

Opinion on sustainability

Summary



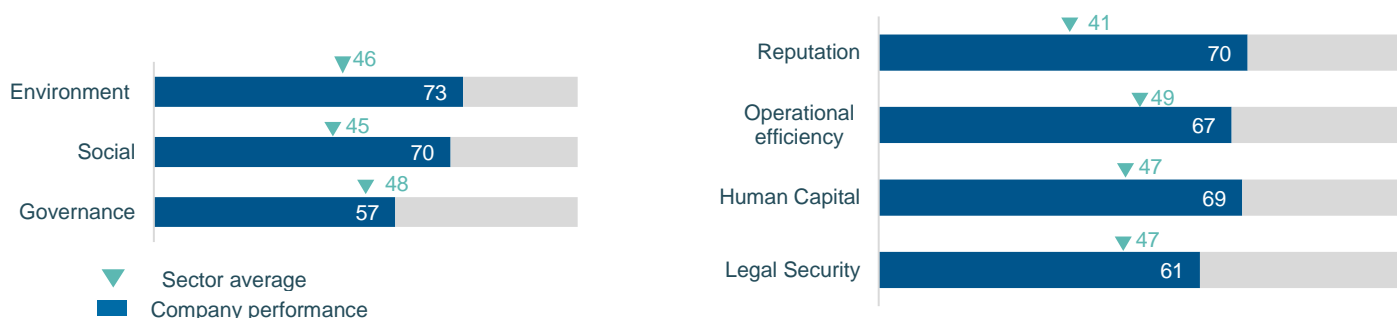
Rank in Sector	2/18	ESG Reporting Rate	96%
Rank in Region	20/1606	Sector Average	75%
Rank in Universe	21/4921		



As of December 2019, Carrefour obtains an A1+ rating, based on an overall score of 68/100. Carrefour ranks within the top 2% of all companies rated by Vigeo Eiris worldwide (4,921 in total) and 2nd within the Supermarkets sector. The company's overall score has increased by 7 points since our 2016 review. Carrefour displays strong willingness and capacity to integrate sustainability targets into its strategy, operations and risk management, with advanced performance on sustainability factors related to human capital, operational efficiency, legal security and reputation.

Carrefour SA operates supermarkets and retail stores of all formats (hypermarkets, supermarket, drive and proximity stores) via integrated operations in nine countries and banner activities in 21 countries. In 2018 the group launched a 5 years transformation plan aiming simplifying the organisation, gaining in productivity and creating an omnichannel sales universe. This plan led to significant reorganisations in Europe. In June 2019, Carrefour sold 80% of its Chinese activities to Suning.com.

ESG AND RISKS MANAGEMENT PERFORMANCE (./100)



STRENGTHS

- ▶ Advanced energy transition score
- ▶ Comprehensive efforts to promote diversity and human rights on the workplace
- ▶ Strong integration of CSR issues within the governance framework

WEAKNESSES

- ▶ Board of Directors' independence is below international standards of good governance
- ▶ Limited transparency on performance targets linked to executives' variable remuneration

KEY TAKEAWAYS

Impacts: Carrefour displays an advanced energy transition score. KPIs demonstrating its social footprint (in terms of diversity, training and health and safety) reveal mixed trends. A wide variety of products and services address UN sustainable development goals (Agenda 2030), n°2 (Zero Hunger), n°12 (sustainable consumption and production), n°14 (Life below water) and n°15 (Life on Land).

Risks: Carrefour's risk management system appears comprehensive, covering its most material ESG risks. The company displays advanced capacity to safeguard and enhance its reputation, human capital cohesion, legal security and operational efficiency.

Management: Carrefour appears to pro-actively integrate ESG factors into its strategy and operations. Its approach is supported by quantified targets and cooperation with relevant stakeholders on environment, human rights and employees' related matters. Comprehensive means and processes address the most material challenges. Carrefour faces a limited number of controversies (5) and is responsive to all of them.

Impacts

VALUE CREATION AND SHARING

<p>Amount of investments and trends</p>	<p>Decrease</p>	<p>Investments have decreased in absolute value and as a ratio of turnover, from Eur 2,856 million in 2016 (representing 3.7% of the Group's turnover) to Eur 1,613 million in 2018 (2.1% of the Group's turnover).</p> <p>Carrefour states that this trend is linked to an increased selectivity of investment projects, each project being, since 2018, assessed on its productivity and adequation to the group's Food transition strategy before being approved. In addition, rationalisation processes have been conducted for non-merchant purchases, leading to gains in efficiency.</p>
<p>% of revenue invested in activities creating sustainable value</p>	<p>Limited</p>	<p>In January 2018, Carrefour announced a 5 years transformation plan aiming at implementing a simplified organisation, gaining in productivity and creating and omnicanal sales'universe. In the frame of this plan, in 2018, Carrefour states to have invested Euro 1,613 million in the development of:</p> <ul style="list-style-type: none"> ▶ Digital services and harmonisation of e-commerce solutions; ▶ Proximity markets and modernisation of hypermarkets; ▶ Drive and click and collect formats, as well as home deliveries; ▶ Improved integration of stores in omni-channel distribution processes; ▶ Organic, fresh and local products, via, among others, the acquisition of Planeta Huerto, a company specialised in online distribution of organic products by Greenweez (a Carrefour subsidiary); ▶ Improved products'quality and traceability; ▶ Support to suppliers in the frame of long-term partnerships. <p>These investments (representing 2.1% of the Group's turnover) are considered as linked to sustainable value creation.</p> <p>In 2019, investments in activities likely to create sustainable value include:</p> <ul style="list-style-type: none"> ▶ Innovation: a partnership with Google to develop the group's offer on Google portals, create an innovation lab for new clients'experiences and train Carrefour's employees on new technologies. ▶ Mitigation of stores'environmental impact: a partnership with Urbasolar (in February 2019) to implement photovoltaic panels aimed at auto-consumption on 36 hypermarkets' parkings. ▶ Support to organic farming and initiatives to reduce packaging: <ul style="list-style-type: none"> - Partnership with WWF France, LSDH and APLC Bio Cooperative to support conversion of milk producers to organic production. - Partnership with the start-up Miimosa to launch a crowd-funding platform (Je.participe) for projects in line with Carrefour's food and agricultural transition principles (e.g start ups specialised in organic farming or products with reduced packaging.) - Partnership with Système U and Veolia to create a platform (Reset) to boost innovative projects in terms of circular economy (e.g use of recyclable materials, innovative selling processes, etc.) - Acquisition of SoBio (French chain of stores offering organic and local food products) in April 2019. ▶ Promotion of employability via creation of a unit (employing 10 FTE) in charge of promoting internal mobility for French employees. <p>The share of turnover invested in these activities is not disclosed and therefore estimated as below 20%.</p>
<p>Ratio of employee wages and benefits vs shareholder dividends [Increase, Stable or No Clear Trend, Decrease]</p>	<p>Decrease</p>	<p>The ratio of payments to employees vs. shareholders has decreased by 21%, from 52.09 in 2014 to 40.9 in 2018. During this period:</p> <ul style="list-style-type: none"> ▶ Expenses for employee wages have decreased from Eur 7,762 Million in 2014 to Eur 6,230 Million in 2018. ▶ Shareholders'dividends have increased from Eur 149 Million in 2014 to Euro 152 million in 2018.
<p>Transparency on tax payments [Major, Significant, Limited, None]</p>	<p>Limited</p>	<p>The company reports only on gross taxes paid. There is no breakdown on a regional or country basis.</p>
<p>Operations in offshore financial centres (OFC), including non-compliant OECD jurisdictions</p>	<p>No operations in OFC</p>	<p>The Company has no operations in a jurisdiction considered by the OECD as not compliant enough on tax transparency rule.</p>

