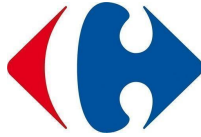


Climate Plan 2023

Carrefour Group

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1. Carrefour Group climate strategy

1.1. Background and challenges

The IPCC's 2021 assessment report¹ detailed some of the irreversible consequences of climate change, such as rising sea levels. It also pointed to ways we can fight climate change, such as curbing rising temperatures, transitioning away from fossil fuels, and increasing the use of renewable energies as part of a new energy model.

In 2015, the COP21 Paris climate agreement set a number of objectives for limiting climate change on our planet, advocating reorientation of the world economy towards a low-carbon model and the phasing-out of fossil fuels. At COP26 in Glasgow, countries acknowledged the climate emergency and committed to stepping up their actions to tackle climate change.

The fight against climate disruption is one of the major challenges facing us in the 21st century. And consumption and food play an essential role in this fight. Carrefour has therefore chosen to join the struggle against global warming and has made a number of major commitments regarding climate. These commitments respond to growing demand from citizens and consumers for transition to a sustainable model.

Because if we're really going to tackle climate change, we have to change our consumption habits. In France, 10 million metric tons of food is wasted every year, with an estimated commercial value of €16 billion. This waste is an unnecessary drain on natural resources such as arable land and water, and contributes to greenhouse gas emissions which could have been avoided. According to estimates by Ademe, these emissions account for 3% of the national total.

The Carrefour Group and greenhouse gas emissions

In 2023, total greenhouse gas emissions by the Carrefour Group were estimated at 101,887 million tons of CO₂ equivalent (scopes 1, 2 and 3)². Emissions from the Carrefour Group's integrated stores are Scopes 1 and 2. They account for 1.4% of the Carrefour Group's emissions. Scope 3 emissions are from upstream and downstream activities and account for more than 98% of the Carrefour Group's emissions³. Carrefour's impact on climate and biodiversity, therefore, is mainly indirect. Unlike other industries, Scope 3 still accounts for over 95% of emissions in the retail sector - and food retailing in particular⁴.

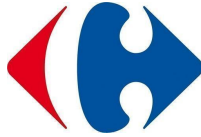
¹Climate change widespread, rapid, and intensifying - IPCC, PR, 9/08/2021:
https://www.ipcc.ch/site/assets/uploads/2021/08/IPCC_WGI-AR6-Press-Release_en.pdf

²Data not including FLAG (forest, land and agriculture) estimates on land use change.

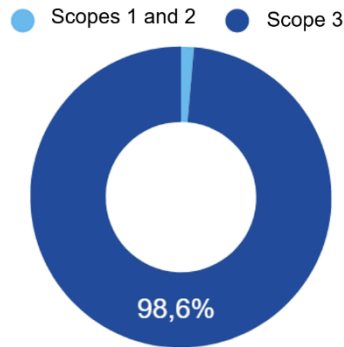
³Data not including FLAG (forest, land and agriculture) estimates on land use change.

⁴LSA Green Barometer, NotaClimate data, 31 May 2023

<https://www.lsa-conso.fr/mondelez-nestle-bel-comment-evoluent-les-emissions-carbone-des-40-geants-de-l-agroalimentaire,437836>

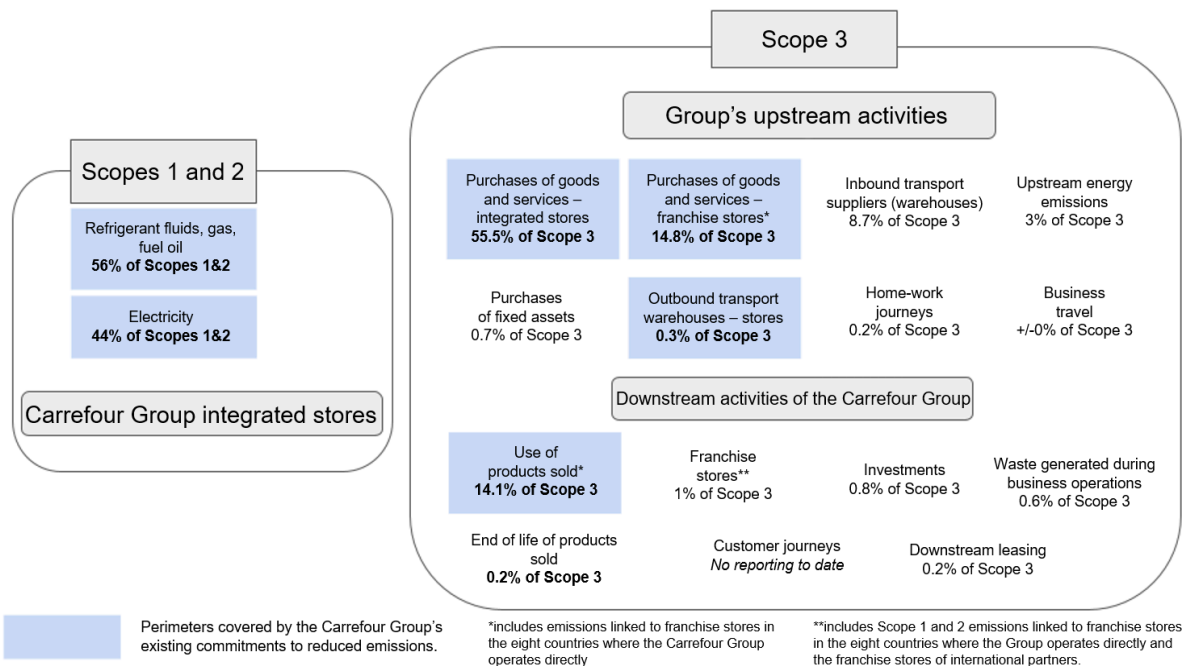


Breakdown of emissions by the Carrefour Group



The Carrefour Group implements the GHG Protocol standard, and uses emission factors from ADEME, Agribalyse, DEFRA and the IEA's NZE scenario. It measures its CO₂ emissions in Scopes 1, 2 and 3. The breakdown of emissions across the different emission items is detailed in the diagram below.

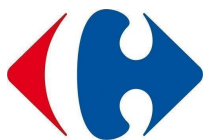
Carrefour Group carbon budget 2023 for applicable items in Scopes 1, 2 and 3 using the GHG Protocol methodology



Franchise store emissions:

Franchise stores are included in the “indirect” perimeter of the Carrefour group (Scope 3). Franchise stores account for 76% of our total store base, 44% of our total sales area, 37% of our total sales, and 25% of our consolidated sales. Most franchise stores are small outlets.

We can distinguish between two types of franchise store in the Carrefour Group:



- Franchise stores in the 8 countries in which the Carrefour Group operates directly: 8,865 stores, accounting for 27% of our total sales area and 25% of the Carrefour Group's consolidated turnover;
- the franchise stores of our international partners (Carrefour Partnership International): 2,543 stores accounting for 17% of our total store base, 12% of our total sales area, and less than 1% of the Carrefour Group's consolidated sales.

Table: Share of franchise stores in Carrefour Group business

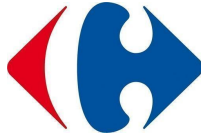
	All franchises	Franchise stores in the 8 countries where the Carrefour Group operates	International franchise partners
Number of stores	11,408	8,865	2,543
Share of total stores	76%	59%	17%
Share of sales area	44%	27%	17%
Share of consolidated sales	25%	25%	0.3%
Share of total sales	37%	25%	12%

Emissions linked to energy consumption and the use of refrigerant fluids by all franchise stores combined (Scopes 1 and 2): in 2023, these emissions accounted for 42% of total emissions (Scopes 1 and 2) by Carrefour stores worldwide, and were equivalent to 1% of the Carrefour Group's Scope 3 emissions. At its 2023 shareholders' meeting, Carrefour committed to defining a target for Scope 1 and Scope 2 emissions by franchisees. At its 2024 shareholders' meeting, the Carrefour Group announced that 80% of franchise stores will be equipped with low-carbon and energy-saving technologies by 2030.

As for Scope 3, Carrefour is updating its climate plan in 2024. It has committed to securing a 32% reduction in emissions related with the purchase of goods and services by 2030 (baseline: 2019) and a 27.5% reduction in use of products sold by 2030 (baseline: 2019) for all stores in the Carrefour group - stores trading under the Carrefour name, integrated and franchise - in the 8 countries where we operate directly. This perimeter represents more than 70% of our Scope 3 emissions.

Details of franchise store emissions included in the Carrefour Group's carbon diagnosis can be found in section 4.2 - "The Carrefour Group's performance". These emissions account for 24% of all Scope 3 emissions for which the Carrefour Group is responsible.

1.2. Climate-related risks and opportunities



The principal threats identified in the Carrefour Group's risk analysis

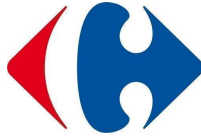
Carrefour is committed to fighting climate change by reducing the Carrefour Group's GHG emissions and minimising the climate risks to which its business is exposed. At Carrefour, the threats related with climate change are integrated into the company's risk management process. Climate change has been identified as a major risk which takes the following forms:

- **Regulatory risk:** The Carrefour Group is exposed to significant regulatory pressures, notably regarding the enforcement of the F-Gas regulation on refrigeration systems used in stores, recent legislation on energy efficiency and the new law on tackling waste and promoting the circular economy (AGEC).
- **Market risk:**
 - Changes in consumer habits: The Carrefour Group is exposed to risk regarding new consumer habits related, to a greater or lesser degree, to climate change: reduction in the use of internal combustion vehicles, buying local produce, low-carbon products, reduced consumption of animal protein etc. All of these trends have a profound impact on the purchasing behaviour of Carrefour Group customers;
 - Securing supplies of raw materials: the Carrefour Group has identified a number of raw materials that contribute to climate change or are highly sensitive to the consequences of climate change (e.g. drought). Carrefour may therefore be exposed to a risk of disruptions to its supplies of raw materials, or to increases in their prices.
 - Securing energy supplies: Energy supplies are also sensitive to climate change. Significant increases in energy prices could therefore affect the Carrefour Group, and could lead to disruptions in supply.
- **Physical risks for stores:** In the countries where it operates, the Carrefour Group may be exposed to natural disasters and erratic meteorological conditions, with direct or indirect consequences on its business, assets, customers and employees - and in each case an impact on our financial performance. Variations in temperature can create challenges in terms of making adjustments to our opening hours or even investing in cooling and heating installations.

The Carrefour Group's detailed analysis of climate-related impacts, risks and opportunities

Acknowledging the risk that climate change poses to its business, as well as the potential opportunities that it could present, in 2021 Carrefour conducted a climate risks and opportunities assessment in line with the TCFD's recommendations. In 2023, Carrefour updated this analysis in light of the requirements of the Corporate Sustainability Directive (CSRD).

The analysis of climate-related impacts, risks and opportunities is structured around the identification, definition, evaluation and prioritization of each risk and opportunity.



1. Identification and definition of climate-related Impacts, Risks and Opportunities (IRO):

All climate-related risks and opportunities commonly addressed within the TCFD framework have been reviewed to select those applicable to the Carrefour Group's business over a given time frame. Physical risks include acute and chronic risks related to climate change and cover our supply chain as well as our operations. Transition risks include political and legal risks, reputational risk, technology and market risks to our operations and, where applicable, supply chain risks.

Carrefour examined the corporate, technological, economic, environmental and political dimensions of its business to identify risks and opportunities. It based its analysis on the International Energy Agency's *Net Zero Emissions* and *Stated Policies* scenarios. These scenarios were supplemented by vulnerability and impact assessments addressing areas such as the energy and carbon pricing markets and physical risks (floods, water restrictions and shortages, extreme heat, drought and reduced agricultural production) in the regions where the Carrefour Group operates.

The universe of climate change risks was updated in 2023 to align it with the applicable regulations (Corporate Sustainability Reporting Directive and Duty of Care).

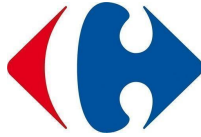
2. Assessment of material risk and opportunities for Carrefour (financial materiality) and externally (stakeholder and environmental materiality).

Interviews were carried out with our technical, energy, investment and real estate departments to rate the financial materiality of climate impacts, risks and opportunities. Risk sheets were prepared to document the risks, impacts and opportunities assessed and to ensure that the teams were well understood during interviews.

Impact materiality was assessed by an external firm (EY France Sustainability Team) in collaboration with internal experts (including the Carrefour Group's CSR team), drawing on external scientific databases and reports as well as charts already prepared by Carrefour.

Material risks and opportunities for the Carrefour Group are identified according to the following criteria:

- a. Financial materiality for impacts, risks and opportunities is assessed in terms of the financial and/or reputational impact for the Carrefour Group, according to the scale detailed below. Material risks are risks with a significant to strategic impact.
 - **low** for a financial risk of less than €10m or local reputational risk,
 - **moderate** for a financial risk between €10m and €50m or regional reputation risk,
 - **significant** for a financial risk between €50m and €100m or national reputational risk, and
 - **strategic** for a financial risk of more than €100m or international reputational risk;
- b. Stakeholder materiality is assessed in relation to the environment, human rights, and health and safety. It takes into account:
 - i. **the magnitude of the risk:** a very high level of risk is an event that can lead to death, the complete loss of the psychological well-being of



individuals, the destruction of wildlife and the environment, or the intensification of climate change;

- ii. **irremediability of risk:** a very high level of risk is a hazard that cannot be eliminated without significant side effects or after-effects, or that is difficult to compensate;
 - iii. **the extent of the risk:** a very high level of risk has a general impact: on society as a whole, and at international or global level.
- c. Risks are rated according to the time frame (short-term if less than 2 years, medium-term if between 2 and 5 years, long-term if over 5 years);
 - d. Risks are analysed all along the value chain: upstream, directly relating to operations, relating to franchises and downstream.

