented and/or human rights sometimes flouted. Moreover, it also relates to countries where infrastructure appears to be non-adapted to larger scale industries. Since the 1990s, various controversies unveiled poor labor conditions in garment and footwear factories: poor or even dangerous working environments, incidences of child and/or forced labor, unpaid overtime, excessive overtime and no respect for the workers' freedom of association and right to collective bargaining. Some suppliers are also known to subcontract certain orders without their client's consent. This sub-contracting chain enables social abuses. Additionally, further up the supply chain, cotton harvesting also carries its own social implications. Due to the important need for labor for harvesting and picking, forced and child labor is a frequent practice in some regions' cotton farms. In 2020, Chinese regions Xinjiang has come under scrutiny for forced labor of a specific oppressed minority: the Uyghurs. A few years before, eyes turned to the situation in Uzbekistan. Furthermore, the excessive use of pesticides in cotton harvesting has been identified as seriously hazardous to the health of the farmers.

Today's global supply chains are complex (see Figure 4) and as such having proper oversight and transparency over one's supply chain is a challenging task. Governments are also taking part by implementing laws that require companies to have a better oversight over their supply chain. Examples of such laws are the UK's Modern Slavery Act, French Devoir de Vigilance¹ and California State's Transparency in Supply Chains Act.

Figure 3: Typical Chain of Suppliers and Subcontractors



Source: Mirova

¹ Duty of Care



While these controversies occur outside direct scope of operations, through their commercial relations with their suppliers, companies in the industry still carry the responsibility to ensure the highest level of social standards. As such, the company needs to conduct adequate due diligences to ensure that different actors in their supply chain respect their employees' rights and provide them with adequate working terms and conditions. This includes companies working together with their suppliers and relevant third-party organizations to ensure that human and labor rights are not violated at various stages of their supply chain. Furthermore, companies should equally ensure that their commercial terms and relationships with their suppliers do not encourage their suppliers to cut corners to fulfil companies' orders to the detriment of their workers. To date, third-party certifications are considered as credible means for companies to assure their consumers and other stakeholders the respect of certain standards. Indeed, such certifications provide transparency required in order to ensure that customers' purchasing decisions do not negatively impact the society.

We expect companies in this sector to be transparent on measures taken to ensure adequate working conditions throughout the process (from raw materials harvesting or production to the manufacturing process). We encourage more transparency on the supplier code of conduct, the list of suppliers and the different initiatives to promote fair working terms and conditions at the factory level. We ask companies to take part in multi-stakeholder collaborations to address these industry-wide issues.

Companies should also ensure that their own practices do not pressure supplier factories beyond their limits. This includes aggressive negotiation tactics, placing last minute changes to orders and giving orders above factories' physical capabilities. Employees who regularly work with suppliers should be aware of the social challenge's companies face at the factory level. We encourage the application of a responsible purchasing charter to the company's employees, increased traceability throughout the supply chain, and increased awareness of the social violations found at the supplier level amongst its buyers.

KEY INDICATORS

- Publication of key elements to mitigate social risk at the supplier level such as the supplier code of conduct, their list of suppliers, and their audit methodology, scores and results
- % of suppliers considered as key suppliers
- % of purchases from certified Fair-Trade organizations
- % of purchasers that are trained on sustainable development issues at their supply chain
- % of suppliers that are audited for social risks
- % of traceability along the supply chain
- % of cotton procured directly from the farmers and/or cooperatives
- Level of company participation in multi-stakeholder initiatives

Environmental Resources Management and pollutions

The Retail & Apparel sector covers a variety of diverse companies with various environmental impacts at different levels of severity. Companies in this sector include clothing companies where their main impacts are in the earth's waterways, home furnishing companies where deforestation is more of a concern, home appliances companies and retailers where energy and water efficiency are more important.