[No Operation in OFC, Justified Operations in OFC, Unjustified Operations in OFC]		
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SOCIAL & ENVIRONMENTAL IMPACTS

Environmental impacts:

Vigeo Eiris considers Carrefour's carbon footprint to be high and the company therefore receives a **grade C** (third on a four-level scale) in this regard. Carrefour obtains an energy transition score of 72/100, which is well above the average performance of the Supermarket sector (41/100). This performance results from advanced management of the Group's major direct impacts on climate: reduction of stores' energy consumption, mitigation of GHG emissions from the cooling chain and reduction of impacts from goods' transportation.

CO2 emissions related transportation [Increase, Stable or Unclear, Decrease or Undisclosed]	Decrease	The company's CO2 emissions per shipping unit have decreased from 6.55 kg of CO2/pallet in 2017 to 6.41 kg of CO2/pallet in 2018.
Energy consumption of stores [Increase, Stable or Unclear, Decrease or Undisclosed]	Decrease	The company's energy consumption, normalised to floor area, has decreased by 13% from 0.6 Mwh/ m2 in 2014 to 0.5 Mwh / m2 in 2018.
CO2 emissions linked to stores' energy consumption [Increase, Stable or Unclear, Decrease or Undisclosed]	Undisclosed	The company's CO2 emissions linked to energy consumption, normalised to floor area, have decreased by 8% from 0.169 tCO2 / m2 in 2014 to 0.155 tCO2 / m2 in 2016. However, no updated information was found for 2017 and 2018.

Social impacts:

Organic growth of employment [Positive, Stable, Negative, Undisclosed]	Undisclosed	The total number of employees has decreased by 5% during the past three years, from 384,151 in 2016 to 363,862 in 2018. However, the organic growth of employment is not disclosed.
% and trends of women in management [Increase, Stable or Unclear, Decrease or Undisclosed]	Increase	The share of women in management positions has increased by 5.2 percentage points from 37% in 2014 to 42.20% in 2018. Carrefour's 2017 performance (40.4%) is slightly below the European Supermarket sector average of 41.2%. (12 companies in the sector disclosed that indicator for 2017)
Annual training budget per employee [Increase, Stable, Decrease or Undisclosed]	Decrease	The average number of training hours per employee has decreased by 23% from 14.9 (hrs/ employee) in 2014 to 11.40 (hrs/ employee) in 2018. Only 6 companies in the Supermarket sector report on this indicator for 2017. The company is therefore not benchmarked to its peers on this indicator.
Rate of absenteeism [Increase, Stable or Unclear, Decrease or Undisclosed]	Decrease	Carrefour's rate of absenteeism related to workplace accidents has decreased by 0.68 percentage points from 5.45% in 2014 to 4.77% in 2018. Nevertheless, Carrefour does not report on total absenteeism rate (including all causes of absenteeism).
Percentage of corrective measures vs social problems uncovered in the supply chain [Major, Significant, Limited, None]	Significant	In 2018, Carrefour states that 18% of audits have led to an alert (meaning that a major non-conformity has been observed at a suppliers' plants). For a referenced supplier, each alert generates a request for corrective action, which is followed by a re-audit within 3 months (corrective action being a pre-requisite to continue commercial relationship with Carrefour). This share was of 19% in 2017.

IMPACTS OF PRODUCTS & SERVICES

Carrefour is considered to have a minor percentage of Goods and services contributing to sustainable development goals (below 20% of the company's turnover). These products materialise the Company's contribution to Agenda 2030 objectives n°2 (Zero Hunger), n°12 (sustainable consumption and production), n°14 (Life below water) and n°15 (Life on Land).

<p>Share of Products & Services contributing to sustainable development [Major, Significant, Minor, Inexistent or Undisclosed]</p>	<p>Limited</p>	<p>Through its supermarkets, the Company distributes</p> <ul style="list-style-type: none"> - Healthcare materials and sanitation products. The amount of sales these products represent is not disclosed. - Basic (i.e unprocessed) and fresh food such as fruits and vegetables, pasta, rice, etc. The amount of sales these products represent is not disclosed - Organic products: sales of organic products amounted to Eur 1,762 million in 2018 (representing 2% of the group's turnover) - Seafood from responsible fishing: sale of MSC, ASC and FQC certified seafood reached Eur 443,9 million in 2018, (0.5% of the group's turnover). Of note, in addition to that, part of Carrefour's suppliers apply sustainable fishing practices, in an approach defined in cooperation with the WWF. Carrefour also states that, in total, 37.6% of own-branded seafood products sold in 2018 either had external sustainable fishing certifications or came from suppliers applying sustainable fishing practices, following the approach defined with the WWF (vs 34.6% in 2017). - Organic products in bulk. The amount of sales these products represent is not disclosed. - Products from sustainable forestry practices (including PEFC and FSC certified forest products) represented Eur 176 million in 2018 (0.2% of the Group's turnover). - Products with fair trade labels. These products represented Euro 149 million in 2018 (0.2% of the Group's turnover). <p>Other initiatives contributing to sustainable development include:</p> <ul style="list-style-type: none"> - Since 2019, Carrefour's stores allow customers to bring their own containers to buy fresh food (cheese, meat, cold-cuts, etc.) at manned counters, in order to reduce packaging. - Since 2019, thanks to a partnership with the start-up Loop, consumers located in Ile-de-France can buy, on Carrefour's website, home-delivered products with returnable packaging that are taken-back at next delivery. Products sold include national brands and own-branded product. The amount of sales these products represent is not disclosed and appears limited. - Carrefour sells products of the brand "C'est qui le patron", a cooperative company that commits to pay a "fair-price" to suppliers. For each product, consumers can vote online to decide on price paid to suppliers and on products' characteristics. Price paid to suppliers and final consumer price are mentioned on products' packaging. - Of note, Fresh products from "Carrefour Quality Lines" present at least one differentiating factor in terms of environmental impact. As an example, fruits from the "high quality network" are produced on open ground and harvested at maturity. Concerned suppliers are audited once a year by independent auditors. Hig-quality network concerns 21,000 producers and related sales represented Eur 820 million in 2018 (1% of the Group's turnover). Nevertheless, no external certifications or label certifies that these products have a reduced environmental impact.
<p>Performance for reducing food-waste [Increasing, Stable or Unclear, Decreasing, Undisclosed]</p>	<p>Undisclosed</p>	<p>Carrefour states to have offered 100 million free meals to food aid associations in 2018. This information is insufficient to assess the amount of avoided food-waste.</p>
<p>Performance for reducing packaging's environmental impacts [Above sector average, Below sector average, Undisclosed]</p>	<p>Above sector average</p>	<p>The Company reports that measures in place to reduce packaging's environmental impacts apply to each own branded product packaging which are reviewed together with the recipes every three years on average. Only 3 companies among the 17 assessed within the Supermarket sector stated that eco-design measures are applied to packaging of more than 50% of own-branded products.</p>

Involvement in Tobacco [None, Minor, Significant, Major]	Minor	Carrefour sells tobacco products in its stores. The turnover derived from this activity is estimated below 5% of total turnover.
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Risks

RISK FACTORS

Carrefour's most material risk and opportunity factors relate to:

- Board of Directors' composition and operating rules
- Climate change
- Employment and career management
- Food and packaging waste reduction
- Integration of social standards in the supply chain
- Product safety and customer information
- Promotion of sustainable agriculture, fishing and forestry
- Social Standards in the supply chain

A detailed analysis of these factors is presented on p15 of this document.