Table 1 shows all the IROs identified as material by the Carrefour Group.

3. Prioritizing climate change-related risks and opportunities

Risks are prioritized in terms of materiality and net probability (probability x level of oversight/opportunity):

- **Risk/opportunity materiality** occupies the intersection between materiality as it affects Carrefour (financial or reputational materiality) and external materiality (as it affects stakeholders and/or the environment).
- **Level of probability**
 - 1: very uncertain if probability of occurrence less than 30%,
 - 2: rather uncertain if probability of occurrence between 30% and 50%,
 - 3: rather likely if between 50% and 80%,
 - 4: very likely if above 80%;
- **Level of oversight** by Carrefour
 - 4: very low if no oversight,
 - 3: low if occasional oversight,
 - 2: medium if partial oversight and mitigation,
 - 1: high if full oversight and mitigation;
- The **level of opportunity** for Carrefour
 - 1: fully realized if the opportunity is already fully exploited,
 - 2: largely realized if the opportunity has not yet been exhausted,
 - 3: moderately realized if the opportunity still needs to be explored,
 - 4: under-exploited if the opportunity has not yet been addressed.

The risk rating is based on the Carrefour Group's risk analysis, which is updated annually with input from teams from all Carrefour Group countries. An analysis of emerging risks was also conducted in 2023 to identify and assess medium- and long-term risks and opportunities, including climate-related ones.

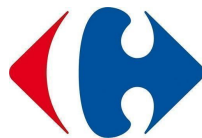
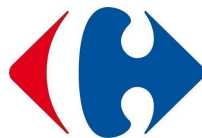
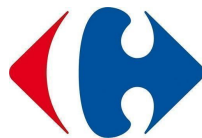


Table 1: Material risks and opportunities related to climate change

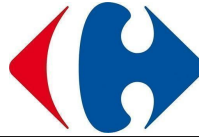
Risks and opportunities	Definition	Type	Value chain	Time frame	Financial impact
Climate change mitigation					
Increase in product costs due to scarcity of resources and raw materials (OPEX)	<p>Higher and more volatile commodity prices, in conjunction with measures to mitigate the carbon impacts of production and the increased vulnerability of certain commodities to climate change.</p> <p>Extreme weather events and climate change can affect the yield and quality of raw materials (OPEX/SALES), supply chain disruptions, shortages, and irregular consumer access to products (SALES/REPUT).</p>	Market risk	Upstream	Medium term (2-5 years)	>€100M
Additional costs for freight transport linked to the increase in the carbon price (OPEX)	<p>Additional freight costs in conjunction with quotas and regulations on road transport and major import quantities. Introduction of low-carbon technologies for transport vehicles: the modernization and renewal of fleets may result in additional costs for the Carrefour Group (OPEX).</p>	Market risk	Upstream	Medium term (2-5 years)	>€100M
Failure to meet compliance requirements, fines and penalties for non-compliance with regulations (OPEX)	<p>Taking action ahead of new regulations and complying with key requirements, e.g. mandates and regulations on existing products (such as the AGEC law on waste reduction and the circular economy in France), carbon pricing mechanisms, tighter obligations on emissions reporting (green taxonomy, CSRD), the F-gas regulation and the use of refrigerants in stores.</p>	Regulatory risk	Operations	Short term (1-2 years)	>€100M
Resilience and energy autonomy (OPEX)	<p>Building resilience and energy autonomy through the development of low-carbon value chains, investment in cleaner technologies and on-site energy production (e.g. installation of photovoltaic panels in car parks).</p>	Market opportunity	Operations	Short term (1-2 years)	>€100M



Increased revenues from low-carbon activities and products (sales)	<p>Reducing the carbon footprint of products by reducing packaging and developing bulk, recycling, and using more efficient production and distribution processes.</p> <p>Innovation and development of less-polluting products and sustainable offers. For example, the development of an energy sales business offering (installation of photovoltaic panels, electric charging stations, heat pumps).</p>	Market opportunity	Downstream	Short term (1-2 years)	>€100M
Adapting to climate change					
Supply chain resilience (OPEX/SALES/REPUT)	<p>The development of sustainable agricultural practices in partnership with producers, suppliers and other stakeholders in the value chain helps to secure supplies. More particularly, the introduction of low-carbon farming practices improves the sustainability of production.</p>	Market risk and opportunity	Upstream	Medium term (2-5 years)	>€100M
Climate events affecting employees, customers, and productivity, or causing damage to buildings (CAPEX/SALES)	<p>Physical sites (stores, warehouses, offices) are exposed to physical hazards which are acute (the increased severity of extreme weather events like cyclones and floods, or the increased probability and severity of forest fires) or chronic (changes in precipitation patterns and erratic climate behaviour, increases in average temperatures and sea levels).</p> <p>These events can affect employee productivity (e.g. heatwaves), damage buildings (e.g. storms, hail), cause the loss of goods (e.g. floods) or disrupt business (e.g. water or refrigeration system failures) (SALES/OPEX/REPUT).</p>	Physical risks	Operations	Long term (>5 years)	>€100M



Products and prices which do not reflect climate change (SALES)	<p>Failure to adapt our product offering to climate change (review of the seasonality of products, introduction of new products, locally produced or locally sourced products etc.) can lead to misalignment with consumer expectations and an increase in the Carrefour Group's carbon footprint related to the purchase of goods and services (SALES/REPUT).</p> <p>Conversely, reviewing product offerings can also be an opportunity to reduce prices and offer a more attractive product portfolio.</p>	Market risk	Downstream	Long term (>5 years)	>€100M
Energy					
Rising energy costs in the value chain and energy shortages (OPEX)	Higher and more volatile energy prices can lead to higher product prices. Energy shortages can lead to disruptions in the supply of products or raw materials along the value chain (fuel for agricultural machinery, energy for storage or processing, fuel for transporting products etc.).	Market risk	Upstream	Short term (1-2 years)	>€100M
Poor energy consumption management, increased energy costs (OPEX/CA)	Inefficient control of energy consumption in stores, warehouses and offices leads to higher operational costs. Higher, more volatile energy consumption prices. Energy shortages that can cause disruption to business and/or the loss of goods (e.g. in refrigerated displays and cold rooms).	Market risk	Operations	Short term (1-2 years)	>€100M
Stores without a proper low energy plan become less attractive (SALES)	Failure to install low-carbon equipment (self-closing refrigerated display cabinets, low-carbon technologies) can make stores less attractive to customers, investors, lessee-operators and franchisees. Investing in equipment (technologies, insulation etc.) and renewable energy (e.g. photovoltaic panels) improves the energy resilience of stores.	Market risk	Operations	Medium term (2-5 years)	>€100M



<p>Sale of products exceeding energy consumption and/or GHG emission thresholds (SALES)</p>	<p>Carrefour may be punished for the sale of products generating high CO2 emissions when used, particularly fuels. Failure to offer products which participate in the transition to greener consumption and transport patterns may have a reputational impact in the form of loss of attractiveness to customers.</p> <p>Misalignment of the household appliances sold by Carrefour with energy efficiency standards may lead to lost revenue and reputational impact. Example: light bulbs, washing machines, media etc.</p>	<p>Market risk</p>	<p>Downstream</p>	<p>Short term (1-2 years)</p>	<p>€50-100M</p>
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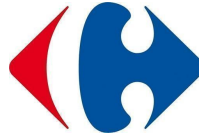
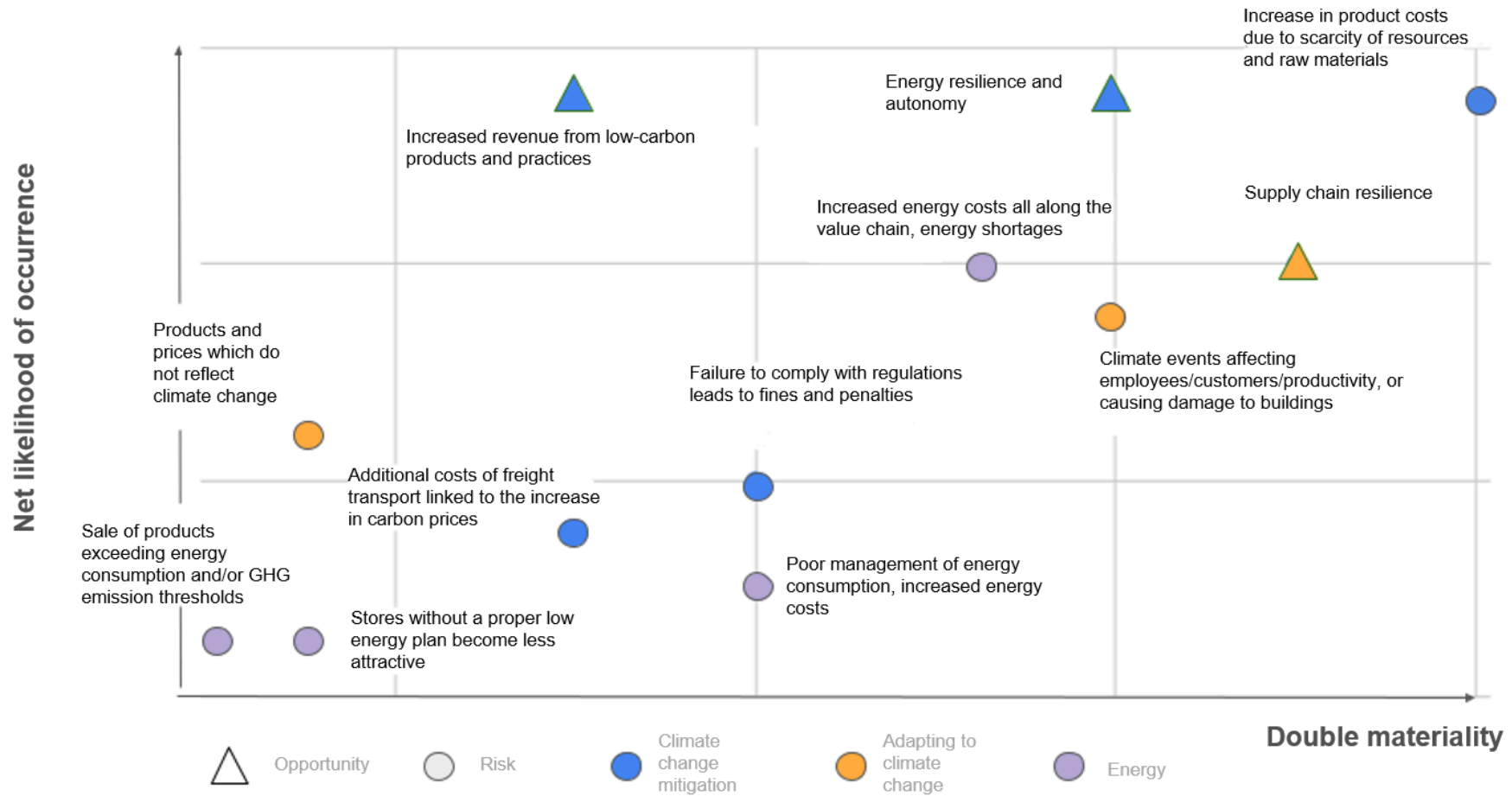
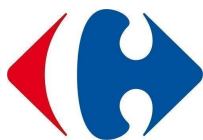


Figure 1: Matrix of material risks and opportunities related to climate change





For an analysis of the risks specific to physical sites, see the section “Adapting to climate change”.

Managing climate-related impacts, risks and opportunities in the Carrefour Group

Risk management options are analysed for all prioritised risks in order to determine appropriate mitigation measures. We also identify priority opportunities and address them in action plans launched as part of Carrefour's adaptation strategy.

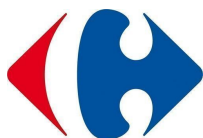
To manage these action plans on risks and opportunities, the Carrefour Group has implemented a specific governance structure involving one or more Executive Committee members and managers from all the departments concerned, identifying the specific vectors addressed by the plans. These vectors and the associated governance are detailed in Table 2-A below.

For all policy vectors, Carrefour puts in place a transition plan to strengthen governance, define policies, objectives, performance indicators, action plans and the associated resources, and evaluate the financial effects. The transition plan is therefore in line with the Corporate Sustainability Reporting Directive (CSRD). Table 2-B below details the different elements of the transition plan.

The risk and opportunities assessment and the associated transition plans are reviewed by the CSR Committee and the Audit Committee under their respective Corporate Sustainability Reporting Directive (CSRD) powers.