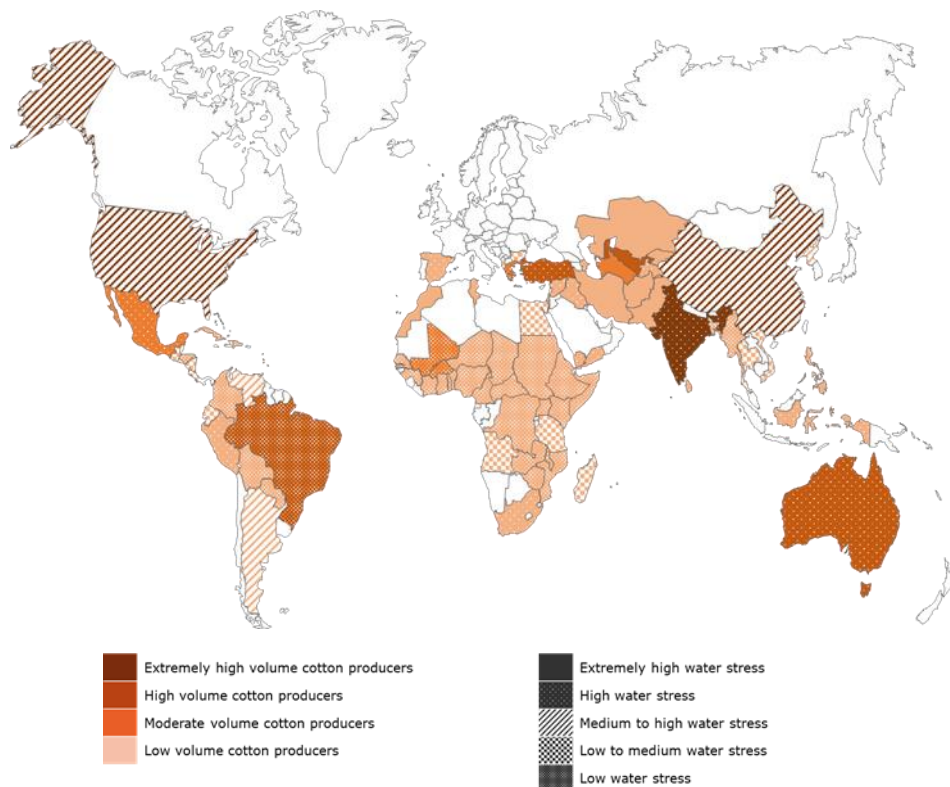
Cotton harvesting, a water-intensive industry

Within companies in the sector, environmental impacts generated by textile and garment companies are considered as the most significant and urgent. The industry carries one of the largest water footprints globally. According to the World Bank in 2019, every year the fashion



industry uses 93 billion cubic meters of water, which is enough to meet the consumption needs of five million people. Cotton cultivation and harvesting is indeed highly water intensive and their negative environmental impacts are already being experienced. The unsustainable farming of cotton (the excessive use of water and pesticides) has led to the complete dry-up the Aral Sea in Central Asia. The impacts of cotton harvesting on droughts in certain areas such as Uzbekistan alongside the poor working conditions and human rights violations of different garment manufacturing companies in various developing markets are some of the best-known examples. This is further highlighted in the graph below whereby area in extremely high-water stress continues to be a major cotton producing region. Currently, cotton is one of the most water thirsty crops in several other large River Basins such as the Indus River in Pakistan, and the Rio Grande in the United States and Mexico.

Figure 4: World Cotton Producers vs. Water Stress



Source: Mirova, (USDA Foreign Agricultural Service, 2018), (Gassert, Reig, Luo, & Maddocks, 2013)

The issue of wastewater management and water pollution

In the production phase, the World Bank estimates that around 20 % of wastewater worldwide comes from fabric dyeing and treatment. The dyeing, rinsing, and treatment of textiles require a large amount of fresh water. If the water is not properly treated prior to release, these toxic chemicals used for the treatment of textiles reach out water supply and some of these chemicals cannot be filtered or removed. The same problems are also found in leather tanneries and their high use of chemicals. These substances used in different stages of the manufacturing process remain attached to the product, raising concerns on how this would affect people and the environment.