Our analysis reveals that Carrefour has comprehensively addressed most of these challenges.

Board of Directors composition and operating rules

We positively note that a four-member CSR committee is part of the Board and that the Head of CSR reports to this committee on a regular basis, which may foster the effective integration of CSR issues in the Group's strategy. The presence of 41% women on Board appears to materialise the implementation of efficient non-discrimination and inclusion strategies. Nevertheless, the limited degree of independence of the Board (35%, which is lower than international good governance standards) as well as the combination of the fonctions of Board Chairman and CEO could question the balance of power and appear as a limit for the Board's ability to exercise its strategic missions of orientation with a full and effective control over the top-management.

Climate change

Carrefour's advanced performance with respect to the reduction of **energy consumption and GHG emissions from stores and transportation** could foster operational efficiency. Carrefour has published quantified targets to reduce GHG emissions linked to stores' energy consumption (by 30% per m2 of sales surface), refrigerant gases emissions (by 40% per m2 of sales surface) as well as from transportation (by 30%, in kg of CO2 per pallet), from 2010 to 2015. Means in place to optimise energy consumption from stores are comprehensive and include optimization of heating, lighting and refrigerating equipment. Efforts to reduce the impacts of refrigeration systems include use of the best available technologies (such as the replacement of HCFCs with CO2). Means in place to optimise transport flows entail the use of alternatives to road transport, as well as logistics optimisations. Nevertheless, although Carrefour has achieved a 13% reduction of stores' energy consumption from 2014 to 2018, GHG emissions from energy consumption are not disclosed. GHG emissions from refrigeration systems (in kg per 1,000m2 of sales surface) and CO2 emissions related to transportations (in kgCO2/pallet) show a decrease from 2017 to 2018 (by respectively 16% and 2%) but no information is disclosed for previous years, impeding to assess a longer trend.

Employment and career management

Carrefour comprehensively addresses **career management and responsible management of reorganisations**, which may preserve the group's reputation as an employer, in a context of large-scale organizational changes.

- ▶ In 2018, Carrefour has renewed its workforce and skills' planning agreement covering French employees, by which it commits to minimize impacts of restructurings on employment. The Group also commits to inform the European consultation and information

Committee for each restructuring plan affecting the European workforce. Resources to support employees affected by reorganisations include both reactive (early retirement, outplacement) and preventive measures (internal mobility). Carrefour has faced one allegation when conducting a reorganisation in 2018, to which it reacted in a pro-active manner, concluding a memorandum of understanding with concerned employees.

- ▶ Carrefour has set the goal to increase the number of training hours per employees (to 13 hours per year in 2025) and reports on a comprehensive **training and career management** system. In the frame of the workforce and skills'planning agreement, for jobs considered at risk, specific measures to support internal and external mobility have been implemented (such as a 28h training allowance per year, paid leave to create ones'company, etc.). Results are mixed: the number of training hours per employee has decreased by 23% from 2014 to 2018 and one employee representative interviewed by Vigeo-Eiris expressed the wish local managers would be given additional levers to manage their team's career.

Food and packaging waste

Carrefour's advanced approach towards **food and packaging waste reduction** could enhance its reputation and contribute costs'mitigation. Carrefour's Food transition and CSR index includes objectives to reduce packaging waste by 10,000 tons and food waste by 50% by 2025 (with a 2016 baseline). Nevertheless, no information is disclosed as to how food waste reduction reductions will be computed. Comprehensive resources address the disposal of own-branded packaging, including partnerships with local authorities to ensure their take-back and eco-design measures to reduce the amount and number of materials, as well as to use recycled and recyclable materials. Means addressing food-waste reduction include donations, optimized storage across the food chain and innovations such as the partnership with the Start-up Too Good to Go, that allows food chains to put unsold products on sale each day, via a smartphone application. The company does not monitor indicators on the reduction of food waste but provides data on the share of recovered waste, wich remained stable (at 67%) from 2014 to 2018.

Product safety and customer information

Product safety and Information to customers, two major components of Carrefour's legal security and market position, appear comprehensively addressed. Carrefour's Annual Report refers to product safety and addresses customer information in an exhaustive manner. Carrefour's food safety management system appears comprehensive and includes a mapping of controversial substances, which serves as basis for decisions to remove certain ingredients from the group's products. This mapping has led to ban 100 controversial substances (including nanomaterials such as titanium dioxide) from own-branded products, from 2018 on, but Vigeo Eiris notes that this ban concerns only French operations. Comprehensive measures appear to tackle major challenges related to customer information, including a transparent labelling of products'nutritional impacts, via a system developed in collaboration with the CLCV (Confederation for consumption, housing and lifestyle, a consumer association). Carrefour faces one allegation over product safety, to which it has voluntarily taken corrective actions.

Promotion of sustainable agriculture, fishing and forestry

Carrefour's advanced performance with respect to **biodiversity protection** may constitute a positive differentiating factor. The Group has identified all its major indirect impacts on ecosystems and has set the target to reach Eur 5 billion of turnover in organic products by 2022. Comprehensive resources address the promotion of sustainable agriculture (reduced use of pesticides and fertilisers, protection of pollinators, prevention of soils' erosion, etc.), prevention of GMO contamination, as well as sustainable animal rearing, fishing and forestry. To ensure organic products'availability, in 2018, Carrefour supports 210 farmers in their conversion to organic agriculture via a partnership with the WWF, by which the group commits to buy products over a 3 to 5 years period at a guaranteed price. The group aims at supporting 500 farmers via such partnership by 2022. Results indicators reflect a growth in sales of organic products from Eur 1.1 billion (1.2% of turnover) in 2016 to Eur 1.8 billion (2% of turnover) in 2018 and seafood from sustainable fishing from Eur 310 Million (34.6% of seafood'sales) in 2017 to Eur 444 million (37.3% of seafood'sales) in 2018.

Social standards in the supply chain

Carrefour's advanced performance in relation to the **integration of social standards in the supply chain** could protect its reputation and legal security. The Social and Ethical Charter for Suppliers tackles all relevant sector issues and Carrefour has a partnership with the International Human Rights Federation, which has reviewed the Group'supplier risk mapping in the frame of the Vigilance plan. Means addressing this issue

include training of purchasing teams, as well as regular assessments and support of suppliers (in the form of training and tools to audit their own suppliers). 100% of plants in countries considered as presenting risks are audited by an external company on BSCI standards, before being referenced as Carrefour's suppliers. Unannounced follow-up audits are also reportedly conducted. The company reports on the number and type of non-conformities uncovered in its supply chain and explains how these are usually handled. The absence of allegations strengthens our assurance on the efficiency of this system.