Table 2-A: Principal policy vectors for the management of climate-related IRO

Policy vectors	Governance	Risks and opportunities
Reducing the GHG emissions of integrated and franchise stores, particularly: <ul style="list-style-type: none"> energy efficiency of physical sites, uptake of renewable energies, refrigerants management 	Executive Committee members: Alice Rault (Strategy Director), Carine Kraus (Engagement Director) Departments involved: strategy, assets, CSR.	Poor management of energy consumption, increased energy costs
		Stores without a proper low energy plan become less attractive
		Failure to comply with regulations leads to fines and penalties
		Energy resilience and autonomy
Reducing GHG emissions in Scope 3, particularly: <ul style="list-style-type: none"> purchases of goods and services, especially agricultural (FLAG) transport of goods use of products and fuels. 	Executive Committee members: Guillaume De Colonges (Merchandise Director), Carine Kraus (Engagement Director), Alice Rault (Strategy Director) Correspondent departments: merchandise, quality, CSR, supply chain, strategy, Carfuel.	Increase in product costs due to scarcity of resources and raw materials
		Sale of products exceeding energy consumption and/or GHG emission thresholds
		Additional costs of freight transport linked to the increase in carbon prices
		Increased revenue from low-carbon products and practices
Adapting product lines to reflect climate change, developing/supporting a resilient agricultural and	Executive Committee members: Guillaume De Colonges (Merchandise Director), Carine Kraus (Engagement Director)	Supply chain resilience
		Increased energy costs all along the value chain, energy shortages
		Products and prices which do not reflect climate



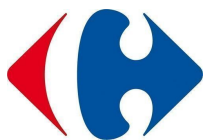
production model	Reference departments: merchandise, quality, CSR.	change
Adapting Carrefour's assets to climate change	Executive Committee members: Laurent Vallée (General Secretary), Jérôme Nanty (Property Director) Reference departments: security, audit & risk, real estate, CSR	Climate events affecting employees/customers/productivity, or causing damage to buildings

Table 2-B: Elements of the transition plan for climate-related material IROs

Area	Detail of action to be taken for each policy vector
Governance	Strengthen governance with the involvement of the relevant departments under the supervision of an Executive Committee member. The transition plan is approved by the CSR Committee appointed by the Board of Directors. Finance teams are involved in the reporting, internal control and validation of sustainability information processes. The audit committee appointed by the Board of Directors is responsible for ensuring the reliability of the information.
Policies	Define a Group-wide policy covering all material Impacts, Risks and Opportunities. Ensure that the Carrefour Group's ESG policies comply with the requirements of the E1 ESRS.
Objectives	Define objectives and trajectories in relation to existing policies. Closing dates are set for the achievement of objectives. Objectives are defined in relation to reference standards including the Science Based Targets initiative to approve alignment with a 1.5°C trajectory by 2030 (and the FLAG standard for agriculture-related emissions).
Action plans and associated resources	Define the actions permitting the transition plan to be implemented, and the associated resources.
Standardized indicators	Identify performance indicators to monitor the progress of action plans. Integrate mandatory indicators in reporting practices and establish internal controls to ensure data reliability.
Financial effects Applicable in 2026	Assess the financial implications of risks and opportunities associated with sustainability issues.

1.3. Carrefour Group aims and objectives

Version 2023 - published May 2024.



History of commitments

In June 2015, Carrefour announced an ambitious emissions reduction target at its Shareholders' Meeting, in line with the 2°C scenario developed by the IPCC. By 2019, Carrefour had achieved a 39% reduction in its greenhouse gas (GHG) emissions (its target is a 40% reduction by 2025) in Scopes 1 and 2. In light of this performance, in 2020 the Carrefour Group updated its climate plan, with more ambitious targets for Scope 1 and Scope 2 emissions and wider commitments on Scope 3 emissions. 98% of the Carrefour Group's GHG emissions are indirect, the main sources being products sold in stores (70%), the use of products sold (14%), and the upstream transport of goods (8.7%).⁵

At its Shareholders' Meeting of 29 May 2020, Carrefour announced new targets approved by the Science Based Targets initiative (SBTi) led by the CDP, the Global Compact, the World Resources Institute (WRI) and the WWF®. With these initiatives, Carrefour is committed to keeping global warming well below the 2°C threshold by 2100 (compared with temperatures during the preindustrial period). This commitment takes into account the Carrefour Group's indirect emissions for the first time (Scope 3), setting a reduction target of 29% for these emissions by 2030.

Carrefour restated its ambitions at the 2024 Shareholders' Meeting. Carrefour is committed to reducing its greenhouse gas emissions in Scopes 1, 2, and 3 by 2030 under its contribution to the collective effort to limit global warming to 1.5°C by 2050. These targets take into account direct and indirect emissions (Scopes 1, 2 and 3) as well as the FLAG (Forest, Land and Agriculture) methodology for emissions by the agricultural sector. Carrefour has submitted a dossier to the SBTi for approval of its 1.5°C by 2030 trajectory.

Reducing emissions from integrated stores aligned with a 1.5°C trajectory (direct and indirect emissions from operations) - Scopes 1 and 2

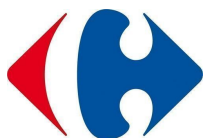
The Carrefour Group's action plan aims to reduce direct emissions from its activities by 30% by 2025 (baseline 2019), 50% by 2030 (baseline 2019) and 70% by 2040 (baseline 2019) - a target in alignment with the 1.5°C scenario.

To achieve these goals, Carrefour is taking the following action in its stores:

- **Using 100% renewable electricity by 2030.** To achieve this goal, Carrefour will give priority to onsite production – for its own use or for injection into the grid – and sign up to PPAs (Power Purchase Agreements).
- **Reducing energy consumption by 27.5% by 2030 (baseline 2019)** – the equivalent of more than 1 million MWh per year and a reduction of 240,000 metric tons in CO₂ equivalent.
- **Reducing emissions related with refrigerants by 50% by 2030, and then by 80% by 2040.** This will involve replacing fluorinated refrigerants with new installations that use CO₂, in compliance with the European F-Gas regulation.

Reducing indirect emissions linked to our upstream and downstream activities (Scope 3)

⁵ Estimate does not include FLAG emissions related with land use change.



Carrefour unveiled new targets for the reduction of GHG emissions at its 2024 Shareholders' Meeting. These new targets are aligned with a warming scenario of 1.5°C by 2030. The targets take into account the FLAG (Forest, Land and Agriculture) methodology for emissions from the agricultural sector.

Carrefour has set itself the target of **reducing its indirect GHG emissions (Scope 3) by 32% by 2030**, compared with 2019. A dossier seeking approval of the alignment of these targets with a 1.5°C trajectory by 2030 has been submitted to the Science Based Targets initiative.

Carrefour has structured its Scope 3 climate action plan around three types of emissions which together accounted for over 90% of its Scope 3 emissions in 2023⁶:

Table 3: Summary of the Carrefour Group's objectives in alignment with a 1.5°C FLAG 2030 trajectory and contribution of each item to Scope 3 total⁷

	Share of Scope 3 total	Reduction by 2030
TOTAL	90.9%	-32%
Purchases of goods and services – non-FLAG	18.1%	-30%
Purchases of goods and services – FLAG	63.0%	-33.30%
Use of products sold	9.0%	-27.50%
Franchises	0.6%	80% of stores equipped with low-carbon solutions
Outbound transport	0.2%	-27.5%
Supplier commitment	-	TOP100 committed to 1.5°C in 2026
Zero deforestation	-	Action plan for sensitive raw materials in 2025

⁶ These figures are based on a preliminary estimate of FLAG emissions related to land use change. It is conservative in its assumptions (in the absence of traceability data, it postulates a worst case scenario. Carrefour's carbon footprint is probably overestimated under this scenario.

⁷ Targets under review by the SBTi - May 2024.

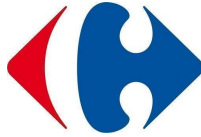


Figure 2: Scope 3 emissions trajectory showing a 32% reduction 2019-2030⁸



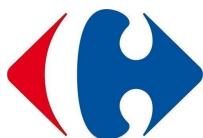
The Carrefour Group's objectives are:

- Purchases of goods and services: Reduce GHG emissions linked to purchases of goods and services by 32% by 2030 (baseline 2019)
 - Reduce GHG emissions linked to purchases of non-FLAG goods and services by 30% by 2030 (baseline 2019),
 - Reduce absolute Scope 3 emissions linked to FLAG by 33.3% by 2030 (baseline 2019),
 - Introduce action plans to tackle deforestation and protect sensitive raw materials, with implementation by 2025 In Brazil, the raw materials concerned are beef, pulp, paper and derivatives, palm oil, soya and cocoa.
 - Supplier engagement: TOP100 suppliers must commit to the 1.5°C trajectory by 2026, under threat of delisting.
- Use of products sold: 27.5% reduction in GHG emissions linked to the use of the products we sell, including fuel, by 2030 (baseline 2019),
- Outbound transport: Reduce emissions linked to outbound transport by 27.5% by 2030 (baseline 2019),
- Franchises: 80% of stores equipped with low-carbon and energy-saving technologies by 2030,

Perimeter:

- The Carrefour Group's commitments apply in the eight countries where the company is present: France, Spain, Italy, Belgium, Poland, Romania, Argentina and Brazil.

⁸ These figures are based on a preliminary estimate of FLAG emissions related to land use change. It is conservative in its assumptions (in the absence of traceability data, the worst case scenario is used, which leads to a likely overestimate).



- Franchise stores in the eight countries in which the Carrefour Group operates are also covered by the Group's objectives ("Purchases of goods and services", "Use of products sold" and "Outbound transport").
- For franchise stores ("Franchises" category), Scope 1 and Scope 2 objectives include franchised stores in the eight countries in which the Carrefour Group operates as well as international franchise partners.

Summary of the Carrefour Group's commitments:

Table 4: Summary of the Carrefour Group's commitments

	Scope 1		Scope 2		Scope 3	
Group commitment	-30% by 2025, -50% by 2030, -70% by 2040 (baseline 2019)				-32% by 2030 (baseline 2019)	
Trajectory	1.5 °C		1.5 °C		1.5 °C	
Coverage of the commitment (% total emissions in 2021)	100% of integrated stores		100% of integrated stores		90%	
Categories covered by Group commitments (and percentage breakdown of emissions categories across the scope in 2021)	Direct emissions from integrated stores:	%	Indirect emissions from integrated stores:	%	Indirect emissions:	%
	Emissions linked to refrigerant gas leaks	86	Emissions linked to electricity consumption	100	Purchases of goods and services	81
	Emissions linked to consumption of gas (liquefied petroleum and natural)	9			Use of products sold	9
	Emissions linked to fuel consumption in stores	5			Franchises	0.6
					Outbound transport	0.2

E-commerce is subject to special monitoring. See Section 3 (Helping achieve net zero via e-commerce by 2030) for details of emissions tracked to date.

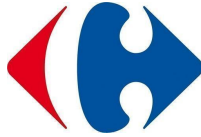
1.4 Responsible lobbying

Coordinated action by governments and businesses is needed to accelerate the food transition and the transition to a low-carbon economy. Carrefour is helping to transform market standards by lobbying in favour of:

- public commitments and their practical implementation in the practices of the Carrefour Group,
- taking public stance, often as part of coalitions, on the adoption of a common platform for action by businesses.

Among the various transformations advocated by Carrefour are:

- support for the UN Paris Agreement and limiting the temperature increase to less than 1.5°C, and its concrete articulation in the Group's climate goals,



- support for the adoption of a UN-backed plastics treaty to reduce production of virgin plastic,
- support for the adoption of an ambitious European regulation to combat imported deforestation.

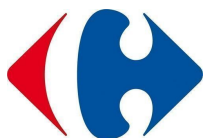
Within the industrial federations and organizations of which it is a member, Carrefour promotes and supports collective actions facilitating the transformation of the retail sector. This is particularly the case with regard to packaging reuse (national pact on plastic packaging in France, collective initiatives on deposit-return schemes) and reductions in greenhouse gas emissions (support for the 1.5°C strategy shared by retailers and suppliers within Perifem).

Finally, and more generally, Carrefour interacts with its fellow retailers to share its vision of the changes necessary in the sector.

Coalitions and partnerships:

To maintain its leadership role on climate issues and achieve its aims, Carrefour has joined a number of international coalitions at Group level, mainly:

- **Business Ambition for 1.5°** - an urgent call to action launched by a global coalition of UN agencies, business leaders and manufacturers, in partnership with Race to Zero. This initiative, which has more than 900 signatories, calls on companies to commit to ambitious goals on emissions reductions by setting a net-zero target in line with a 1.5°C trajectory to limit the impact of climate change.
- **Race to Zero** - a global campaign to mobilize enterprises, cities, regions and investors behind a healthy, resilient, zero-carbon recovery that anticipates emerging threats, creates decent jobs, and enables inclusive and sustainable growth. By joining this initiative, Carrefour is committed at the highest level of its organization to achieving net zero for Scopes 1, 2 and 3 greenhouse gas emissions as soon as possible, and by the middle of the century at the latest, in line with global efforts to limit warming to 1.5°C.
- **The European Climate Pact** is an EU initiative urging individuals, communities and businesses to get involved in climate action and build a greener Europe. Signatories are invited to share and report on their climate commitments through the CDP questionnaire.
- **Science Based Targets initiative (SBTi)**: The Science Based Targets initiative is a coalition of the Carbon Disclosure Project (CDP), the United Nations Global Compact, the World Resources Institute and the World Wildlife Fund (WWF) for Nature. It incubates methods and mechanisms that commit companies to science-based targets that are commensurate with their impact on the environment in their efforts to tackle global warming. These targets cover scopes 1 and 2, and 3. The Carrefour Group's objectives were approved in 2020 by the Science Based Targets (SBTi) as in alignment with a trajectory that helps limit global heating to well below 2°C by the end of the century.
- **Consumer Goods Forum (CGF)** The Consumer Goods Forum is an organization that brings together retailers and manufacturers of consumer goods worldwide. Its members



include CEOs and senior executives from more than 400 retail, manufacturing and service companies, as well as other stakeholders from more than 70 countries. Across the CGF, companies are working pre-competitively in a number of key areas to find solutions, implement actions, bring about positive change and generate shared commercial value. Its action directly addresses climate change on several fronts: food waste, plastic waste, and the Forest Positive Coalition. Carrefour has aligned some of its objectives with those of the Consumer Goods Forum, particularly with respect to refrigerants and the fights against food waste.