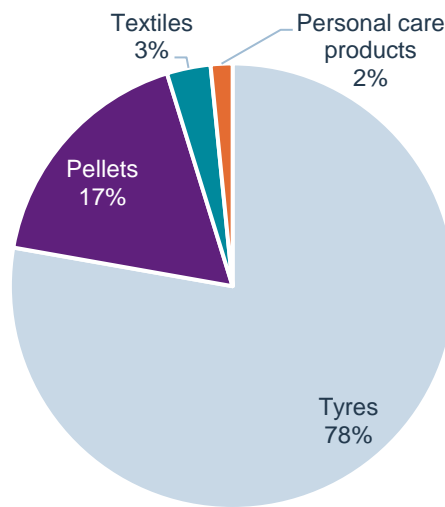
Furthermore, the apparel and the household textile industry are also facing an increasing scrutiny regarding their responsibility in micro-plastics leakages in oceans and terrestrial environments. Indeed, a growing share of the industry is using synthetic fibers to manufacture their products. According to Textile Exchange, polyester represented as of the end of 2019, 52% of global fiber production volume compared with 23% for cotton. Synthetic fibers are the results of chemicals synthesis manufactured out of plastic-based polymers. In textile, mostly used synthetic fibers are nylon and polyester. Awareness is highly increasing over this type



of pollution, yet, current ability to understand and to precisely measure the scale of the pollution remains at an early stage. Thus, as initial assumptions vary, there is no real consensus on the share of synthetic textiles microplastics releases in the oceans. According to Systemiq (2020), textiles & personal care products contributed for 4% of microplastic leakage by mass combined in 2016. Some other estimations, such as made by the International Union for Conservation of Nature estimate that textiles account for 35% of primary microplastics released in the oceans. The reason for such pollution is mainly the release of these synthetic microfibers during washing that are not filtered by current individual or professional washing equipment and are thus released all the way through oceans.

As illustrated by the figure below, the laundry of synthetic textiles is the first cause of microplastics releases in oceans.

Figure 5: 2016 microplastic leakage to the ocean by source



Source: Mirova, Systemiq, 2020

Wood sourcing and Deforestation

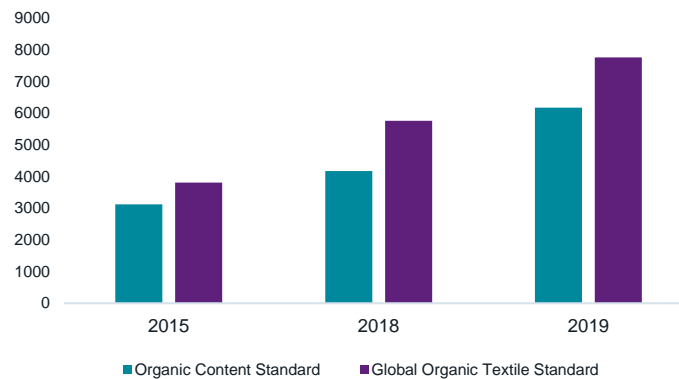
For home furnishing companies, their impacts are mainly occurring in wood sourcing, as it is the main material for the majority of the industry's products. While wood is a renewable resource, unsustainable and illegal logging can lead to detrimental environmental consequences such as deforestation and biodiversity destruction. For the remaining actor of the sector, household appliances and retailers, their main impacts are linked with the energy and water use and waste production of their operations and manufacturing sites. While there is no data on the collective environmental impact of these industries, it is nevertheless important to increase the water and energy efficiency of one's operations and ensure that manufacturing waste is recycled as much as possible.