RISK MANAGEMENT

Carrefour's risk management system appears comprehensive and covers the group's most material CSR risks.

- ▶ Group-wide risk mapping is conducted once a year by the Audit and Risk Department, which Head reports to the General Secretary, a member of the executive committee. The Risk department provides each country (representing a Business Unit) with a taxonomy of 54 sub-factors of risks and requires them to assess their exposure. This taxonomy is built in cooperation with all Directions, including CSR. Risks are weighted according to their potential impacts on financial results and reputation, as well as on their probability of occurrence. Country Directors also assess their level of risk mitigation and delay for activity recovery in case of major accident.
 - Since 2018, most relevant CSR risks are considered as operational risks and included in the group-wide risk mapping. In 2019, these include product safety, supply chain related impacts (on human rights and the environment), talent attraction and retention, psycho-social risks, non-discrimination, physical impacts of climate change, stores' environmental impacts, cyber-security, corruption prevention and data protection.
 - Mapping of emerging risks at group level has not yet been conducted by the Risk Director but is planned for the coming years.
- ▶ The CSR Department annually updates the group's materiality matrix, where most of the relevant CSR risks are identified and hierarchised depending on their significance for stakeholders and potential impact on the Group's activities. Based on this matrix, 17 priority CSR objectives have been set, which constitute the Group's Food Transition and CSR index. In addition, in the frame of the vigilance plan, the CSR department has mapped environmental, human rights and employees' related risks linked to the group and its sub-contractors' activities. This mapping has been reviewed by the WWF, the International federation for Human Rights and UNI Global Union, in the frame of their partnerships with Carrefour.
 - Risk-management processes are in place: For each risk, a risk owner is identified within each Direction, with relays at country level. Risk owners are responsible for ensuring that adequate mitigation plans are in place in concerned countries and for reporting on action plan progresses to the Risk Director. CSR risks are managed in this frame
 - In the frame of the Internal Audit plan, the Internal controls and Risk director checks that risk mitigation plans have been implemented. The next internal audit plan will go from 2020 to 2022.
 - A global confidential reporting system is available to all employees to report on any human resources, human rights and business ethics issue. Local confidential reporting hotlines are also in place in each country.
- ▶ Reporting on risk management is conducted by the Head of the Risk Department to the Board's Audit committee once a year. The Board's Audit committee has approved the risk mapping methodology in Q1 2019. The new Risk manager will report to the Audit Committee for the first time in end of October 2019. This reporting will address CSR risk included in the group-wide risk-mapping. Discussions on group-wide risk management are planned to be held twice a year at executive committee level. The Risk Director, who arrived in February 2019 plans to discuss risk mitigation action plans with the executive committee within a 6 months time-frame.
 - Reporting on other CSR risks is conducted by the CSR department to the CSR committee. The 17 CSR indicators defined in the Food Transition and CSR index are discussed in this frame.
 - Reporting to stakeholders is made via the Extra-financial Declaration, which presents 26 relevant CSR indicators (among which the 17 included in the Food transition and CSR index) on key material issues and has been reviewed by an external auditor who expressed a moderate assurance

Several factors strengthen our assurance on the effectiveness of Carrefour's risk management system:

- Most CSR risks relevant to the Group's activity appear to be identified, covered by relevant risk management processes and reviewed by the Board's Audit committee, together with other operational risks. This may strengthen the group's ability to integrate CSR risks in strategic decisions.
- The Group's vigilance plan has been discussed with relevant stakeholders which may reinforce its comprehensiveness.
- The Audit committee entails a majority of independent members (three out of five) and its Chairman is considered independent.

One area for improvement concerns the roles of the Risk Director, who is also in charge of internal controls and internal audits. A separation of these functions could strengthen the group's overall risk prevention system. Ultimately, banner operations do not appear to be included in the risk management system, which reduces our assurance on the Group's mitigation of reputational risks.

REPUTATION

REPUTATION (/100)	
	70
Protection of biodiversity	87
Integration of social factors in the supply chain	81
Contribution to general interest causes	80
Respect for human rights standards and prevention of violations	77
Management of environmental impacts from the disposal of products and packaging	75
Shareholders	73
Promotion of social and economic development	73
Management of atmospheric emissions	71
Prevention of corruption	60
Prevention of anti-competitive practices	56
Executive remuneration	38

OPERATIONAL EFFICIENCY

OPERATIONS (/100)	
	67
Environmental strategy and eco-design	84
Minimising environmental impacts from energy use	83
Audit and internal controls	75
Board of Directors	60
Management of environmental impacts from transportation	59
Sustainable Relationships with suppliers	59
Transparency and integrity of influence strategies and practices	48

HUMAN CAPITAL

HUMAN CAPITAL (/100)	
	69
Non-discrimination and diversity	96
Respect for freedom of association and the right to collective bargaining	84
Promotion of labour relations	74
Improvement of health and safety conditions	69
Career management and promotion of employability	60
Responsible management of reorganisations	58
Quality of remuneration systems	54
Respect and management of working hours	53

LEGAL SECURITY

LEGAL SECURITY (/100)	
	61
Information to customers	67
Product safety	55

Weak: from 0 to 29

Limited: from 30 to 49

Robust: from 50 to 59

Advanced: from 60 to 100

Management

INTEGRATION OF ESG FACTORS INTO CORPORATE GOVERNANCE

Most factors under review demonstrate Carrefour's advanced willingness and capacity to integrate ESG factors into its governance structure and decision-making processes.

- ▶ **At management level**, the CSR Director reports to the Group's General Secretary, a member of the executive committee who is also responsible for the Group's food transition objectives. The CSR direction is in charge of defining the group's CSR strategy and managing its implementation, bring emerging and important CSR subjects to the top management's attention, conducting projects in line with the group's CSR strategy and disseminate Good practices throughout the group. The CSR team is composed of 10 employees at group level, with at least one CSR correspondent in each country.
 - In 2018, the Group's CEO, General Secretary and legal director worked on the definition of Carrefour's Raison d'être, which has been added as a preamble to the Group's status in June 2019. It affirms the Group's ambition to be the leader of food transition and to propose services, products and food of quality, accessible to everyone and via all distribution channels.
 - In September 2018, the Group has implemented a food transition committee composed of 7 external stakeholders recognised for their actions in favour of food waste reduction, agro-ecology, or evolution of the agri-food business model towards more environmentally and socially responsible practices. This committee, animated by the General Secretary, is in charge of advising the Group on its food transition strategy.

