

Consumption: Retail, Apparel and Household

Sustainable Development Sector Analysis Framework

April 2018



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.

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Companies in these industries are exposed to a wide set of issues ranging from social issues in the supply chain to environmental issues linked to the manufacturing processes and the sourcing of their raw materials. While the social risks have been known for quite some time (such as labour and human rights violations in manufacturing plants and on cotton farms), there is an increasing awareness for the environmental impacts, most particularly with regard to water use: the chemicals used and the improper disposal of wastewater into local sources of water. The growing demand for these products, a consequence of the rising middle class, further magnifies these impacts. The frequency at which consumers dispose of products to buy new ones is also creating environmental problems at the end of life phase of these products. Conscious of these impacts, consumers are increasingly demanding from these companies to provide products that minimize negative environmental and social impacts. Unlike most of Mirova's sectors where products and services have a direct contribution to the Sustainable Development Goals, there are limited opportunities as to what the companies in this sector can offer with regards to the direct impacts of the products. Nevertheless, companies can still capture opportunities by offering products that are eco-friendly (e.g. organic cotton certified, eco-design, eco-efficient for appliances) or certified fair trade and by transforming their business models into a more circular one.

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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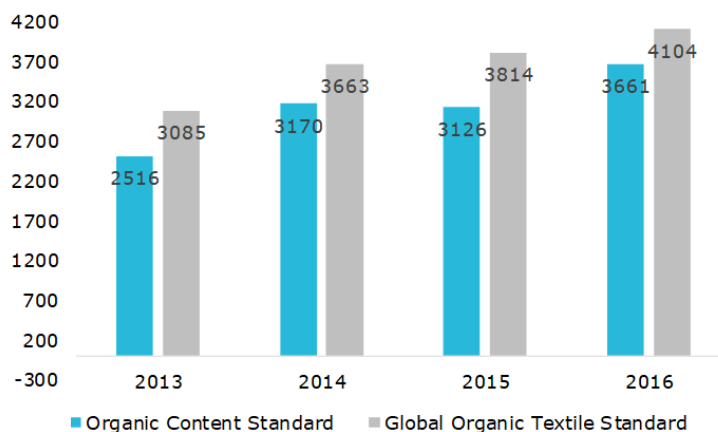


Sustainability Opportunities

Sustainably Certified and/or Designed Products

The majority of the negative social and environmental impacts of Retail & Apparel companies are found in their supply chains - deforestation, impacts on biodiversity, impacts on the rights of smallholder farmers and local communities, water pollution, and poor labour conditions. Consumers' awareness of such impacts is gradually increasing, partly due to campaigns held by concerned non-profit organizations and the increasingly common media reports on these issues. The best-known examples are the impacts of cotton harvesting on droughts in certain areas such as Uzbekistan and the poor working conditions and human rights violations of different garment manufacturing companies in various developing markets. Furthermore, using a lifecycle analysis, part of the environmental impacts are during the consumer use-phase of certain products such as the energy use of home appliances. Companies can appeal to the growing population of conscious consumers by increasing transparency on how their products are sourced and produced to ensure that they are done so in a responsible and sustainable matter. Companies that sell electrical appliances can enhance their sustainability offerings by producing appliances that are more energy and water efficient than the market average

Figure 1: Number of Certification Units for Organic Content Standard¹ and Global Organic Textile Standard²



Source: Mirova / (TextileExchange, 2017)

The best and the most credible way for companies to assure their consumers and other stakeholders that they adhere to certain standards is through third-party certifications. Third-party certifications provide consumers with the transparency and credibility required in order to ensure that their purchasing decisions do not negatively impact the environment and/or society. These certification processes are nevertheless not perfect. Companies would thus need to work collaboratively with the certification organisations and other relevant third parties to improve the processes and maintain its integrity. Third-party certifications vary depending on the underlying theme (e.g. social certifications, such as the Fair Trade certification, would have a stronger focus on the social aspects of the supply chain, or Certified Organic, would focus more on the use of pesticides and fertilizers), but all of them have minimal social and environmental standards that must be respected.