Certifications and alternatives

Similarly to the social risks, environmental impacts of the Retail & Apparel sector are found in different parts of its supply chain, from raw materials sourcing to the manufacturing of the finished goods, and its direct operations. Companies then have a role to play by using their commercial leverage to encourage more sustainable practices from their suppliers. First would be by sourcing responsibly. To date, third-party certifications remain considered as the most credible means for companies to assure their consumers and other stakeholders the respect of certain standards. Indeed, such certifications provide transparency required in order to ensure that customers' purchasing decisions do not negatively impact the environment. For example, the certification Certified Organic would focus more on the use of pesticides and fertilizers).



Figure 6: Number of Certification Units for Organic Content Standard² and Global Organic Textile Standard³



Source: Mirova / (TextileExchange, 2020)

However, certifications have drawbacks and are often focusing on one limited issue, thus are not comprehensive on all environmental aspects. Companies should thus continue to work collaboratively with the certification organizations and other relevant third parties to improve certification processes and maintain its integrity.

Another expectation would be to eliminate some materials carrying negative impacts on the environment in the use phase. In the manufacturing phase, companies would need to reduce the use of chemicals and to phase out the use of substances of concern (e.g. per fluorinated chemicals, PFCs). Furthermore, companies also need to ensure that their business relationships with their suppliers are healthy enough to better encourage more environmental practices in their factories and suppliers' operations. Solutions are the same as those presented in the previous section on labor rights.

Companies implementing strict environmental standards with a strong focus on their supply chain can better mitigate the environmental risks. We encourage companies to eliminate the use of pollutant raw materials, to reduce the amount of chemicals used and to phase out the number of hazardous chemicals from their treatment process. With an increasing scrutiny, we encourage companies to improve their knowledge towards microfibers pollution in order to tackle the devastating biodiversity issue.

Collaboration with third-party organizations can help accelerate the process. We consider some third-party certifications as a good indicator of a commitment to sustainability and transparency. We therefore look for certified companies for their environmental and social behaviors beyond local legal requirements. While this is mainly targeted towards textile companies, it is also true for home furnishing and household appliances companies.

Furthermore, the integration of technology enabling environmentally friendlier processes is a proactive way for companies to address this issue. For example, no- or less- water dyeing technologies are currently gaining momentum in the textile industry. In terms of the sustainable procurement of cotton and timber, companies should prioritize the purchase of sustainably certified materials whenever possible and should encourage the use of more sustainable practices amongst their cotton farmers and forest managers.

² Certification whereby 95% of raw material is organic material

³ Certification whereby 70% of fibre is organic material



KEY INDICATORS

- Mandatory environmental protection processes in the supplier code of conduct
- % of suppliers considered as key suppliers and/or audited for environmental risks
- % of cotton sourced from areas of high-water stress
- % of timber that is sourced from highly valuable and threatened forests
- % of dyeing factories and/or tanneries located in areas of high-water stress
- % of purchases bought from sustainably certified organizations
- % of water treated and/or recycled
- % of chemicals used that are deemed hazardous by third-party organizations
- % of raw materials that are renewable and sustainably sourced

Human Resources

While it might change in the next few years, most companies in these sectors still sell most of their products in direct stores. These stores usually have a significant employment base with store hours being more than the regular 8 hours. Furthermore, these jobs tend to be physically demanding, low-paying and low-skilled thereby attracting the lesser educated and more vulnerable population in any labor force. Additionally, research has shown that retail companies investing in their labor force can bring about operational benefits to the company as well. Such examples of these are higher labor productivity and increased customer satisfaction (Ton, 2012). Consequently, it is also to the benefit of the company to invest in proper management. With the emergence of e-commerce, retail jobs might slightly evolve in the new few years, from sales in brick and mortar shops to more routine jobs in warehouse. Yet, to date, companies in this segment of industry have remained lagging in what regards e-commerce and most of the employment remains.

We expect companies to have a labor management policy that is at least in line with the International Labor Organization's 8 Fundamental Conventions addressing the following underlying issues: freedom of association and the effective recognition of the right to collective bargaining, elimination of all forms of forced and compulsory labor, effective abolition of child labor and elimination of discrimination in respect of employment and occupation. We give an importance to the freedom of association and collective bargaining as this freedom is not always respected in several labor markets.