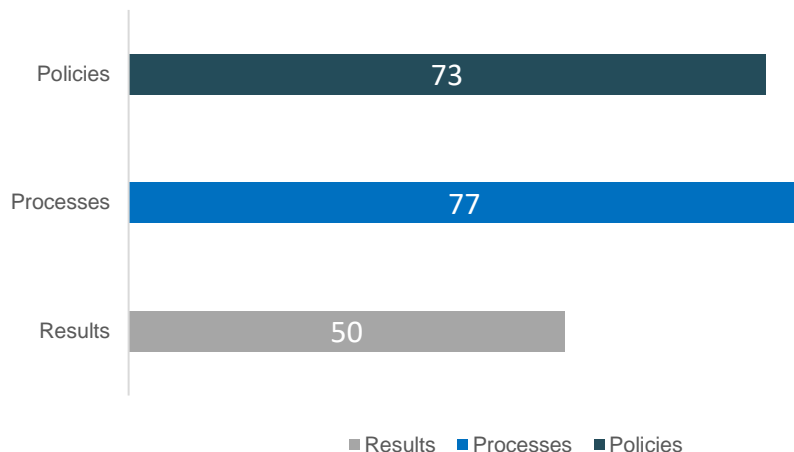
- ▶ **At board level**, a CSR Committee, in place since 2015, is responsible for examining the Group's CSR strategy and its implementation, checking the alignment of the group's CSR commitments with key strategic objectives, assessing the potential impacts of the group's CSR strategy on its economic performance and reviewing the group's extra-financial performance. In the second semester of 2019, CSR topics discussed by the Board's CSR committee included, progresses on the implementation of food transition related projects, implementation of the food transition committee and programmes to reduce packaging and food waste.

- ▶ CSR risks are covered by the **internal controls system**, which entails comprehensive risk mitigation processes (these are analysed in detail in the "risk management" part on p9 of this document).

- ▶ Carrefour has presented its CSR strategy to **shareholders** and investors and this covers most of the relevant CSR issues. The CSR Strategy is presented to shareholders at the Annual General Meeting every year by the Group General Counsel and Deputy CEO. During the 2019 AGM, the resolution to add a preamble to the company's status defining Carrefour's Raison d'être was adopted. Other topics discussed with shareholder included extra-financial rating agencies' assessments, results achieved on the 17 strategic objectives composing the Food transition and CSR index and main achievements in terms of reduction of food packaging.

- ▶ **Executive remuneration** appears to include a variable component based on CSR objectives but information on performance targets are not disclosed: 20% of the CEO's 2019 annual variable remuneration is said to be linked to CSR objectives but the nature of CSR criteria taken into account is not disclosed publicly. In addition, 25% of LTI received by 500 top managers of the group is said to be based on achievement of the 17 objectives included in the CSR and Food Transition Index. However, minimum thresholds to be achieved for that part of the LTI to be awarded are not disclosed.

ESG MANAGEMENT PERFORMANCE



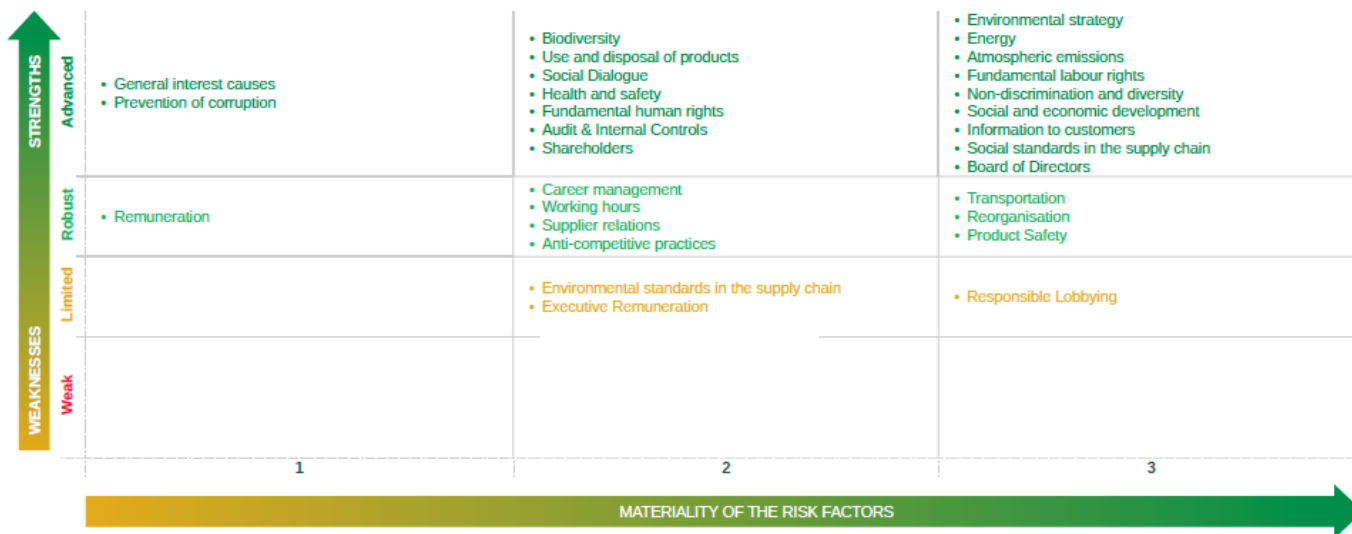
Carrefour's policies and processes display advanced scores and rank amongst the best performances within Vigeo Eiris' research universe, while the company's results scores appear robust.

Carrefour has disclosed public commitments addressing the 29 CSR criteria assessed by Vigeo Eiris. Carrefour's CSR and Food transition Index defines 17 priority objectives addressing environmental and social impacts of the group's products and stores and setting relevant quantified objectives in terms of offer of organic food and seafood products from responsible fishing, reduction of stores' climate footprint, employee's training and diversity. Carrefour's Ethical Charter for Suppliers includes comprehensive commitments towards responsible suppliers' relationships and the inclusion of environmental and social standards in the supply chain. Carrefour's participation in the Supply chain initiative (a joint initiative launched by several EU level associations with the aim to increase fairness in commercial relations along the food supply chain) increases the visibility of the group's commitment towards suppliers. Carrefour's partnership with the International Human Rights Federation includes a monitoring of the group's commitments to include social standards in its supply chain and ensure respect for human rights in the workplace, thereby reinforcing the ownership of such commitments. In October 2018, the group has renewed its agreement with UNI Global union addressing social dialogue, diversity, and respect for fundamental rights in the workplace which further strengthens the visibility of the Group's commitments in this respect. The Group's Code of Conducts addresses corruption, anti-competitive practices, responsible lobbying and respect for human rights standards while product safety is addressed in the Group's Annual Report.

Carrefour reports comprehensively on dedicated means in place for all CSR challenges except two (responsible lobbying and management of working hours). Measures addressing the promotion of social and economic development, promotion of diversity, respect for human rights standards, participation to general interest causes, reduction of energy consumption and of atmospheric emissions from cooling chain received the maximum score (100/100), reflecting the implementation of state-of-the-art processes throughout Group operations. Outstanding scores (above 80/100) are observed with respect to means addressing Biodiversity protection, reorganisations, employees' Health and safety and supplier relations, reflecting a high level of maturity on these subjects. One area showing limited scores relates to responsible management of working hours (where measures to compensate for atypical working hours do not appear to go beyond legal minima).