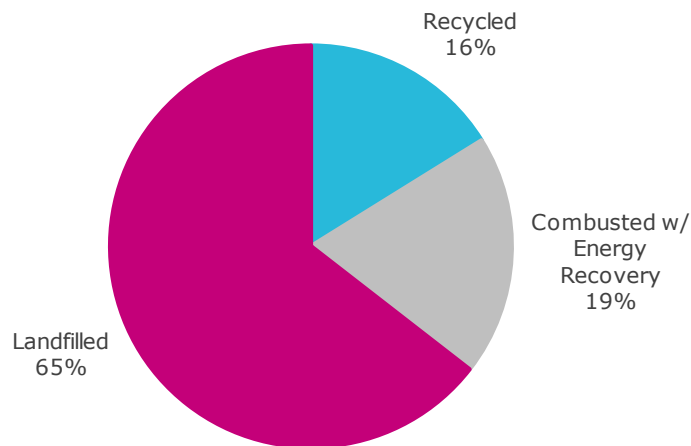
¹ Certification whereby 95% of raw material is organic material
² Certification whereby 70% of fibre is organic material



Eco-design and the Circular Economy

Today's retail and apparel industry is a linear one whereby non-renewable and renewable resources are turned into products that are mainly sent to landfill or incinerated after their use. Additionally, the increase in globalization has caused the prices of these products to decrease. That these products are now more affordable has then increased the rate of which they are renewed and disposed of. For example, clothing utilization in China has decreased by 70% over the past 15 years (Ellen MacArthur Foundation, 2017). This decrease in clothing utilization not only multiplies the negative impacts incurred during their production but also increases the amount of undervalued and underutilised products in landfills. As such, if companies are to be sustainable and to survive, they would need to reconsider the current linear system and transform it into a circular one through innovation and collaboration.

Figure 2: Textile Waste Management in the USA (2014)



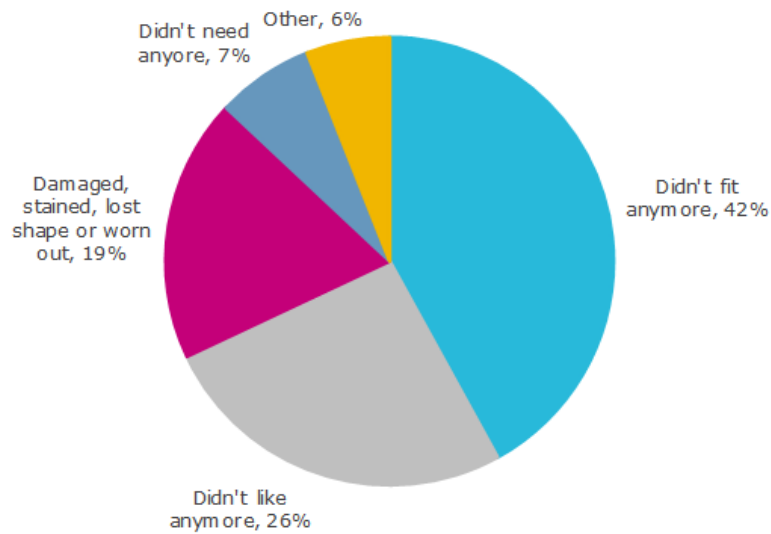
Source: Mirova, (EPA, 2016)

Companies can start in the design phase of their products by integrating eco-design principles. Integrating eco-design principles could increase the recyclability and the durability of their products while at the same time minimize the environmental and social risks linked to the product. Companies can also increase the circularity of their products by increasing the use of recycled materials. While this is currently in its infantile stages, several companies have started integrating recycled materials into their production lines.

Companies can also make their business models more circular first by increasing the amount of time their products are being used through different marketing strategies. Solutions to this are short-term rentals, and making durability aspirational through advertising campaigns. Companies can also play a role in setting up the infrastructure necessary to recycle their products and increase awareness amongst their consumers on the importance of recycling their unwanted products.



Figure 3: Reasons for Disposal/Donation/Sale of Clothing in the UK



Source: Mirova, (WRAP, 2016)

The solutions outlined have yet to be tried and tested in the real world. Yet the adoption of these solutions is important for the future of the industry. No company under Mirova's universe can be considered as fully circular. Nevertheless, with the help of organizations focused on the circular economy, companies have been making steps towards circularity and these actions will be closely followed.

We see third-party certifications as a good indicator of a commitment to sustainability and transparency. We therefore look for companies that are certified for their environmental and social behaviours beyond local legal requirements. We also see a sustainability opportunity in educating consumers on the most environmentally-sound way of using a company's products.