KEY INDICATORS

- Presence of a labor management policy
- Scope and coverage of labor management policy
- Performance indicators: % of global workforce that is covered by collective bargaining agreements
- Absenteeism
- Employee turnover

Business Ethics

While companies in these sectors are not the most exposed or the most likely to be found engaging in controversial practices from a business ethics point of view, it is nevertheless important that companies be transparent with regard to their lobbying practices and anti-corruption and bribery policies and initiatives.

Furthermore, considering that companies in this industry are generally global organizations, we would also appreciate more transparency about their tax optimization strategy.

Beyond having the necessary policies in place (business ethics, lobbying and donations, etc.), we would appreciate more information the company actions to ensure these policies are implemented throughout the entirety of its operations (audits, training and corrective measures).



Furthermore, we encourage companies to adopt a transparency policy about their lobbying efforts, donations made to third-party organizations, and country-by-country reporting on taxes in countries with operations.

KEY INDICATORS

- Presence of the following policies: business ethics, lobbying and donations
- On-going business ethics litigations and company response
- Lobbying and donation report
- Ethical controversies around the company and their response
- Effective tax rate
- Tax country by country reporting

Sustainable Development Governance

It is important to understand how the company integrates sustainability into its core strategy and how it is implemented in its operations. The good governance of sustainability, with support from top management, is more likely to have a sustainable strategy that is credible and robust.

We encourage companies to have both a top-down and bottom-up approach when it comes to sustainability: top-down in the sense that there is support from the CEO and Chairman to effectively put into place a sustainability strategy that is in line with the company's overall strategy, and bottom-up where employees are encouraged to use their creativity and experience to better integrate sustainability into their everyday working life.

KEY INDICATORS

- Management to whom the director of sustainability reports to
- Presence of sustainability targets into the variable compensation of the executive committee
- Presence of an externally audited and certified sustainability report



Risk Assessment

	Criteria
Positive	<p>Not be eligible for a Risk rating AND</p> <ul style="list-style-type: none">- Evidence of robust environmental and/or social management systems that effectively address the company's environmental and social issues in the entirety of its operations and include a majority of its supply chain- Productive responses to ethical controversies with evidence towards improvement OR- Absence of ethical controversies
Neutral	<p>All other cases</p>
Risk	<p>Responses to repeated ethical controversies that are deemed as insufficient or inappropriate or</p> <ul style="list-style-type: none">- Company practices and/or environment that go against any of the issues outlined above or- Weak governance structure to allow for sustainability practices to flourish



Conclusion

The Retail, Apparel and Household industry is less prone than other industries within Mirova's scope to offering products and services with clear sustainable development solutions. The opportunities identified are either marginal (healthy lifestyles through sporting companies) or still represent a non-significant proportion of their overall revenues.

Efforts made by some companies to ensure the sustainability of their products (e.g. increasing use of sustainably sourced raw materials, increasing recycled content in and the recyclability of their products) are undeniable and have shown small signs of the willingness to transform their business model into a more circular one. Nevertheless, the rise of fast fashion and general household products consumption question the possibility of such business models to be fully sustainable.

Companies are thus mainly analyzed on their ability to manage the tremendous environmental and social risks they faced. In terms of environmental and social risks, the two main risks of the industry are human rights and working conditions in the supply chain and the various environmental impacts, particularly on water and forests. As they are mainly occurring within the supply chain, the proper mitigation and avoidance of these risks requires a comprehensive supply chain management including at least the following aspects:

- enhanced relationships with key suppliers,
- increased traceability from the raw materials phase to the production and manufacturing phase,
- inclusion of social and environmental clauses in supplying contracts,
- formalization and implementation of environmental and social audits at the supplier level and the inclusion of sustainability criteria in the overall supplier selection process.