The majority of topics display robust results linked to the absence of allegations and KPIs reflecting positive trends (on, among others, energy consumption of stores, offer of organic products, percentage of women on management positions) or strong performance (in terms of inclusion of social factors in the supply chain). Nevertheless, results scores on product safety, anti-competitive practices, labour relations and reorganisations are impacted by allegations, to which the company reports comprehensively. Another area for improvement concerns CO2 emissions related to stores' energy consumption (which are not disclosed for 2017 and 2018), GHG emissions linked to cooling chain (which cover only 2 years, impeding assessing a longer trend).

ESG MATERIALITY AND PERFORMANCE MATRIX



ENVIRONMENT

Strengths	Weaknesses
<p>The CSR and Food transition index sets quantified environmental performance objectives related to offer of organic food and seafood products from responsible fishing and reduction of stores' climate footprint. This clear roadmap may sustain the group's ability to mitigate its environmental footprint and positively impact its reputation.</p> <p>Carrefour reports on advanced processes to reduce packaging of own-branded products. In a context of increasing customer expectations in this regard, such efforts may positively impact the group's market position.</p> <p>As legal constraint is increasing in some European countries regarding food waste reduction, Carrefour's strong endeavour in this respect may strengthen legal security and foster brand recognition.</p>	<p>Carrefour does not appear to disclose the CO2 emissions related to energy consumption of its stores. In addition, Carrefour's reporting on GHG emissions linked to cooling chain covers only 2 years. Providing increased visibility to stakeholders on progresses achieved in this respect could reinforce stakeholders' trust in the company's ability to achieve the 2°C objective.</p> <p>Carrefour does not disclose the share of environmental issues uncovered in its supply chain that were addressed by corrective measures while transparent reporting on such data could positively impact brand recognition.</p>

SOCIAL

Strengths	Weaknesses
<p>The agreement with UNI Global Union, renewed in 2018, addressing non-discrimination, respect for human rights on the workplace and social dialogue may set a strong basis for cooperation between management and employees and reinforce human capital cohesion. In this respect, one employee representative interviewed by Vigeo-Eiris considers social dialogue as fruitful and indicates that significant information is shared with the European Works Council.</p> <p>While significant business transformation are planned for the coming years, relevant commitments to ensure skills' development and comprehensive career management system reportedly in place could support a smooth transition towards a new business model. Of note however, the average number of training hours per employee has decreased by 23% from 2014 to 2018.</p> <p>Highly-relevant commitments and comprehensive measures to prevent discriminations and promote diversity may positively affect talent attraction and retention.</p> <p>Comprehensive measures in place to ensure the integration of social standards in the supply chain may protect the company's reputation and legal security.</p>	<p>Carrefour has issued a relevant commitment to responsibly manage restructurings and reports comprehensively on measures implemented to minimise impacts on affected employees. Nevertheless, the Group faces two allegations regarding the management of reorganisations, which do not appear to be addressed by corrective measures.</p> <p>While the Group has implemented various channels for social dialogue at national, European and global level, one employee representative expressed the wish operational management could provide the workforce with a clearer view of the strategic transformation that will occur in the coming years. Addressing this challenge could reinforce the group's human capital cohesion.</p>

GOVERNANCE

Strengths	Weaknesses
<p>External stakeholders such as UNI Global Union, the International Federation for Human Rights protection (FIDH) and the WWF have been involved in the review of the Group's vigilance plan. This may reinforce the relevance of this mapping and of related mitigation measures.</p> <p>25% of variable remuneration of 500 top managers of the group is linked to achievements of 17 objectives set in the Food transition and CSR index. This may support the appropriation of CSR objectives by all employees. Nevertheless, thresholds set for variable remunerations to be allocated are not disclosed.</p>	<p>While the Board of Directors entails a minority of independent members, the roles of CEO and Chairman are combined and there doesn't appear to be any independent referent board member. This could reduce shareholders' trust in the Board's ability to effectively supervise the top management's work.</p> <p>The Board's remuneration committee entails a minority of independent members and quantified performance targets linked to executives' long-term incentives are not disclosed. These elements may reduce shareholders' trust in the company's ability to mitigate costs related to top management's remuneration.</p>

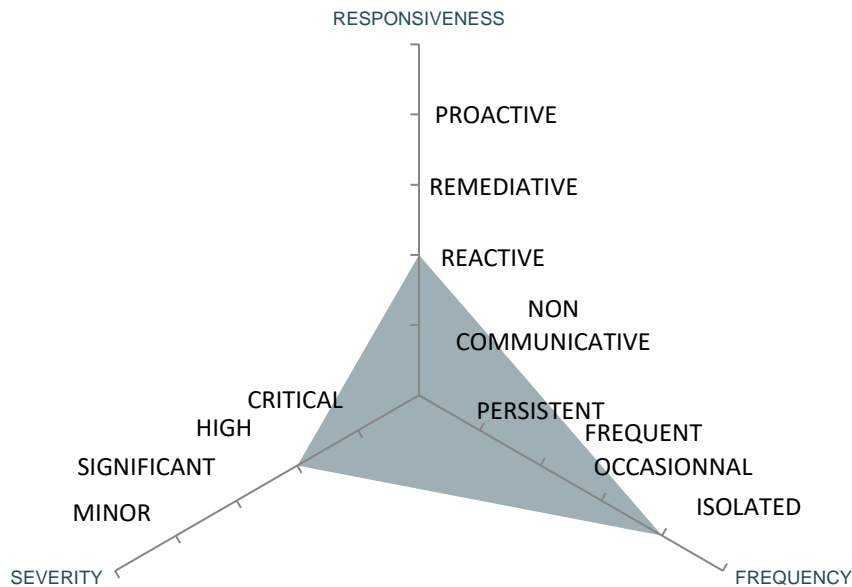
ACCOUNTABILITY & REPORTING

Carrefour's reporting exhaustively addresses all subjects considered material by Vigeo-Eiris. In addition, Carrefour's Annual Report includes a table of correspondence with GRI standards. Carrefour reports to CDP on its carbon footprint as well as on its impact on forests. Carrefour is listed as a committed company on the Science-Based Targets (SBT) website and states to be currently discussing with the committee on elements to include in their scope 3 reporting. The Group plans to have their SBT commitments validated by 2020.

DETAILED EXPOSURE TO CONTROVERSIES

ESG Issues	Number of companies facing associated cases within the sector	Company exposure	Company responsiveness
Customer Safety	5	Yes	Remediative
Information to customers	4	No	N/A
Environmental standards in the supply chain	1	No	N/A
Social standards in the supply chain	1	No	N/A
Prevention of corruption	2	No	N/A
Anti-competitive practices	5	Yes	Remediative
Responsible Lobbying	1	No	N/A
Respect for human rights standards and prevention of violations	2	No	N/A
Non-discrimination and diversity	2	No	N/A
Environmental strategy	1	No	N/A
Biodiversity	2	No	N/A
Social and economic development	1	No	N/A
Board of Directors	1	No	N/A
Audit & internal controls	2	No	N/A
Executive remuneration	2	Yes	Reactive
Social Dialogue	2	Yes	Reactive
Responsible management of reorganisations		Yes	Reactive
Quality of remuneration systems	3	No	N/A
Health and safety	1	No	N/A

CONTROVERSY MANAGEMENT



Carrefour faces five allegations, one of which is considered of high severity. These events are related to reorganisations, product safety, information to customers, anti-competitive practices and executive remunerations.