Companies' initiatives towards transforming to a more circular model will be analyzed. These initiatives include increasing the amount of time their products are used, ensuring the recyclability of its products and contributing 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 products with a third-party sustainably sourced certification
- % of product lines or brands that take into consideration sustainable design
- % of recycled material found in products
- % of products that are recyclable
- 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 :		
<ul style="list-style-type: none"> - % of products with a third-party sustainably sourced certification - % of product lines or brands that take into consideration sustainable design - % of recycled material found 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. Addressing this issue involves two aspects: 1) changing eating behaviours 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 the marketing and use of their products, companies can promote and further encourage physical activity within their customers, thereby participating in the push for healthier and more active lifestyles. In this sense, sports companies are well 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 taken with great caution. While this will be given a positive consideration, the opportunities rating will still be rated as Low or No exposure.

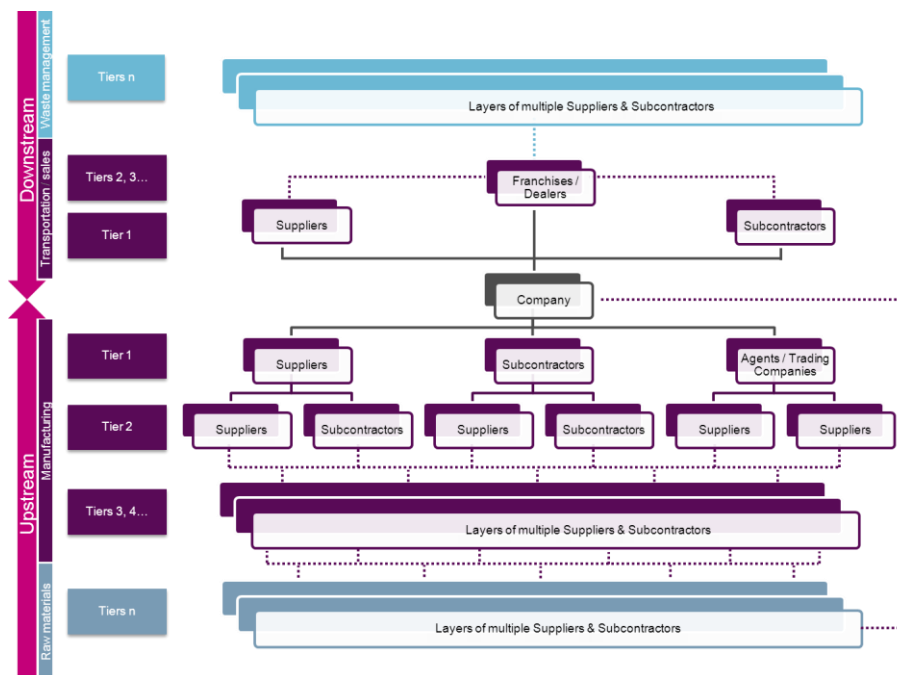


Environmental and Social Risk

Labour Rights in the Supply Chain

It is common practice in the industry for companies to outsource production to markets where labour costs are lower. This is particularly beneficial for the industry where the manufacturing of their products is known to be labour intensive. However, markets where labour costs are low are also markets where labour standards and rights are not well implemented or often respected and where infrastructure is not adapted to larger scale industries. Since the 1990s, various controversies have risen with regard to labour conditions where garment and footwear products are being made. The controversies are quite common in most locations of where these factories are based: poor or even dangerous working environments, incidences of child and/or forced labour, 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 consent from their clients to factories where conditions could be even poorer. Additionally, further up the supply chain, cotton harvesting also has its own social implications. Due to the high need for labour for harvesting and picking, forced and child labour is frequently found on cotton farms. Furthermore, the excessive use of pesticides in cotton harvesting is hazardous to the health of the farmers.

Figure 4: Typical Chain of Suppliers and Subcontractors



Source: Mirova

While these controversies happen outside the companies' direct operations, through their commercial relations with their suppliers, they still have some responsibility to ensure that these controversies do not happen in the factories where their products are manufactured. 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. In order 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, France's Devoir de Vigilance³ and California State's Transparency in Supply Chains Act.

3 Duty of Care



As such, the company needs to perform adequate due diligence 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 different their suppliers and relevant third-party organizations to ensure that the human and labour rights are not being violated throughout 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.

We ask companies in this sector to show measures taken to ensure adequate working conditions throughout the production process. This is usually done through self-answered questionnaires and/or on-site audits in-house or by third parties. We also encourage companies to be transparent when it comes to 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 issues that are not isolated to one company.