- **French Business Climate Pledge:** The French Business Climate Pledge is a voluntary commitment by companies operating in France which are taking concrete action to ensure a successful transition to a low-carbon economy, catalyse innovation and develop low-carbon solutions, technologies, products and services.

- **Food Transition Pact:** launched in 2019 by five founding members (Nestlé, Bonduelle, Barilla, Pepsico and Colgate-Palmolive), the Food Transition Pact is a reciprocal commitment between Carrefour and partner suppliers. With their shared commitment to a food transition for all, they undertake to profoundly transform the food retailing system and offer customers healthy, affordable products that are environmentally friendly. The Pact focuses on five priority issues (packaging, biodiversity, healthier choices, healthier products, climate) to help achieve the United Nations Sustainable Development Goals.

For more information, see: <https://www.carrefour.com/fr/rse/engagements/pacte-transition-alimentaire>

1.5. Organization of the Carrefour Group

Governance and management

Carrefour unveiled its new 2026 strategic plan in late 2022. To meet the expectations of its customers, and because global warming is a major concern, at its 2024 Shareholders' Meeting Carrefour renewed and accelerated its commitments to the climate transition as part of its strategic plan. Carrefour has reaffirmed its commitments to climate, the fight against all forms of food waste, tackling deforestation and safeguarding the planet's biodiversity.

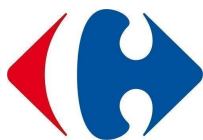
To achieve these goals, the Carrefour Group has implemented a specific governance mechanism to manage its commitments in regard to climate change. Governance of climate issues is shared between the various departments involved, from risk definition to implementing action plans and measuring their effectiveness and performance.

Governance of the Carrefour Group's climate plan is structured as follows:

Strategic planning:

Table 5: The Carrefour Group's strategic planning governance bodies

Body	Party responsible	Report 2023
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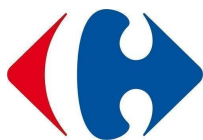
<p>The Carrefour Group's Executive Committee defines strategy, policies and objectives, and measures performance.</p>	<p>The Engagement Director, Carine Kraus, is a member of the Carrefour Group's Executive Committee and is responsible for all functions relating to Group corporate social responsibility. She is the deputy managing director of the Carrefour Foundation. The Engagement Department is responsible for implementing the Carrefour Group's climate strategy and putting its social and environmental commitments into practice.</p>	<p>In 2022, the Executive Committee met 12 times. Five presentations related to the Group's climate and energy policy were made during the year, including on the integration of climate issues into investment policy, energy purchases, energy recovery from real estate assets and new climate commitments.</p>
<p>Carrefour's Board of Directors approves the strategy drawn up by the Carrefour Group's Executive Committee and evaluates its implementation. The Board of Directors' CSR committee reviews the Carrefour Group's performance and climate strategy annually.</p>	<p>The CSR Committee is made up of five members, and is chaired by Aurore Domont.</p>	<p>As of 31 December 2023, the CSR Committee had met four times.</p> <p>In 2023 and early 2024, the CSR Committee worked to gather facts and establish the Carrefour Group's aims and objectives on the fight against climate change, aligning them with the 1.5°C trajectory for 2030.</p> <p>The CSR Committee reviews the Carrefour Group's climate performance annually.</p>

Reporting to the Board, the CSR Committee is responsible for overseeing climate strategy, validating the Carrefour Group's ambitions and monitoring the progress of its action plans. The chair of the CSR Committee, Aurore Daumont, is responsible for overseeing the climate transition plan. In 2023, the CSR committee received training on climate issues. Training focused on regulatory issues, impacts on the business models of companies, the various standards aligned with the Paris Agreements (SBTi guidelines, Net Zero standard), and reducing the carbon footprint of existing practices, technologies and solutions.

Implementation:

Table 6: Governance of climate strategy implementation in the Carrefour Group

Body and roles	Manager(s)	2022 report
Each country's executive committee rolls the strategy out at local level; The	The CEO of each country is responsible for	In 2022, action plans to achieve the objectives of the CSR index,



country's climate strategy is integrated into each country's strategic plans.	implementing the climate strategy.	particularly those to do with climate, were integrated into countries' strategic plans. Since 2023, the achievement of climate targets has been included in the quarterly performance reviews of each country.
<p>An international climate committee whose job is to:</p> <ul style="list-style-type: none"> • Share the Carrefour Group's strategy and trajectory for meeting its 2040 net zero commitment; • Share the countries' strategies and trajectories for helping to meet the Carrefour Group's net zero targets; • Share views and ideas on actions and technical issues about the net zero strategy. 	This committee is chaired by Bertrand Swiderski, the Carrefour Group's Chief Sustainability Officer. It brings together representatives of operations teams, energy purchasing teams and CSR teams.	This committee is in charge of overseeing the deployment of refrigerated display units using natural refrigerants following the update of the associated CAPEX roadmaps.

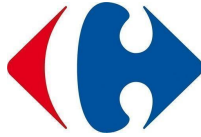
Financial planning:

To make sure its climate goal is achieved, the Carrefour Group has outlined a CAPEX trajectory for the implementation of initiatives designed to reduce GHG emissions by 2030.

Table 7: Role of the Carrefour Group Investment Committee

Body	Party responsible	2023 report
The Carrefour Group's Investment Committee approves the Carrefour Group's CAPEX projections. The Carrefour Group has outlined a CAPEX trajectory for the implementation of initiatives designed to reduce GHG emissions by 2030.	Chairman and CEO Alexandre Bompard, CFO Matthieu Malige and the CEO of Carrefour Property, Jérôme Nanty, are responsible for this committee.	<p>The committee meets monthly and analyses investment projects against the criteria defined for implementing the climate plan.</p> <p>In March 2023, for example, the Committee approved a €39 million investment package for the installation of photovoltaic panels on the roofs of stores in Spain.</p>

In 2021, Carrefour's finance department worked with the Group CSR Department, country CSR departments and country purchasing and operations teams to devise an investment **roadmap**. In 2022, this roadmap served as the basis for annual CAPEX and OPEX projections, and the associated gains, up to 2030. These projections are made under the oversight of the Carrefour Group's **Investment Committee** and are to chart the financial



aspects of the Carrefour climate plan. The roadmap has enabled budgets to be allocated for reducing energy consumption and CO2 emissions in all Carrefour countries.

The Carrefour Group's **Investment Committee systematically analyses the climate impact of projects** by including climate criteria in the investment validation phase. All new stores must comply with a specially-defined list of environmental criteria (e.g. low energy consumption, low GHG emissions, etc.). These criteria were deployed in the second half of 2022 to allow Carrefour to prioritize store projects that meet these criteria when making investment decisions. In addition, and to the extent that this is possible, projects that do not comply with these criteria will be encouraged to evolve so that they are more aligned with the Carrefour ESG criteria. This will help Carrefour boost investment in low-carbon projects.

Operational and management teams:

The Carrefour Group's CSR team monitors the implementation of the action plan through quarterly reports, and reports to senior management and countries on their performance via the CSR and food transition index every quarter.

The **CSR teams in each country** report on performance to the Carrefour Group on a quarterly basis and monitors the realization of targets at national level.

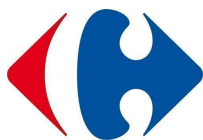
Technical/asset management teams in each country are responsible for implementing the energy efficiency roadmap and phasing out harmful refrigerants with the support of purchasing teams. Non-retail purchasing teams are responsible for implementing the roadmap for 100% renewable electricity with the support of operations departments for on-site production.

Group and country commodity teams are responsible for the roadmap for reducing emissions related with purchases of goods and services. They define the priority areas of the Scope 3 climate roadmap in collaboration with the CSR department, directly managing supplier relations and implementing action plans targeting product mixes.

Compensation criteria and performance analysis

CSR and Food Transition Index Carrefour has introduced a CSR and Food Transition Index to monitor the achievement of its targets, assess performance, and motivate its teams. Designed as a management tool for various business lines, the CSR Index offers a platform for external reporting on deployment of the Carrefour Group's strategies, particularly those addressing biodiversity, climate, health and the commitments of partners and employees.

The Carrefour Group's performance in achieving these objectives has a 20% weighting in the **remuneration of the CEO** and all members of Group and country Executive Committees.



It also has a **25% weighting in managers' earnings under the long-term investment incentive plan**. Under this plan, managers are awarded shares free of charge, subject to conditions relating to presence and performance. The CSR and Food Transition Index account have a 25% weighting in terms of performance. The plan covers the two highest tiers of management and the talented people who are playing a major role in the Carrefour Group's transformation. In 2023, nearly 700 people benefited from the plan, almost 80% of them from outside senior management.

With **Carrefour Group senior executives who are eligible for variable remuneration**, 10% of the variable is pegged to Carrefour's performance, tracked using the CSR and Food Transition Index. Thanks to this variable remuneration scheme, 1000 senior executives had a direct interest in non-financial performance in 2023.

Table 8: Weight of the CSR Index in Carrefour Group remuneration 2023

Remuneration	Beneficiary	Number of persons concerned	CSR Index weighting in earnings	Climate contribution share (Tables 1 and 2)	Share directly related to climate (Table 1 only)
Variable remuneration	Chairman and Chief Executive Officer ⁹	1	20%	11%	2.4%
	Group senior executives ¹⁰	1000	10%	5.5%	1.2%
	Senior executives in France ¹¹	10000	Between 10% and 20%	Between 5.5% and 11%	Between 1.2% and 2.4%
Long term incentive	Managers	680	25%	13.75%	3%

Over half of the objectives embodied in the CSR and Food Transition Index are directly or indirectly related to climate. Overall, 55% of the CSR Index score is linked to the Carrefour Group's climate performance. The following objectives are directly linked to climate and are included in the CSR Index:

⁹ Weight of the CSR Index in variable remuneration.

¹⁰ Weight of the CSR Index in the collective share of variable remuneration.

¹¹ Weight of the CSR Index in the collective share of variable remuneration.

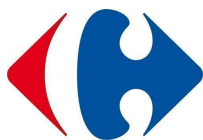


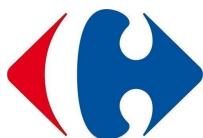
Table 9: Objectives of the Carrefour Group's CSR Index directly related to climate

Area	Objectives	Perimeter	Weighting in the CSR Index
Climate - Scopes 1 and 2	50% reduction in Scope 1 and 2 GHG emissions by 2030, and 70% by 2040 (baseline 2019)	Integrated stores in the eight countries of the Carrefour Group.	6%
Climate Scope 3	20 megatonne reduction in CO ₂ emissions related to products sold in stores by 2030 (compared with 2019)	GHG emissions related to purchases of goods and services.	3%
	Top 100 suppliers committed to a trajectory of 1.5°C by 2026 under threat of being delisted	100 largest Carrefour suppliers.	3%
Total weight of these criteria in the CSR Index			12%

The following objectives are indirectly related to climate and are included into the CSR Index: These objectives have an impact on the Carrefour Group's climate footprint, particularly Scope 3.

Table 10: Objectives of the Carrefour Group's CSR Index with indirect contribution to climate change (Scope 3)

Area	Objectives	Perimeter	Weighting in the CSR Index
Food Transition	€8 billion in sales of certified sustainable products by 2026.	Sales under the Carrefour banner in the Carrefour Group's eight integrated countries.	5%
Plant-based animal feed	€500 million in vegetable protein sales by 2026.	Sales under the Carrefour banner in the Carrefour Group's eight integrated countries.	5%
Raw materials	100% of sensitive products (products affecting deforestation, animal welfare, land, marine resources and human rights) to be covered by a risk mitigation plan by 2030.	Implementation evaluated through purchasing rules for the food transition. These rules apply to all products controlled by Carrefour and for national brands, depending on the individual case.	5%
Packaging	100% of packaging to be reusable, recyclable or compostable by 2025.	Packaging for own-brand products.	5%
	20,000 tonnes of packaging to be saved by 2025 (cumulative since 2017).	Sales under the Carrefour banner in the Carrefour	



		Group's eight integrated countries.	
	€150 billion sales of loose products and reuse by 2026 (a fivefold increase compared with 2022).	Sales under the Carrefour banner in the Carrefour Group's eight integrated countries.	
Supplier commitment	500 suppliers committed to the food transition pact by 2030.	National brand suppliers in the Carrefour Group's eight integrated countries.	6%
Food waste	Reduce food waste by 50% by 2025 (compared with 2016).	Integrated stores in the eight countries of the Carrefour Group.	6%
Waste	Recover 100% of waste by 2025	Integrated stores in the eight countries of the Carrefour Group.	6%
Producer partners	50,000 partner producers by 2026	Partner producers in the Carrefour Group's eight integrated countries.	5%
Total weight of these criteria in the CSR Index			43%

2. Reduce GHG emissions from integrated stores by 50% by 2030 and 70% by 2040 compared with 2019 (Scopes 1 and 2)

2.1. Scope 1 and 2 emissions

Emissions from the Carrefour Group's integrated stores are Scopes 1 and 2. More specifically, Scope 1 emissions are direct emissions related to the consumption of gas, fuel oil and refrigerant gases by integrated stores. Scope 2 emissions are indirect emissions related to the consumption of electricity by integrated stores.