- ▶ The only controversy of high severity relates to a general strike that occurred in March 2018 after the announce by Carrefour of a plan to cut about 1000 jobs. The Company handled this case in a reactive manner as an agreement was signed with unions in June 2018, under which the company committed to reduce the number of redundancies (from 1,223 to 950).
- ▶ Other cases are considered of minor to limited severity and relate to anti-competitive practices, executive remuneration and product safety.
 - In January 2018, Carrefour was among the French Supermarkets that acknowledged having sold potentially contaminated infant-milk powder. The company is considered remediative in this case since it has recalled all concerned product and extended the recall to all infant products manufactured in the concerned Lactalis plant.
 - Carrefour faces two allegations related to anti-competitive practices: in March 2019, Carrefour was one of the seven companies sanctioned by Romania's Competition Council over price-fixing in Romania's food market. In May 2019, the Belgian Competition Authority launched an investigation over Carrefour purchasing alliance. The company is considered remediative in the first case for having voluntarily taken corrective actions (including training of exposed employees to avoid recurrence of such events) and reactive to the second case, which is considered of minor severity since it states to be fully cooperating with authorities in charge of the investigation.
 - Carrefour faces a lawsuit filed by a French Union (CGT) in October 2019 for having embezzled the French Tax Credit for Competitiveness and Employment since the Group implemented a job-cuts project while receiving this tax credit. The company is responsive on this case.

Considering the frequency and severity of these events, as well as the Group's overall responsiveness, Carrefour's ability to maintain balanced relationships with stakeholders is considered limited.

Detailed Risks Factors

Carrefour operates via a network of more than 12,000 outlets involved in grocery products. The company is therefore responsible for **guaranteeing the safety of products sold, as well as to inform customers** on their contents and impacts on health.

- ▶ 74% of the company's 2018 turnover was made in Europe where **customers' safety** is protected by the European legal framework. Nevertheless, cases of food contamination occasionally occur in the European Union, thereby challenging companies' reputation, legal security and market acceptability. Since a major part of Carrefour turnover comes from food retail, any food safety issue uncovered by an external stakeholder could generate lawsuits and significant damages to the company's reputation and sales.
- ▶ Supermarkets are also responsible for **informing clients** on products' contents and nutritional information. As consumer demand for healthy food grows, transparent information on nutrition, as well as on controversial materials (such as GMOs) and additives with potential health effects (such as nano-materials) is key for Carrefour reputation and market acceptability. Any failure to inform customers could induce legal and/ or customer sanctions.

Carrefour mainly sells food products, several of which are under high scrutiny by stakeholders for their conditions of production (including coffee, cacao, tea, etc.). Carrefour's hypermarkets also sell textiles and leather products which may come from countries presenting social risks such as India, China and Bangladesh. Any allegation related to a breach of **social standards by a supplier** could affect Carrefour's reputation. Since Carrefour is now subject to the French law on duty of care and due diligence, any failure to respect international labour standards by one supplier could also result in legal suits or fines.

The **promotion of sustainable agriculture** is formalised in the scope of UN Sustainable Development Goal n°2. As a food-retailer, Carrefour faces significant stakeholder expectations with regards to its' indirect **impacts on biodiversity**. In addition, customers are increasingly aware of the impacts of their choices on ecosystems, water resources and climate change. Carrefour sells several products containing materials under high stakeholder scrutiny for their environmental footprint (such as palm oil, fresh fish, beef, soya, etc.), which increases the risk of indirect involvement in deforestation. Any allegations related to the involvement of one of its suppliers in damages to ecosystems could severely harm the company's reputation. Conversely, promoting sustainable agricultural practices among suppliers could strengthen the company's ability to source organic products in the future.

Carrefour's activities bear a significant **climate footprint**. The Group's **direct sources of GHG emissions** include the significant transportation flows linked to its distribution activity and the recent development of e-commerce, the intensive energy consumption linked to air-conditioning and lighting of stores, and the use of refrigeration processes. Efforts to optimise transportation flows and reduce GHG emissions from the cooling chain could positively impact the company's operational costs, while efforts to reduce stores' energy consumption could contribute to strengthen the value of Carrefour's fixed assets.

Carrefour also has significant **indirect impacts on climate change** via the products it sells. According to the Food and Health organisation, **animal rearing** is the source of two thirds of GHG from agriculture and 78% of methane emissions from agriculture, while deforestation is linked to about 10% of worldwide GHG emissions. One way for Carrefour to reduce its scope 3 impact is to promote meat from sustainable rearing, as well as reduced meat consumption. In addition, **the reduction of food waste** is a key driver for combating climate change. According to the Food and Health Organisation 8% of GHG emissions from human origin are linked to food waste. Ensuring the reduction of food waste could positively impact Carrefour's image with customers. Conversely, climate change could affect Carrefour's ability to conduct its operations: according to IPCC, agricultural yields are likely to decrease by 20% to 25% from now to 2050 as a result of climate change.

While consumers are increasingly aware of **packaging's impacts** on ecosystems and striving to reduce these via responsible consumption modes, Carrefour's ability to fulfill this demand for packaging with reduced impacts (i.e packaging of reduced weight, made of recyclable materials, not containing hazardous substances, etc.) may strongly affect its market position in the coming years. In a context of evolving European legislation on waste, such efforts may affect the group's license to operate.

88% of the company's employees are non-managers in 2018 and a significant percentage of them hold positions considered as vulnerable in terms of employment (such as cashiers, deliverers, etc.). The company has recently conducted **reorganisations** (including a reduction of 2,400 jobs in early 2019). In a context of transformations of the Supermarket industry (in link with the development of e-commerce and automatisation) and in the frame of the Group' strategy to focus its activity on food, the group is likely to conduct further reorganisations in coming years. Failing to responsibly address stakeholders' expectations could negatively impact its ability to attract and retain talented employees. In addition, the implementation of Carrefour's strategy creates an increased need for competencies in the food-service industry, which may be difficult to find externally. As a result, an efficient management of **employee training and career development** is a pre-requisite for Carrefour's transition towards its new business model.

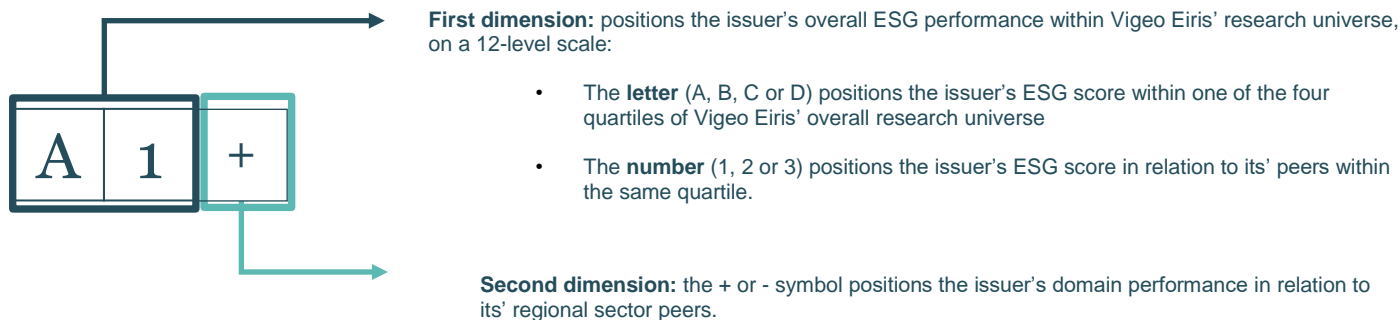
Methodology

Corporate Rating Scale

Vigeo Eiris' consolidated rating scale ranges from A1+ to D3-.