Furthermore, companies can also tackle these issues by introducing more water and/or energy efficient technology, such as waterless dyeing for companies in the textile sector. Robust labor management processes are also expected to be implemented for their direct human resources issues, particularly considering retail shops workers account for an important portion of workforce. Along with comprehensive policies and best practices, a stable and robust governance structure overlooking these measures is needed to ensure its effectiveness.

The level of transparency is a necessity to analyze the company's performance in what regards sustainability. As such, a company can be excluded from the investable universe due to the lack of transparency in their environmental and social risk management. For example, the repeated occurrence of controversies and responses deemed inadequate given the scale can lead to a company to be ineligible. Similarly, it is possible to be excluded from the investment universe from an ESG standpoint if risk management is not deemed robust compared the level of exposure. When possible, discussion with the company is established before giving the company in question a risk rating.

Our Approach to sustainability assessment

Acting as a responsible investor requires interpreting the economic world within its social and environmental context. This approach calls for understanding the interactions between different private-public players, small-medium-large companies, developed and developing economies to ensure that each player's growth is consistent with the balance of the rest of the system. It is a long-term approach that guarantees that today's choices will not lead to negative consequences for future generations. Understanding these complex relationships demands:

- Clear understanding of sustainable development issues facing our societies,
- Assessing the possible interactions between the assets of our investment strategies and these sustainability issues.

The SDGs as a Guide

Following the Millennium Development Goals created in 2000, the United Nations set out a new framework for sustainable development in 2015. It contains 17 Sustainable Development Goals (SDGs), broken down into 169 specific targets designed to address the main social and environmental issues between 2015 and 2030. In addition to having been adopted by all members of the United Nations, the SDGs offer several advantages.

First, they establish a comprehensive framework concerning environmental and social issues, applicable to all economies regardless of their level of development. Thus, while some issues such as ending hunger or ensuring access to water for all are often more relevant for low- and middle-income countries, other objectives such as fighting climate change or making cities safe, resilient and sustainable, are applicable at all levels of development.

Moreover, the SDGs can be considered as a frame of reference for sustainable development issues for a variety of actors, from governments to companies and investors. The private sphere is increasingly considering environmental and social issues, illustrating new forms of governance where subjects of general interest are no longer solely the prerogative of the public sphere. Considering the SDGs can help companies to think on how they create environmental, economic, and social value.

Finally, the SDGs help investors to question the long-term resilience of their assets and portfolios to the ongoing transformations. Then, investors can go even further by looking at their exposure to new solutions and economic models that will respond to long-term economic transformations. For example, the targets associated with the SDGs to significantly increase the share of renewable energy and to double energy efficiency by 2030 imply a profound transformation within the energy sector.

We consider the SDGs squarely in line with our mission. As a result, in 2016, Mirova decided to use this framework to define its responsible investment approach.



Figure 7: The 17 Sustainable Development Goals

	End poverty in all its forms everywhere		Reduce inequalities within and among countries
	End hunger, achieve food security and improved nutrition and promote sustainable agriculture		Make cities and human settlements inclusive, safe, resilient and sustainable
	Ensure healthy lives and promote well-being for all at all ages		Ensure sustainable consumption and production patterns
	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all		Take urgent measures to combat climate change and its impacts
	Achieve gender equality and empower all women and girls		Conserve and sustainably use the oceans, seas and marine resources for sustainable development
	Ensure availability and sustainable management of water and sanitation for all		Protect, restore and promote sustainable use of territorial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
	Ensure access to affordable, reliable, sustainable and modern energy for all		Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all		Strengthen the means of implementation and revitalize the global partnership for sustainable development
	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation		

Source: United Nations



Assessing Environmental and Social Quality by the SDGs

We believe that the SDGs will transform the economy as we know it. Acting as a responsible investor starts with taking a broader view of the way investors think about the environmental and social profile of the assets they finance. These interactions can be grouped into two categories:

- **Materiality:** how the current transitions are likely to affect the economic models of the assets financed either positively or negatively.
- **Impact:** how investors can play a role in the emergence of a more sustainable economy



We believe that these two approaches are closely linked. Our evaluation methodology thus seeks to capture the extent to which each asset contributes to the SDGs. From our perspective, this approach provides a relevant vision on both the “Materiality” and “Impact” aspects.