The share of each type of emission in the direct and indirect emissions of the stores (Scopes 1 & 2) is detailed in the figure below:

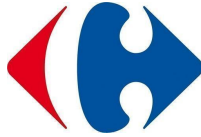
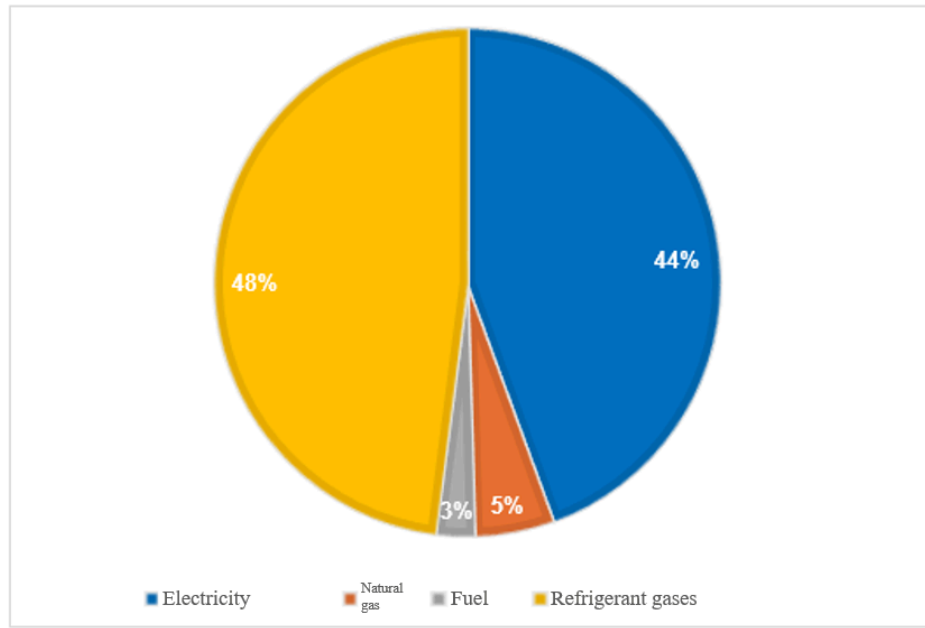


Figure 3: Breakdown of the Carrefour Group's Scope 1 and 2 emissions 2023



2.2. The Carrefour Group's performance

Direct emissions from stores (Scopes 1 and 2)

Carrefour reduced its store emissions (Scopes 1 and 2) by 29% in 2022 compared with 2019. It's now aiming for a 70% reduction by 2040 and a 50% reduction by 2030. Carrefour is ahead of its own target and is in line with its GHG emissions reduction trajectory of 1.5°C.

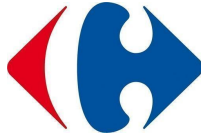


Figure 4: Scopes 1 and 2 GHG emissions since 2010¹²

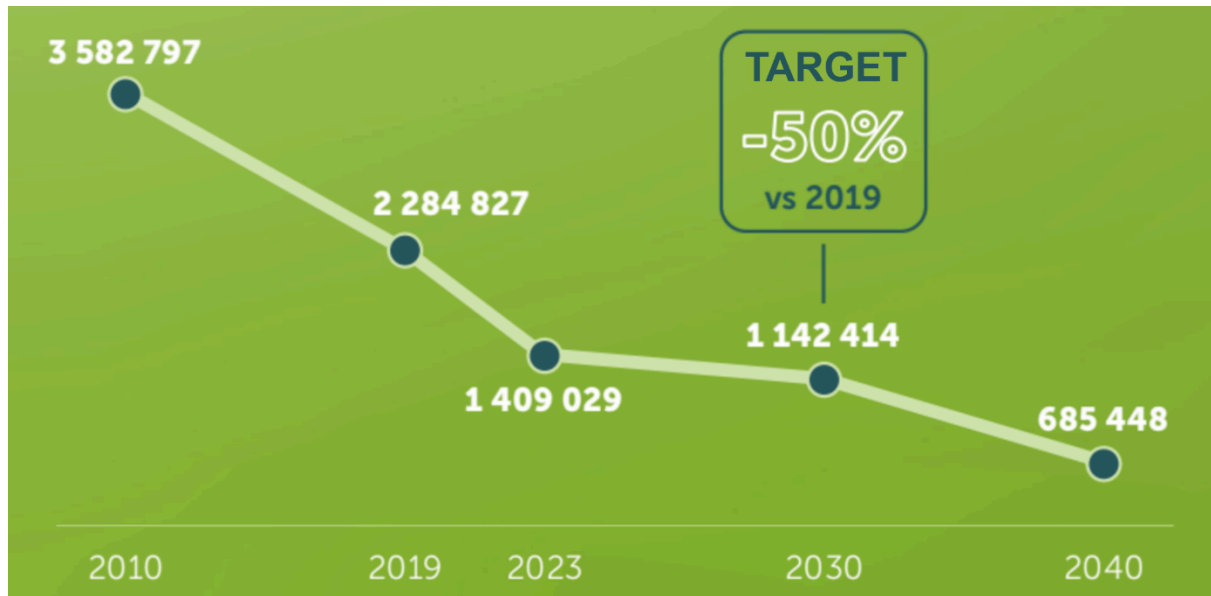


Table 11: Scopes 1 and 2 GHG emissions since 2019¹³

Indicators	Units	2019 ¹⁴	2022 real ¹⁵	2022 corrected ¹⁶	2023	Change 2023 vs 2022 corrected	Target for 2030	Target for 2040
Scope 1 emissions	tCO ₂ eq	1,257,651	581,593	831,820	782,709	(5.9)		
Scope 2 emissions	tCO ₂ eq	1,027,176	631,402	651,581	626,321	(3.9)		
Scope 1 & 2 emissions	tCO ₂ eq	2,284,827	1,212,995	1,483,401	1,409,030	(5)	1,142,414	685,448
Reduction of Scope 1&2 emissions (baseline 2019)	%	-	(29)	(35)	(38)	(3.3)	(50)	(70)
Monetary intensity of Scope 1&2 emissions	gCO ₂ /€	-	21.2	24.3	23.2	(4.5%)		

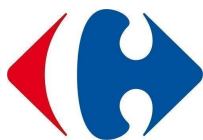
¹²Data audited with reasonable assurance. Data reprocessed in 2010 and 2019 to take into account the acquisition of BIG stores.

¹³Data audited with reasonable assurance.

¹⁴ Estimated data over comparable perimeter 2023 (including BIG and Atacadão stores for refrigerants).

¹⁵ Consolidated data for 2022, not including BIG stores and Atacadão refrigerants data.

¹⁶ Estimated data over comparable perimeter 2023 (including BIG and Atacadão stores for refrigerants). Estimate based on 2023 data.



Use of refrigerant fluids in store cooling systems:

Reductions in emissions related to refrigerant fluids accelerated by 3 percentage points in 2023 vs. 2022, reaching 40% in 2023 against the 2019 baseline. Carrefour is in line with its target of 50% by 2030 (baseline 2019). The Carrefour Group has continued to convert its commercial refrigeration systems into systems using 100% natural or hybrid fluids (648 natural or hybrid stores in 2023).¹⁷

Indicators	Units	2019 ¹⁸	2022 real ¹⁹	2022 corrected ²⁰	2023	Change 2023 vs 2022 corrected	Target vs. 2019
Leakage rate	%	17.6%	20%	-	19.7		
Percentage of stores with natural or hybrid refrigeration systems	%	16.4%	20.2%	19.6%	19.3%	(0.3 pts)	
Number of stores equipped with natural refrigeration systems	Units	153	227	272	293	7.7%	
Number of stores equipped with hybrid refrigeration systems	Units	259	298	399	355	(11%)	
Total emissions from refrigerants ²¹	tCO ₂ eq	1,126,299	464,908	712,278	675,777	(5.1)	
Reduction in emissions related to refrigerant fluids (baseline 2019)²²	%	-	(34)	(37)	(40)	(3 pts)	-50% by 2030 -80% by 2040

¹⁷ 100% of 2023 consolidated sales; note that figure published in the URD is 481 - it relates to 68% of consolidated sales (inclusion at the beginning of 2024 of the Brazil data excluded at the end of 2023)

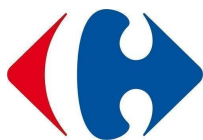
¹⁸ Estimated data over comparable perimeter 2023 (including BIG and Atacadão stores for emissions from refrigerants).

¹⁹ Consolidated data for 2022, not including BIG stores and Atacadão refrigerants data.

²⁰ Estimated data over comparable perimeter 2023 (including BIG and Atacadão stores for refrigerants). Estimate based on 2023 data.

²¹ Perimeter: 100% of consolidated sales 2023. Non-comparable BUs (77% of consolidated sales in 2022, not including BR AT)

²² Perimeter: 100% of consolidated sales 2023. Non-comparable BUs (not including ES (SM, CO), IT (CO), RO (warehouse), AR (C&C) in 2022). The 2019 baseline was withdrawn in 2023 with the inclusion of emissions from BIG stores and Atacadão refrigerants. The reduction achieved in 2023 is calculated with reference to this new baseline.



Energy consumption and energy efficiency of stores:

Total emissions related to energy consumption decreased by 5 percentage points in 2023 compared to 2022. Energy intensity per square metre also fell, by 7 percentage points in 2023 compared to 2022, a reduction of 21% in 2023 compared to 2019. The Carrefour Group is on course to meet its target of reducing energy intensity by 27.5% by 2030 (baseline 2019).

Indicators	Units	2019 ²³	2022 real ²⁴	2022 corrected ²⁵	2023	Change 2023 / 2022 corrected	Objective
Emissions from gas consumption	tCO ₂ eq	90,519	80,487	81,108	71,761	(11.5%)	
Emissions from fuel oil consumption	tCO ₂ eq	40,834	36,198	38,435	35,170	(8.5%)	
Emissions from electricity consumption	tCO ₂ eq	1,027,176	631,402	651,581	626,321	(3.9%)	
Total emissions linked to energy consumption²⁶	tCO₂eq	1 158,529	748,087	771,124	733,252	(4.9%)	
Energy intensity (monetary) ²⁷	Wh/€	-	71.42	80.64	74.89	(7.1)	
CO ₂ intensity (monetary) ²⁸	gCO ₂ eq/€	-	13.07	12.37	12.05	(2.6)	
Share of renewable electricity in electricity consumption	%	-	0.5%	0.4%	3.7%	3.3 pts	

Intensity indicators ²⁹	Units	2019	2022	2023	Change 2023 vs	Target vs. 2019
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²³Estimated data over comparable perimeter 2023 (including BIG and Atacadão stores for refrigerants).

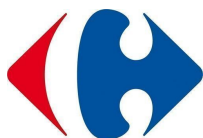
²⁴ Consolidated data for 2022, not including BIG stores and Atacadão refrigerants data.

²⁵Estimated data over comparable perimeter 2023 (including BIG and Atacadão stores for refrigerants). Estimate based on 2023 data.

²⁶Perimeter: 100% of consolidated sales 2023. Comparable BUs. Energy consumption includes fuel oil, electricity and gas.

²⁷ Perimeter of consolidation of Scopes 1 and 2: energy consumption and sales by significant integrated store formats in the eight countries in which the Carrefour Group operates directly.

²⁸ Perimeter of consolidation of Scopes 1 and 2: GHG emissions in CO₂ equivalent and sales by significant integrated store formats in the eight countries in which the Carrefour Group operates directly.



					2022 corrected	
Emissions intensity due to refrigerants	kg CO ₂ /m ²	90	60 ³⁰	55	(7.0%)	
Intensity of refrigerant consumption	kg/1000 m ²	43	39 ³¹	37 ³²	(4.5%)	
Intensity of emissions linked to energy consumption	kg CO ₂ /m ²	134	94.9 ³³	94.6 ³⁴	(0.3%)	
Energy intensity	kWh/m ²	502	432 ³⁵	394 ³⁶	(8.7%)	
Reduction in energy intensity compared with 2019	% (kWh/m ²)	-	(14)	(21)	(7%)	(27.5)% in 2030

²⁹ 68% of consolidated sales 2023, data does not include Brazil. Comparable data in 2019, 2022 and 2023.