Companies should ensure that their own practices do not push 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 challenges 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 that are considered 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 mutli-stakeholder initiatives

Environmental Management

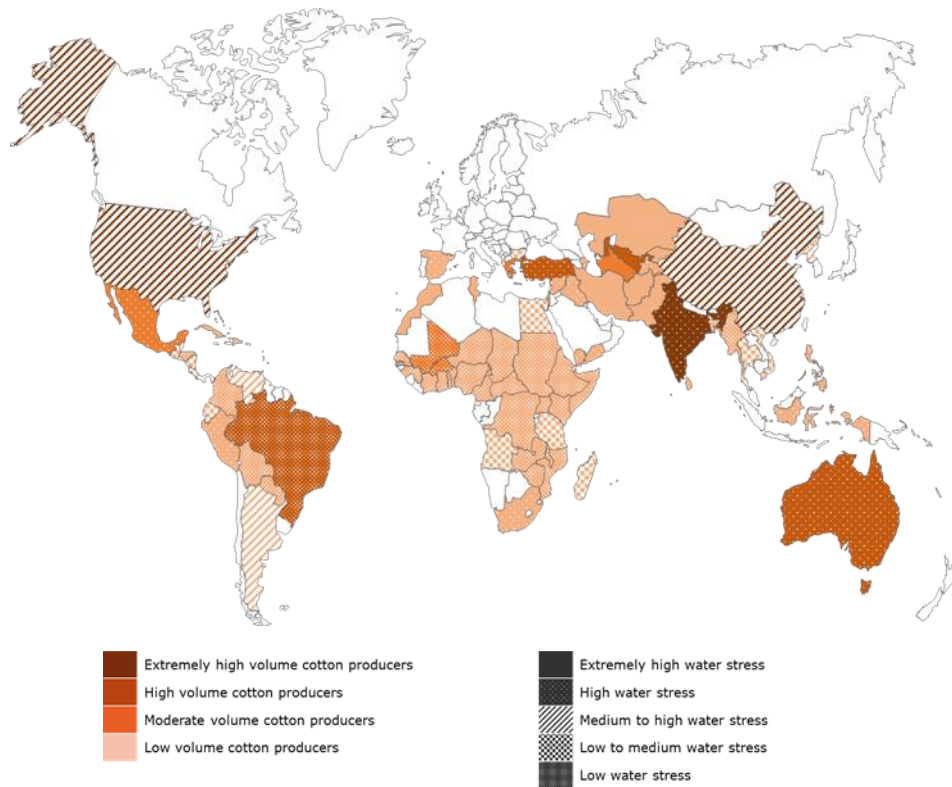
The Retail & Apparel sector covers a variety of diverse companies with various environmental impacts at different levels of gravity. Companies in this sector include clothing companies where their main impacts are in the earth's waterways, home furnishing companies where deforestation is more of a concern,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

Of the companies in the sector, the environmental impacts of textile and garment companies are potentially the most significant and urgent. The industry has one of the largest water footprints globally. The cultivation and harvesting of cotton is very 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 drying up of the Aral Sea in Central Asia. This is further highlighted in the graph below whereby that area is in extremely high water stress and yet 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 5: World Cotton Producers vs. Water Stress



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

In the production phase, the World Bank estimates that roughly 20% of global industrial water pollution is a result of the treatment and dyeing of textiles (Kant, 2012). 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 our 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 with the product, raising concerns on how this would affect people and the environment. Furthermore, clothes made of plastic-based textile (e.g. nylon and polyester) release microfibres while they are washed that are then leaked into the ocean, polluting the water ecosystem and going into the food chain.

For home furnishing companies, their impacts are mainly found in the sourcing of their wood, 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 adverse effects on biodiversity. The WWF estimates that logging in violation of national laws accounts for 8-10% of global production and trade, and 40-50% of logging in some of the most important forests on earth.

For the remaining sectors, 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.

As outlined, the environmental impacts of the Retail & Apparel sector are found in different parts of its supply chain, from the sourcing of raw materials 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 in their suppliers. First would be by sourcing responsibly. This includes sourcing through certified processes such as organic, Better Cotton and FSC when possible. Another would be by eliminating the use of materials that have negative impacts on the environment throughout the use of the product. 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. perfluorinated 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 labour rights.