A Five-level Qualitative Analysis

Mirova has based its environmental and social evaluation method on four principles:

A RISK/OPPORTUNITY APPROACH

Achieving the SDGs requires taking two different dimensions into account that often go together.

- **Capturing opportunities:** when companies center their strategies on innovative business models and technologies focused on technological and societal transformation, they can often capture opportunities related to the SDGs.
- **Managing risks:** by proactively managing risks related to these transitions, companies can reduce and re-internalize their social and environmental externalities, which often takes the form of general management of sustainability issues.

This analysis structure gives equal importance to opportunities and risks. It is the first prism through which we analyze sustainable development issues.

A LIFE-CYCLE VISION

To identify the issues that could impact an asset, the analysis of environmental and social issues must consider the entire life cycle of products and services, from raw material extraction to end-of-life phase.

TARGETED AND DIFFERENTIATED ISSUES

Our risk/opportunity analysis focuses on the elements most likely to have a real impact on the assets studied and on society in general. Additionally, the issues that economic players face

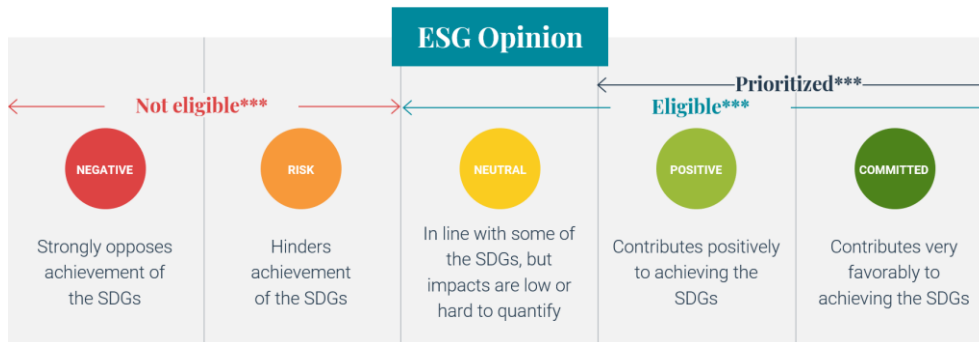


are very different depending on the sector, and can even vary within the same sector⁴. For example, it is important for us to focus on work conditions for suppliers in the textile industry, while for automobile manufacturers, the focus will be more on energy consumption during product use.

So, our analysis focuses on a limited number of issues adapted to the specificities of each asset.

A QUALITATIVE RATING SCALE

Our analyses are summarized through an overall qualitative opinion on five levels. This opinion assesses to what extent an asset contributes to the SDGs.



***5

This rating scale is based on the SDGs and their achievement. As a result, opinions are not assigned based on a distribution set in advance: we are not grading on a curve overall or by sector. Mirova does not exclude any industry on principle and carries out a thorough analysis of the environmental and social impacts of any asset. For some sectors, this analysis may lead to the exclusion of all or some of its actors. For example, companies involved in fossil fuel extraction are considered "Risk" at best, while renewable energy companies are generally well rated.

An indicative grid provides some overall guidelines regarding the links between opportunities, risks and the overall sustainability opinion.

Sustainability Risks Review	Positive	Risk	Positive	Positive / Committed	Committed
	Neutral	Negative / Risk	Neutral	Neutral / Positive	Positive / Committed
	Risk	Negative	Negative / Risk	Risk	Risk
		Negative	Low or no	Significant	High
		Sustainability Opportunities Exposure			

⁴ For every sector, defining key issues is the subject of a specific study. This document is available on Mirova [website](https://www.mirova.com/fr/recherche/comprendre#vision). <https://www.mirova.com/fr/recherche/comprendre#vision>

⁵ *** For Mirova's investments



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