³⁰ 68% of consolidated sales 2023, not including Brazil (comparable 2019 and 2023). Figure published in URD: 62, including Crf Brazil (but not including BIG or Atacadão).

³¹ 68% of consolidated sales 2023, not including Brazil data (comparable 2019 and 2023). Figure published in URD: 39.6, including Crf Brazil (but not including BIG or Atacadão).

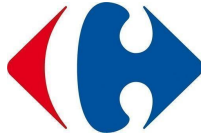
³² 68% of consolidated sales 2023, not including Brazil (comparable 2019 and 2023). Figure published in URD: 43.7, including Crf Brazil (but not including BIG or Atacadão).

³³ 68% of consolidated sales 2023, not including Brazil (comparable 2019 and 2023). Figure published in URD: 83.7, including Crf Brazil (but not including BIG or Atacadão).

³⁴ 68% of consolidated sales 2023, not including Brazil (comparable 2019 and 2023). Figure published in URD: 73.9, representing 100% of consolidated sales 2023.

³⁵ 68% of consolidated sales 2023, not including Brazil (comparable 2019 and 2023). Figure published in URD: 457, including Crf Brazil (but not including BIG or Atacadão).

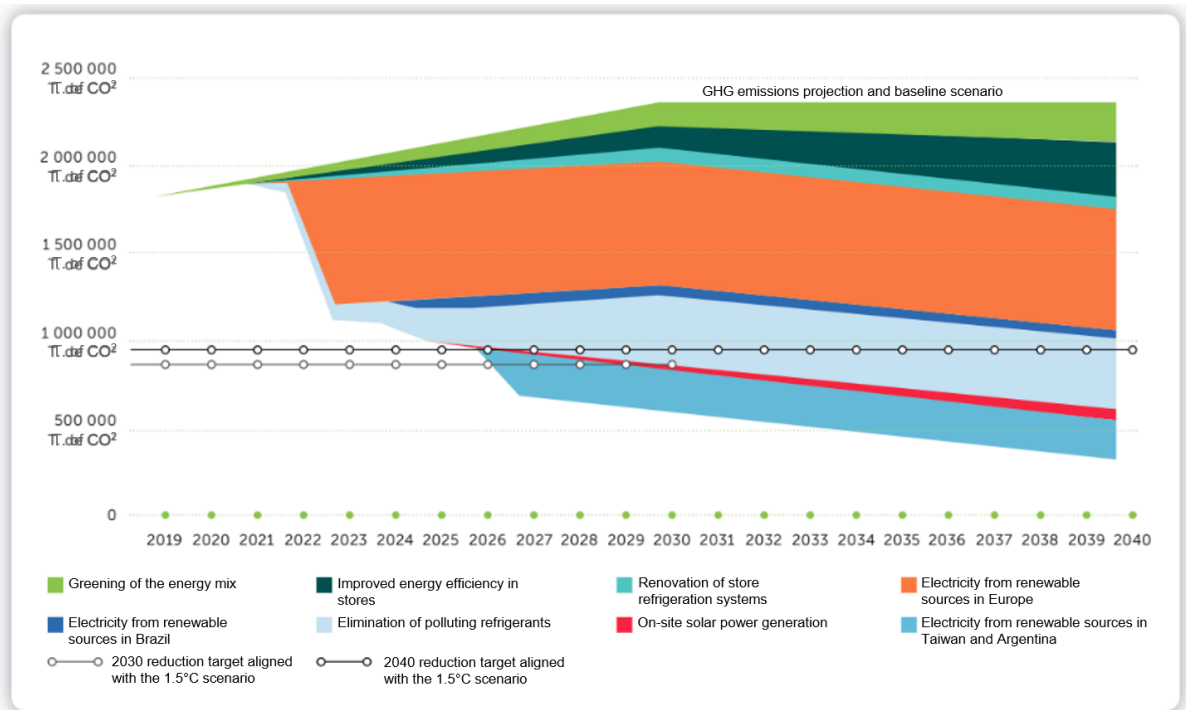
³⁶ 68% of consolidated sales 2023, not including Brazil (comparable 2019 and 2023). Figure published in URD: 459.5, representing 100% of consolidated sales 2023.



2.3. The Carrefour Group's action plans

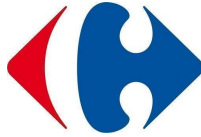
In 2021, the Carrefour Group defined the target scenario for achieving its greenhouse gas emission reduction goals in its stores. This scenario is based on projections of the Carrefour Group's emissions until 2040, based on current emissions and the Carrefour Group's estimated growth between now and then (Business as Usual + Projected Growth). This scenario breaks down the various actions which are necessary to achieve its GHG emissions objectives in alignment with the 1.5° trajectory.

Figure 5: Breakdown of the action plan to achieve net zero through stores by 2040



Use of 100% electricity from renewable sources by 2030 by giving priority to on-site production - producing electricity for our own use or injecting it into the grid - and PPAs (Power Purchase Agreements):

- the Carrefour Group has accelerated the deployment of photovoltaic power plants in its stores (as of 31 December 2023, there were 94 such installations in Spain, 14 in France, 13 in Poland, 9 in Brazil, 6 in Belgium and 1 in Italy). In 2023, the Carrefour Group signed 4 Physical Power Purchase Agreements (covering wind and photovoltaic farms) in France. By 2024, around 100 GWh of power will be produced under these agreements, the equivalent of the power consumption of 29 hypermarkets. The Carrefour Group will continue to accelerate the implementation of these green energy contracts in every region.
- Also, as part of its Carrefour 2026 objective of producing nearly one TWh of electricity per year in France, Spain and Brazil by 2027, Carrefour has selected a number of partners for the production of photovoltaic energy on



over 500 sites in France; preparations are underway for the selection of Spanish partners. The first half of 2024 will be dedicated to formalizing partnerships.

27.5% reduction in energy consumption by 2030 compared to 2019 Investments in the form of operating and investment expenditure will reduce Group-wide energy consumption by 20% by 2026 and by 27.5% by 2030. France met its 20% reduction target in 2023. The Carrefour Group aims to improve its energy efficiency via six recommended priority actions in its stores: renovation of cooling systems, and installation of: doors on above-zero display cabinets, electronic speed controllers, sub-metering systems, low-power LED lighting, and building management systems (including HVAC).

Reducing emissions related with the use of refrigerants The Carrefour Group has committed to replacing its refrigeration equipment with installations using natural fluids (CO₂), which produce far less pollution. These installations will significantly reduce emissions by 2030 (in Europe) and by 2040 (in other regions). Each country has prepared a roadmap for the renovation of its refrigeration systems: by the end of 2023, renovation was on course to meet the targets set for 2030 in Europe.

3. Reduce indirect GHG emissions by 32% by 2030 compared to 2019 (Scope 3)

4.1 Scope 3 emissions

In 2019, Carrefour conducted a survey of indirect emissions linked with the Group's business operations. This survey is updated annually with refinements in the way the impact is measured. The Carrefour Group's total greenhouse gas emissions across all scopes was estimated at 101,887 million tons of CO₂ equivalent in 2023 (scopes 1, 2 and 3)³⁷. Emissions from the Carrefour Group's integrated stores are Scopes 1 and 2. They account for 1.4% of the Carrefour Group's emissions.

Scope 3 emissions are from upstream and downstream activities and account for more than 98% of the Carrefour Group's emissions³⁸ (see Section 1.1, Background and challenges). Purchases of goods and services account for 70% of Scope 3 emissions, followed by the use of products sold (14% of Scope 3), fuel sales (11% of Scope 3), and incoming transport of goods (9% of Scope 3).

³⁷Data not including FLAG (forest, land and agriculture) estimates on land use change.

³⁸Data not including FLAG (forest, land and agriculture) estimates on land use change.

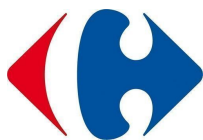
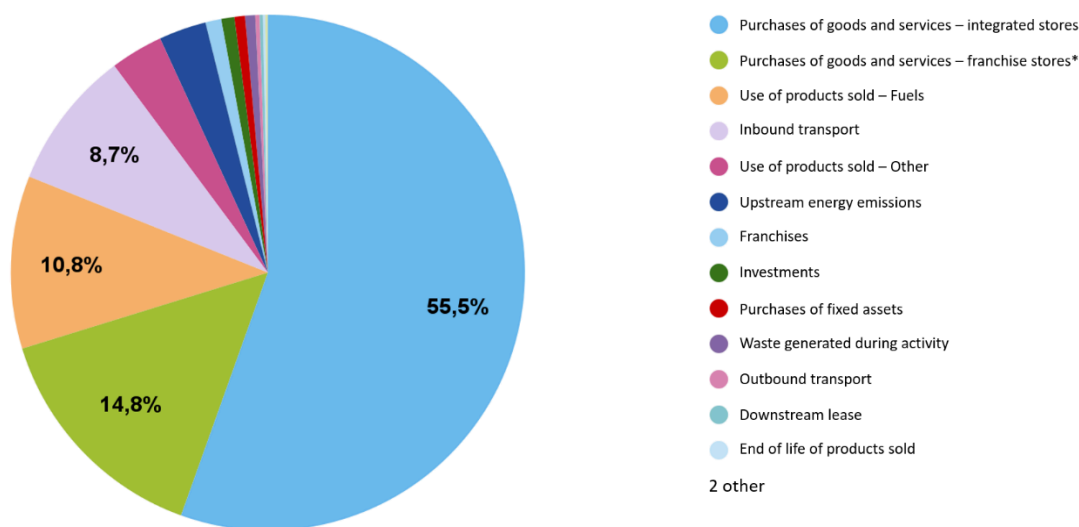


Figure 6: Breakdown of Carrefour Group's Scope 3 emissions in 2023³⁹



This data constitutes the most optimistic estimates, and is obtained using currently available methodologies, in particular regarding the impact of products sold. Carrefour is continuously working to improve reporting in this area and draws on the input of consultants (Ernst & Young), relevant stakeholders (suppliers) and internal and external experts to do so. While the available data does not yet yield a detailed picture of the actions implemented by the Carrefour Group or its suppliers in terms of tackling deforestation, agricultural practices, reducing packaging, etc., it does give a clearer vision of the Group's carbon footprint. The detailed results of the survey are shown in the table below.

³⁹Data not including FLAG (forest, land and agriculture) estimates on land use change.

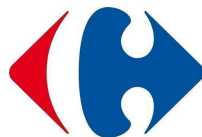


Table 12: Detailed survey of Carrefour Group's Scope 3 emissions in 2023^{40 41}

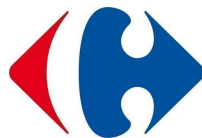
Category	Share 2023	2023 vs 2022	2023 vs 2019	2023	2022	2019
Total GHG emissions in Scope 3	100.0%	0%	11%	100,477,661	100,969,516	90,886,910
Purchases of goods and services	70.2%	0%	19%	70,573,477	70,746,566	59,313,570
<i>of which purchases of goods and services - integrated stores</i>	55.5%	1%	20%	55,748,261	55,135,646	46,290,463
<i>of which purchases of goods and services – franchise stores⁴²</i>	14.8%	-5%	14%	14,825,215	15,610,920	13,023,107
Use of products sold⁴³	14.1%	-1%	-13%	14,202,664	14,342,621	16,233,355
<i>of which use of products sold - fuels</i>	10.8%	-2%	-17%	10,880,940	11,107,532	13,163,911
<i>of which use of products sold - other</i>	3.3%	3%	8%	3,321,725	3,235,089	3,069,444

⁴⁰Data not including FLAG (forest, land and agriculture) estimates on land use change.

⁴¹Some clarifications on the perimeter of the survey: Following the agreement reached at the 2022 Taiwan BU session, data for this BU has been excluded from the Scope every year since 2019. Following the acquisition of Grupo BIG in Brazil in 2022, the relevant data was incorporated for all significant categories of Scope 3. The data has thus been retroactively incorporated since 2019 to take into account emissions associated with Grupo BIG's business operations in the following categories: purchases of goods and services, inbound transport, use of products sold, end of life of products sold, and purchases of fixed assets.

⁴²Including franchise stores in the 8 countries in which the Carrefour Group operates, but not including international partners (see section 1.1 Background and challenges).

⁴³Including franchise stores in the 8 countries in which the Carrefour Group operates, but not including international partners (see section 1.1 Background and challenges).

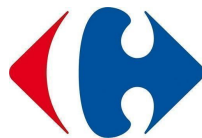


Inbound transport⁴⁴	8.7%	-4%	16%	8,782,493	9,111,319	7,594,972
Franchises⁴⁵	1.0%	20%	-12%	1,000,808	833,299	1,134,479
Investments	0.8%	3%	2%	828,450	807,300	810,000
Purchases of fixed assets	0.7%	7%	-1%	666,000	621,000	669,960
Waste generated during business operations	0.6%	5%	-27%	639,645	608,449	870,335
End of life of products sold	0.2%	-11%	-1%	153,141	172,844	155,088
Outbound transport⁴⁶	0.3%	-10%	-21%	265,280	294,193	337,095
Downstream leasing	0.2%	3%	-15%	213,710	208,421	252,611
Employee journeys to and from work	0.2%	-2%	-5%	152,760	155,301	160,642
Upstream energy emissions	3.0%	-2%	-11%	2,992,396	3,062,713	3,349,124

⁴⁴Including franchise stores in the 8 countries in which the Carrefour Group operates, but not including international partners (see section 1.1 Background and challenges).