Companies that implement strict environmental standards with a strong focus on their supply chain can better mitigate the environmental risks linked to their products. 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. Collaboration with third-party organisations can help accelerate the process. While this is mainly targeted towards textile companies, it is also true for home furnishing and household appliances companies. Furthermore, the application of technology that makes their processes more environmentally friendly is a proactive way for companies to address this issue. An example of this is the no water or less water dyeing technology that is 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.

KEY INDICATORS

- Environmental protection in the supplier code of conduct that is mandatory
- % of suppliers that are considered 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 organisations
- % 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

Most companies in these sectors sell their products directly in their stores. These stores usually have a significant employment base with store hours being more than the regular 8 hours. Furthermore, these types of jobs tend to be physically demanding, low-paying and low-skilled thereby attracting the lesser educated and more vulnerable population in any labour force. Additionally, research has shown that retail companies investing in their labour force can bring about operational benefits to the company as well. Such examples of these are higher labour productivity and increased customer satisfaction (Ton, 2012). Consequently, it is also to the benefit of the company to invest in proper management.

We expect companies to have a labour management policy that is at least in line with the International Labour Organisation'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 labour, effective abolition of child labour and elimination of discrimination in respect of employment and occupation. We give a particular importance to the freedom of association and collective bargaining as this freedom is not always respected in several labour markets.



KEY INDICATORS

- Presence of a labour management policy
- Scope and coverage of labour 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 global organisations, we would also appreciate more transparency with regard to their tax optimization strategy.

Beyond having the necessary policies in place (business ethics, lobbying and donations, etc.), we would appreciate more information as to how the company ensures that these policies are implemented throughout the entirety of its operations.

Furthermore, we encourage companies to have in place a transparency policy with regard to their lobbying efforts, donations made to third-party organisations, 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

As a whole, 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	All other cases
Risk	<ul style="list-style-type: none">- Responses to repeated ethical controversies that are deemed as insufficient or inappropriate or- Company practices and/or environment that go against any of the issues outlined above or- Weak governance structure of sustainability to allow for sustainability practices to flourish



Conclusion

The retail and apparel industry is different in the sense that the industry as a whole is less prone to offering products and services that provide sustainable development solutions. The few opportunities identified are either not very straightforward (healthy lifestyles through sporting companies) or still represent only a small part of their overall revenues (sustainably certified products). Furthermore, the rise in demand for the sector's products will put even more pressure on the environment. A particular concern is the rise of fast fashion and whether such a business model can fully be sustainable. Nevertheless, companies are making an effort 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) and have shown small signs of the willingness to transform their business model into a more circular one.

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, most particularly on water and forests. As they are mainly found within the supply chain, the proper mitigation and avoidance of these risks requires a comprehensive supply chain management program that includes 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 their contracts, the 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. Proper labour management is also required with their direct employees, particularly those working in their retail shops. 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 very important when it comes to determining the sustainability of the company. As such, even if the products of the company clearly provide opportunities for sustainable development, a company can be excluded from the investable universe due to the lack of transparency in their environmental and social risk management. This can happen with repeated controversies and responses deemed inadequate given the scale, or if risk management is not deemed sufficient considering the level of exposure. This is usually determined after regular discussions with companies on certain issues that pose a serious concern. If after multiple discussions with the company, the practices in place are not considered sufficient with regard to the risks at hand, then the company can be rated as not investible from an ESG standpoint. 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 6: 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>

⁵ *** For Mirova's investments



Sources

Ellen MacArthur Foundation. (2017). A New Textiles Economy: Redesigning Fashion's Future.

EPA. (2016). Advancing Sustainable Materials Management: 2014 Fact Sheet. United States Environmental Protection Agency.

Gassert, F., Reig, P., Luo, T., & Maddocks, A. (2013). Aqueduct country and river basin rankings: a weighted aggregation of spatially distinct hydrological indicators. . Washington D.C.: World Resources Institute.

Kant, R. (2012). Textile dyeing industry an environmental hazard. Natural Science.

TextileExchange. (2017). Organic Cotton Market Report.

Ton, Z. (2012). Why "Good Jobs" are Good for Retailers". Harvard Business Review. Récupéré sur <https://hbr.org/2012/01/why-good-jobs-are-good-for-retailers>

USDA Foreign Agricultural Service. (2018, April 13). Custom Query. Récupéré sur United States Department of Agriculture Foreign Agricultural Service: <https://apps.fas.usda.gov/psdonline/app/index.html#/app/advQuery>

WRAP. (2016). SCAP textiles tracker survey.



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