The consolidated rating translates the overall and relative ESG performance of an issuer according to 2 elements:

- Quartile performance and position within this quartile;
- Position in relation to its' peers.



Definition of Strategic Assets

Each sustainability criterion of our rating framework affects issuers' non-material strategic assets with a different intensity. Vigeo Eiris has categorised these non-material assets into 4 classes: reputation, human capital cohesion, operational efficiency and legal security. The intensity of each sustainability driver on each asset class translates into a weight from 0 to 3.

Vigeo Eiris postulates that a correlation exists between an issuer's level of commitment towards each of the sustainability criteria analysed and its ability to protect and develop these 4 classes of strategic assets.

From the ESG scores obtained by an issuer on different sustainability criteria, we infer a level of risk mitigation of these strategic assets. This level is given a score which is calculated using the following formula:

- "R": Level of risk mitigation
- "Y": Asset under review (reputation, human capital cohesion, legal security, operational efficiency)
- "S": Sustainability criteria score for which the weight of the asset X is weighted at 2 or 3
- "W": Weight allocated to the asset under review within each sustainability driver

$$Ry = \frac{\sum(Sy \times Wy)}{\sum Wy}$$

Risk Typology – The 4 main categories

Reputation	<ol style="list-style-type: none"> 1. Brand recognition, level and variation of brand image and organisation, its leaders and consulting shareholders 2. Outbreak, persistence, reduction or elimination of rumours, allegations and controversies 3. Licence to operate, degree of social acceptability (approval of the implementation and/ or extension of the company, receipt and maintenance of operational permits and licences from public authorities or ordering parties) 4. Talent attraction 5. Variation of levels of shareholder support and satisfaction
Human Capital Cohesion	<ol style="list-style-type: none"> 1. Stability of labour relations and social conflict mitigation 2. Retention of skills and know how; skills development 3. Attraction and mobilisation of core skills 4. Company culture and values
Operational Efficiency	<ol style="list-style-type: none"> 1. Production cost management (work accidents, competencies, reducing energy consumption etc) 2. Competitiveness of products and services (training, waste reduction, employee training and participation) 3. Organisational and process effectiveness (audits and control mechanisms, environmental strategies etc)

	<p>4. Innovation and preventing production and organisational process techniques from becoming obsolete; prevention of technological obsolescence</p> <p>5. Security and quality of supplies and revenues</p>
Legal Security	<p>1. Recourse and complaints, litigation, legal proceedings, trials and fines</p>

Controversies

We continuously monitor controversies involving the social responsibility of the issuers we assess. We promptly disseminate our detailed opinion on the severity and possible consequences of the controversies in question. This service is designed to inform investors and asset managers about unexpected changes in issuers' risk profiles and enable them to make informed decisions.

We assess issuers' capacity to mitigate risks arising from allegations, media campaigns, lawsuits, or social movements related to environmental, social, ethical, supply chain, human rights and governance issues, which involve their products, services or behaviours. We provide an opinion on issuers' controversy risk mitigation based on the analysis of three systematic factors: the **severity** of the controversy regarding the social responsibility norms and standards applicable to the issuer and the rights and expectations of its stakeholders; the **frequency** of similar allegations involving the issuer; the issuer's **responsiveness** and its ability to take appropriate, corrective and preventive measures. Depending on their topic, controversies are categorised into 106 different themes.

This service provides access to our Controversy Journal, which is permanently available and categorises entries by social responsibility theme and factor, company, sector, and country. It also offers a "Warning List", identifying companies involved in the most critical controversies which, due to the frequency of allegations to which they are subject and/ or their weak level of responsiveness, require issuers to be more vigilant. The reference universe for Vigeo Eiris' controversy analysis is based on our exclusive Equitics© research. The Controversy Database is updated daily and involves correspondence with issuers.

Contribution to the UN Sustainable Development Goals

Vigeo Eiris measures issuers' level of contribution towards the Sustainable Development Goals (SDGs), set by the United Nations in 2015. As these 17 goals are interdependent, complementary and indivisible, Vigeo Eiris has developed an analytical framework, based on its generic reference framework, that companies can use to assess their level of commitment regarding their SDG responsibilities.

The sustainability criteria rated are categorised into 8 themes: Business Ethics, Governance, Wellbeing, Decent Work, Basic Needs, Clean Technology, Natural Resources and Development Tools. The analysis reviews and balances issuers' degree of contribution to the SDGs against their governance, operations, and the specific nature and footprint of their products and services. The assessment is based on the premise that contributing to the SDGs forms an integral part of issuers' social responsibility and must therefore be integrated into their frameworks of commitments, risk management, stakeholder dialogue and reporting.

Vigeo Eiris provides a final opinion on companies' overall level of contribution to the SDGs on a 5-level scale: very positive, positive, marginal, negative or very negative. The reference universe is based on Vigeo Eiris' Equitics© research and is updated at the same time as Equitics©.

Energy Transition Strategy score

By taking into account the size, sector of activity and nature of its products and services, we assess a company's willingness and capacity to adopt a clear, documented and measurable transformation strategy regarding its behaviour, products and services; with the objective of reducing its carbon footprint and creating sustainable value based on low-carbon activities that are in line with international climate objectives such as the 2 degrees policy.

Each issuer receives an Energy Transition Strategy score resulting from the analysis of criteria defining its responsibilities regarding the fight against climate change. These criteria stem from an authoritative framework of international norms and standards and consider the best practices that make up our Equitics© framework: green products, energy, atmospheric emissions, transportation, use and disposal of products, and societal impacts of products & services. The reference universe is based on Vigeo Eiris' Equitics© research and is updated at the same time as Equitics©.

Carbon Footprint

A company's carbon footprint is the total volume of Greenhouse Gas (GHG) emissions in tonnes of CO2 equivalent (Scope 1 + Scope 2) emitted by the issuer.

Emissions

- Scope 1 covers direct GHG emissions originating from sources that are owned or controlled by the issuer.
- Scope 2 covers indirect GHG emissions caused by the organisation's consumption of electricity, heat, cooling or steam purchased or brought into its reporting perimeter.
- Scope 3 covers other indirect emissions (not included in Scope 2) from the entire value chain, both upstream and downstream.

Data

The main source of GHG emissions data is the Carbon Disclosure Project (CDP) and Vigeo Eiris' own company research. When data is not available via these two processes, Vigeo Eiris estimates the Carbon Footprint of the company based on the size and the nature of the issuer's activities, using three main modeling processes: regression analysis, sector-specific factors and average sector emission ratios. The research on non-sovereign issuers is updated twice a year.

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