⁴⁵ Franchise stores in the 8 countries in which the Carrefour Group operates plus international partners (see section 1.1. Background and challenges).

⁴⁶Including franchise stores in the 8 countries in which the Carrefour Group operates, but not including international partners (see section 1.1 Background and challenges).



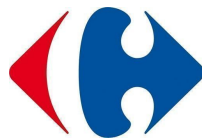
Business travel	0.0%	25%	20%	6838	5492	5681
Upstream leasing	NA	-	-	0	0	0
Processing of sold products	NA	-	-	0	0	0
Customer journeys	Not yet included					
Purchases of goods and services from international franchise partners	Not yet included					

Table 13: Share of Scope 3 emissions attributed to franchise stores and perimeter of coverage^{47 48}

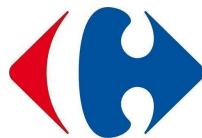
Category	Share 2023	2023	Share of the franchise	2023 non-franchise	2023 franchise	Perimeter
Total GHG emissions in Scope 3	100.0%	100,477,661	23.9%	76,471,701	24,005,961	
Purchases of goods and services	70.2%	70,573,477	21.0%	55,748,261	14,825,215	Franchise stores in the 8 countries in which the Carrefour Group operates (Argentina, Belgium, Brazil, Spain, France, Italy, Poland,

⁴⁷Data not including FLAG (forest, land and agriculture) estimates on land use change.

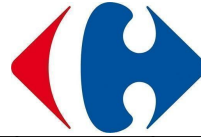
⁴⁸Some clarifications on the perimeter of the survey: Following the agreement reached at the 2022 Taiwan BU session, data for this BU has been excluded from the Scope every year since 2019. Following the acquisition of Grupo BIG in Brazil in 2022, the relevant data was incorporated for all significant categories of Scope 3. The data has thus been retroactively incorporated since 2019 to take into account emissions associated with Grupo BIG's business operations in the following categories: purchases of goods and services, inbound transport, use of products sold, end of life of products sold, and purchases of fixed assets.



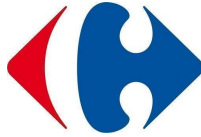
						Romania).
Use of products sold	14.1%	14,202,664	35.6%	9,152,501	5,050,163	
<i>of which use of products sold - fuels</i>	10.8%	10,880,940	40%	6,528,564	4,352,376	Purchases of fuel by franchise stores are taken into account for all fuel sales activities in countries where the Carrefour Group operates.
<i>of which use of products sold - other</i>	3.3%	3,321,725	21.0%	2,623,937	697,787	Franchise stores in the 8 countries in which the Carrefour Group operates (Argentina, Belgium, Brazil, Spain, France, Italy, Poland, Romania).
Inbound transport	8.7%	8,782,493	21.0%	6,937,574	1,844,919	Franchise stores in the 8 countries in which the Carrefour Group operates (Argentina, Belgium, Brazil, Spain, France, Italy, Poland, Romania).
Franchises	1.0%	1,000,808	100.0%	0	1,000,808	Franchise stores in the 8 countries in which the Carrefour Group operates (Argentina, Belgium, Brazil, Spain, France, Italy, Poland, Romania) plus international partner stores (Carrefour Partnership International).
Investments	0.8%	828,450	-%	828,450	<i>Not included</i>	Franchised stores are not taken into account.
Purchases of fixed assets	0.7%	666,000	-%	666,000	<i>Not included</i>	Franchised stores are not taken into account.
Waste generated during business operations	0.6%	639,645	-%	639,645	<i>Not included</i>	Franchised stores are not taken into account.



End of life of products sold	0.2%	153,141	21.0%	120,971	32,170	Franchise stores in the 8 countries in which the Carrefour Group operates (Argentina, Belgium, Brazil, Spain, France, Italy, Poland, Romania).
Outbound transport	0.3%	265,280	21.0%	209,553	55,727	Franchise stores in the 8 countries in which the Carrefour Group operates (Argentina, Belgium, Brazil, Spain, France, Italy, Poland, Romania). The Carrefour Group awards store franchises under the franchise agreement (around 80% of the stores' volumes).
Downstream leasing	0.2%	213,710	-%	213,710	<i>Not included</i>	Franchised stores are not taken into account.
Employee journeys to and from work	0.2%	152,760	-%	152,760	<i>Not included</i>	Franchised stores are not taken into account.
Upstream energy emissions	3.0%	2,992,396	40%	1,795,438	1,196,958	Purchases of fuel by franchise stores are taken into account for all fuel sales activities in countries where the Carrefour Group operates.
Business travel	0.0%	6838	-%	6838	<i>Not included</i>	Franchised stores are not taken into account.
Upstream leasing	NA	0	0	0	0	
Processing of sold products	NA	0	0	0	0	
Customer journeys	Not yet included	Not yet included	Not yet included	Not yet included	Not yet included	

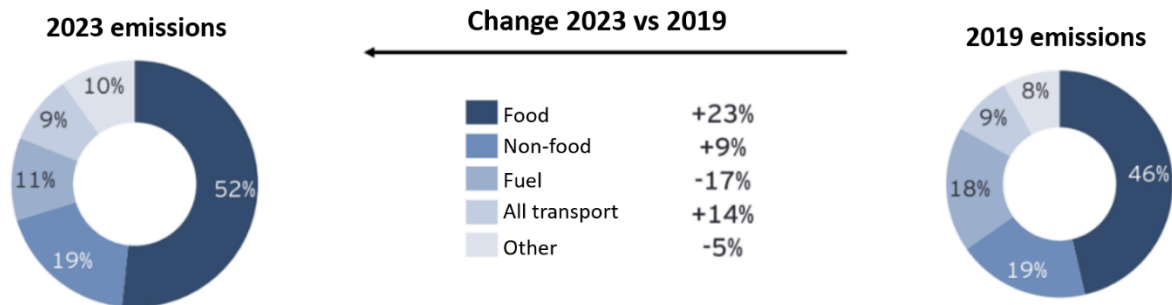


Purchases of goods and services from international franchise partners	Not yet included	Not yet included	Not yet included	Not yet included	Not yet included	
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Scope 3 emissions in 2023 are related primarily to food products (52%), followed by non-food products (19%) and fuel sales (11%). Meat sales account for almost 25% of Scope 3 emissions in 2023.

Figure 7: Breakdown of Scope 3 emissions 2019 and 2023



The Carrefour Group identified ten categories of food products responsible for nearly 70% of its emissions from purchases of goods and services: beef, dairy, cereals, pork, poultry, eggs, other meats (e.g. lamb), fruits and vegetables, coffee and dry pet food. These categories will be the focus of specific action plans.

The remaining product and raw material categories are grouped into sub-categories which, taken individually, are of lower priority for the Carrefour Group.

4.2. The Carrefour Group's performance

Full diagnosis of Scope 3 CO2 emissions

The increase of 11 points in Scope 3 emissions in 2023 against 2019 can be attributed to Carrefour's higher sales and therefore the quantity of products sold by the group. Emissions from the sale of food products are increasing significantly, particularly in relation to meat consumption.

A reduction of 0.5 points was recorded in 2023, compared to 2022, together with a reduction of 4 points in the carbon intensity of the Carrefour Group's business operations (reduction in GHG emissions per € of sales). This result is in line with the outlined trajectory, firstly in terms of moving towards net zero growth and secondly in a reduction in emissions in absolute terms.

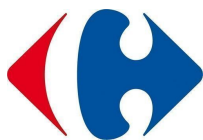


Table 14: Carrefour Group Scope 3 emissions 2023⁴⁹

Indicator	Unit	2023 vs 2022	2023 vs 2019	2023	2022	2019
Scope 3 emissions	t CO2	-0.5%	11%	100,477,661	100,969,516	90,886,910
Sales	€ million (excluding VAT)	2%	15%	83,270.00	81,385.00	72,397.00
GHG emissions intensity of Scope 3	gCO2 / €	-3%	-4%	1.207	1.241	1.255

Emissions related to products:

In 2022, Carrefour committed to mobilizing its 100 largest suppliers behind the 1.5°C by 2026 trajectory. Suppliers not signing up to the scheme face the threat of delisting. At the end of 2023, 44% of these suppliers had committed to the 1.5°C trajectory. To support this climate commitment, Carrefour introduced a dedicated platform in its efforts to reduce product volumes by 20 megatonnes (baseline 2019) by 2030. By the end of 2023, 80 suppliers had registered on the platform, 53 had started to fill out their particulars and 28 had validated their applications.

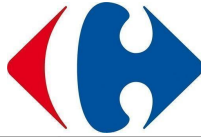
To secure collective commitments from its suppliers, Carrefour offers them the chance to join the Food Transition Pact. This pact is a reciprocal commitment between Carrefour and its partner suppliers. With their shared commitment to a food transition for all, they undertake to transform the food retailing system and offer customers healthy, affordable products that are environmentally friendly. Carrefour set itself a target of 500 partner suppliers by the end of 2023. 306 suppliers had joined the pact by the end of 2023.

Building on the Food Transition Pact, Carrefour launched an international coalition in 2023 to accelerate sales of plant-based alternatives with 7 manufacturer partners. The Carrefour Group has set itself the goal of reaching €650 million in vegetable protein sales by 2026 in Europe. By the end of 2023, the Carrefour Group had achieved €514 million in sales of vegetable protein-based products.

Table 15 - A: Detailed results of action plans on Scope 3

Indicators	Units	2020	2021	2022	2023	2023/2022	Objective
Number of Food Transition Pact partner suppliers	Number	26	114	204	306	50%	500 by 2030

⁴⁹Data not including FLAG (forest, land and agriculture) estimates on land use change.



Share of suppliers committed to a 1.5°C trajectory	%	-	New	34%	44%	29.4%	100% by 2026
Number of partner producers	Number	36,277	38,580	37,758	46,013	22%	50,000 by 2026
Percentage of Carrefour Quality Line products with agroecological commitment	%	-	<i>Reporting methodology currently being developed</i>	6.5%	28.4%	21.9 pts	100% by 2025
Tons of packaging saved (cumulatively since 2017)	Tonnes	6212	11,068	16,390	20,738	26.5%	20,000 by 2025
Percentage of reusable, recyclable or compostable packaging in Carrefour-branded products	%	44%	46%	57%	69%	12 pts	100% by 2025
Percentage of recycled plastics included in the packaging of Carrefour branded products	%	-	<i>Reporting methodology currently being developed</i>	7.7%	8.6%	0.9 pts	30% by 2025
Percentage reduction in food wastage (kg/m2) compared with 2016	%	(28.7) %	(30.7) %	(40)%	(36)%	(4) pts	(50) % by 2025
Percentage of store waste recovery	%	66.2%	68.2%	74.5%	69.8%	(4.7) pts	100% by 2025

Emissions related with outbound transport:

Carrefour has achieved its target of reducing outbound transport-related GHG emissions by 20% compared with 2019 levels. With a reduction of 9 points in 2023 compared to 2022, Carrefour achieved a cumulative reduction of 21% in downstream GHG emissions against the 2019 baseline. The Carrefour Group has set a new GHG emissions reduction target of 27.5% by 2030 against the 2019 baseline.

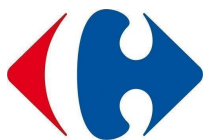
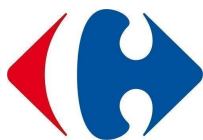


Table 15 - B: Detailed results of outbound transport action plans

Indicators	Unit	2020	2021	2022	2023	2023/2022 variation	Objective
Emissions linked to outbound transport	tCO ₂ eq	332,531	306,872	294,193	265,280	(10%)	
Reduction in emissions linked to outbound transport compared with 2019	%	(1.35)	(8.97)	(12.73)	(21.3)%	(8.6) pts	(20)% in 2030 baseline 2019
Emissions linked to outbound transport – diesel	tCO ₂ eq	315,437	296,149	281,758	253,127	(10%)	
Emissions linked to outbound transport – electricity	tCO ₂ eq	-	1	1	0	(100%)	
Emissions linked to outbound transport – biofuel	tCO ₂ eq	17094	10340	12197	12153	(0)%	
Emissions linked to outbound transport – rail and ship	tCO ₂ eq	-	382	237	0	(100%)	
Emissions intensity per pallet transported	tCO ₂ eq/pallet	6.4	6.0	5.7	5.7	0%	
Distance travelled	km	420,283,393	409,202,428	410,072,990	376,467,626	(8)%	



4.3. The action plan

4.3.1. Scope 3 net zero roadmap

The Carrefour Group has launched a Scope 3 climate action plan to reduce its indirect emissions, which are mainly related to the products it sells. The levers contributing to the reduction of Scope 3 emissions are detailed in the table below.

Carrefour is implementing a comprehensive action plan to reduce its Scope 3 emissions. Group estimates predict a reduction in 2026 to offset the organic growth recorded since 2019 and resulting in an increase in gross emissions. This reduction will help reduce our emissions against the 2030 horizon.

Several levers contributing to the reduction of Scope 3 emissions were identified:

- **Suppliers' commitment** to respect the 1.5°C trajectory, collaboration within the Food Transition Pact and 20 megatonnes project, in-store projects. By the end of 2023, 44% of Carrefour's top 100 suppliers had committed to the 1.5°C trajectory. 306 suppliers are now Food Transition Pact members, and 80 suppliers are listed on the 20-megatonne platform.
- **regenerative agriculture** enabling the introduction of low-carbon agricultural practices in the production of the priority raw materials for the Carrefour Group:
 - meat (mainly beef, followed by pork and poultry),
 - cereals and fruit and vegetables,
 - dairy products,
 - coffee
- **the fight against deforestation** and priority raw materials: palm oil, pulp/paper, beef in Brazil, soya and cocoa. With the adoption of the FLAG standard, the fight against deforestation make a significant contribution to reducing Scope 3 emissions.
- **developing a more plant-based diet**, reaching €650 million in sales by 2026 and supporting the transition to more plant-based proteins by 2030. By the end of 2023, the Carrefour Group had achieved €514 million in sales of vegetable protein-based products. Carrefour also launched an international coalition to accelerate sales of plant-based alternatives with 7 manufacturer partners.
- **the development of green mobility** to reduce emissions from fuel sales and fuel use by our customers. By the end of 2023, Carrefour had already reduced emissions from the consumption of the fuel it sold by 11% compared to 2019.

Other levers are also operated, even if they contribute little, for example:

- reduction of packaging and zero waste consumption,
- waste recovery and reduced food waste in stores,
- reduced emissions related to outbound transport,
- development of short supply chains.

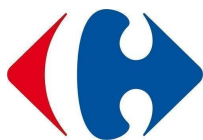
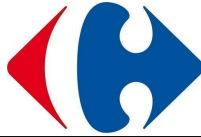


Table 16: Contribution of the various net zero levers to the Carrefour Group's Scope 3 emissions⁵⁰

Priority perimeter	Contribution 2030 baseline 2019	Actions implemented	Commitments contributing to achieving the target
Supplier commitment	-8%	Commitment by the Carrefour Group's 100 largest international suppliers to the 1.5°C trajectory for reducing emissions.	Top 100 suppliers committed to a trajectory of 1.5°C by 2026. Suppliers not committing run the risk of delisting
		Working with suppliers – large and small – to realize the food transition and promote low-carbon consumption patterns.	500 suppliers committed to the Food Transition Pact and 20 megatonnes saved by 2030
Regenerative agriculture	-8%	Reducing carbon emissions from the production of priority raw materials for the Carrefour Group: <ul style="list-style-type: none"> - beef, pork, poultry and other meats (including pet foods), - dairy products, - eggs, - fruit and vegetable, cereals and coffee, 	Implementation of raw material action plans to secure a 32% reduction in emissions from purchases of goods and services by 2030 (baseline 2019).
		Developing partnerships with producers to facilitate the transition to low-carbon practices.	50,000 partner producers by 2026.
		Promoting eco-labels (Bio, FSC, PEFC etc.).	8 billion euros in sales of certified sustainable products by 2026.
		Developing regenerative agriculture and agro-ecology across Carrefour Quality Lines.	All Carrefour Quality Line products to be committed to an agroecological approach by 2025.
Zero deforestation (FLAG LUC emissions)	-4%	Tackling deforestation and developing alternatives to soya for animal feed.	By 2025, implementation of an action plan to tackle deforestation for sensitive raw materials for Carrefour brands. In Brazil, the raw materials concerned are beef, pulp, paper and derivatives, palm oil, soya and cocoa. 100% of forest-sensitive production to be covered by a risk mitigation plan by 2030.
Plant-based animal feed	-3% ⁵¹	Committing our stakeholders to the transition to a more plant-based diet (commercial operations, food transition pact). Fostering innovation and developing a comprehensive offering.	Increasing sales of plant proteins in Europe to €650 million by 2026.
Fuel and green mobility change.	-3%	Increase volumes of biofuels. Encourage soft modes of transport and the use of electric	27.5% reduction in GHG emissions linked to the use of products sold by 2030 (baseline 2019).
			Installation of 2000 electric charging stations in France by 2023.

⁵⁰ This action plan covers agriculture-related FLAG emissions, including emissions related to land-use change.

⁵¹ This estimate assumes 30% replacement of animal proteins by plant proteins by 2030.



		vehicles.	
Other minor actions	<1%	Improve the efficiency of outbound transport. Modernise the fleet and develop a fleet of vehicles powered by biomethane.	Reduce GHG emissions linked to outbound transport by 27.5% by 2030 (baseline 2019)
		Reduce waste generation, guarantee sorting of materials for recycling and zero landfill.	All waste to be recycled by 2025.
		Action at all levels to reduce food waste across the value chain, in stores and among consumers.	Food waste to be cut by 50% by 2025.
Action pending	-	Other actions remain to be defined. The principal levers are: <ul style="list-style-type: none"> - Quantifying the impact of packaging reductions on the carbon footprint of purchases of goods and services: 100% of Carrefour brand packaging to be reusable, recyclable or compostable by 2025; €300 million in bulk sales and reuse by 2026. - Action plan on non-food products and household appliances in particular, - Extending the decarbonization of agriculture to other raw materials. 	

The Carrefour Group's roadmap focuses on reducing emissions across all scopes by 2030. Carbon offsetting, carbon credits, and negative emissions are not part of the Carrefour Group's strategy in the short term (horizon 2030). In the longer term, to reduce the impact of emissions that cannot be reduced, the Carrefour Group will make carbon capture a priority strategy in its supply chains.

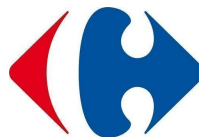
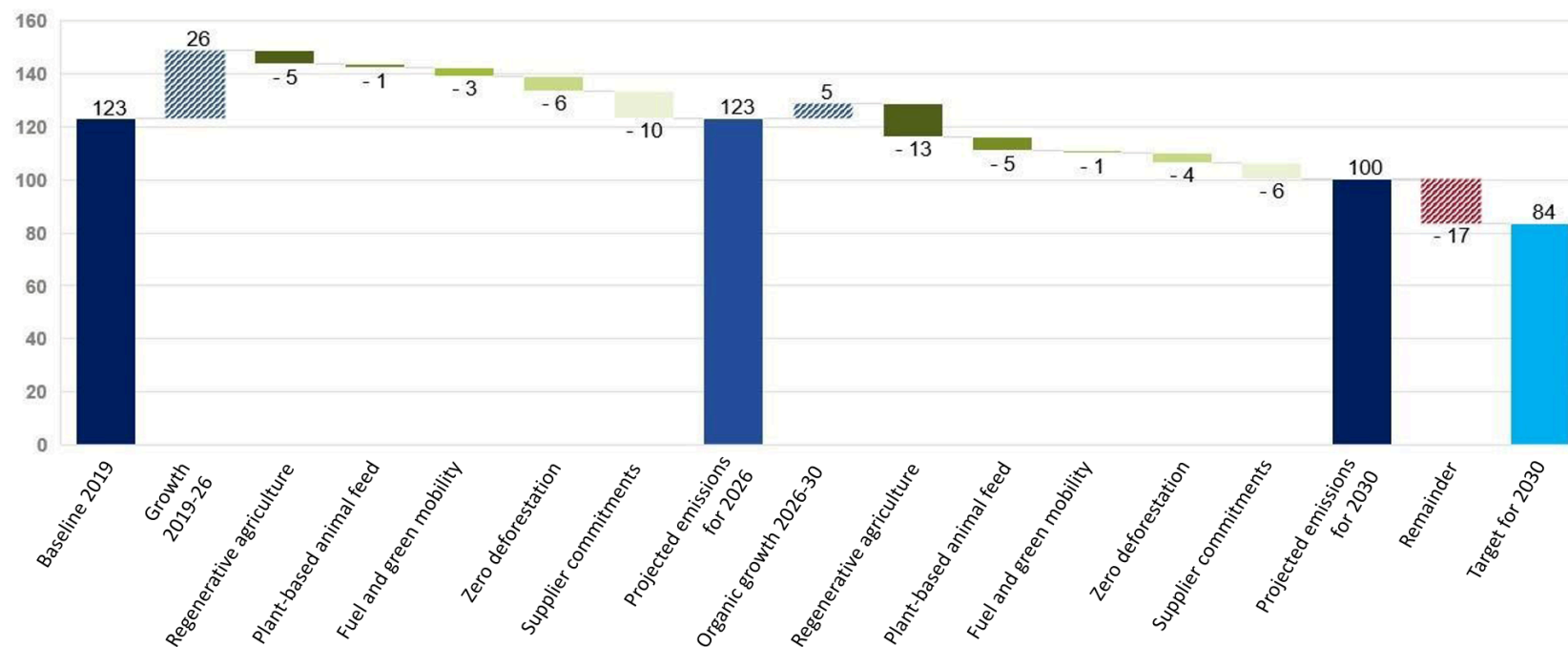


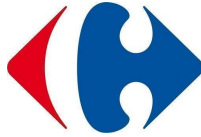
Figure 9: Carrefour Group Scope 3 net zero roadmap^{52 53}



⁵² These figures are based on a preliminary estimate of FLAG emissions related to land use change. It is conservative in its assumptions (in the absence of traceability data, the worst case scenario is used, which leads to a likely overestimate).

⁵³ Assumptions:

- Supplier commitment: TOP100 supplier commitments do not generate double counts, the 20 megatonnes project enables identification of 10 megatonnes of additional CO2 reductions not already captured by operating other reduction levers.
- Plant-based diets: after a first step in 2026 (€650 million sales in 2026), this estimate is made on the assumption of a 30% shift from animal protein to plant protein by 2030.



4.3.2 Action plans detailed by format and lever

The action plan consists of:

Fuel and green mobility:

To reduce GHG emissions from the combustion of traditional fuels, the Carrefour Group encourages consumers to choose green-powered vehicles.

In 2022, Carrefour launched **Carrefour Énergie**, an electric charging service available in all its hypermarkets and Carrefour Market stores in France. Carrefour is accelerating the rollout of infrastructure for charging electric vehicles by gradually building charging stations next to all of its hypermarkets and Carrefour Market supermarkets. By the end of 2023, for example, more than 1,500 parking spaces were equipped with electric charging stations, making Carrefour France's first retailer to offer a full e-mobility service. By 2025, 5,000 parking spaces will be equipped with electric charging stations, half of them with ENEDIS fast-charge technology. Each hypermarket will offer an average of ten electric charging spaces, while each supermarket will offer five. This comprehensive e-mobility infrastructure is rated from 22kW to 300kW and offers the following options:

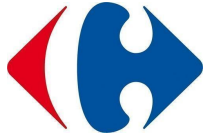
- a 22 kW "comfort" charging service, free for the first hour for customers with loyalty cards or Carrefour PASS cards. For a period of one hour, customers with B-segment cars can charge for free to a battery level of around 50%;
- a 50 kW to 300 kW ultra-fast charging service. These terminals will deliver a complete recharge in between 20 and 60 minutes, depending on the vehicle;
- a free service for soft mobility charging solutions, such as E-bikes and electric scooters.

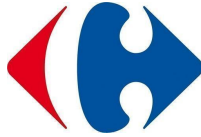
Carrefour has teamed up with two leading partners to build and operate the electric vehicle charging infrastructure at its stores: ALLEGO for stations next to its hypermarkets and DRIVECO for stations next to its Carrefour Market supermarkets. The first Carrefour Énergies station will be available to customers in the car park of the Troyes - La Chapelle Saint-Luc hypermarkets, starting on 8 April 2022. Each hypermarket will offer an average of ten electric charging spaces, while each supermarket will offer five. Customers will be able to use the service via the Carrefour Énergie mobile app.

By the end of 2023, for example, more than 1,500 parking spaces were equipped with electric charging stations, making Carrefour France's first retailer to offer a full e-mobility service. By 2025, 5,000 parking spaces will be equipped with electric charging stations, half of them with ENEDIS fast-charge technology. Each hypermarket will offer an average of ten electric charging spaces, while each supermarket will offer five. Carrefour also offers hydrogen stations in Île-de-France under a partnership between Carrefour and HysetCo. This partnership involves the installation of five distribution stations in Île-de-France by summer 2024.

In 2023, Carrefour and Uber also announced a partnership to improve accessibility, cost, and charging experience for electric vehicle drivers. Drivers will benefit from preferential rates on the Carrefour Énergies network from January 2024 in France.

All of these initiatives also enable the Carrefour Group to keep ahead of emerging regulations, such as the ban on combustion engines in new cars by 2035.





Towards a more plant-based diet:

Foods of animal origin— particularly red meat, dairy products and farmed shrimp – are generally associated with the highest greenhouse gas emissions. In contrast, foods of plant origin have a lower greenhouse gas intensity⁵⁴. This is why encouraging people to adopt a more plant-based diet is a major issue for Carrefour. This is consistent with strong societal expectation which sits at the crossroads of major climate issues, the safeguarding of biodiversity, the sharing of resources at global level and major public health issues. This expectation is already reflected in a significant increase in demand that is impacting markets. Carrefour is committed to developing vegetarian ranges with a view to offering an alternative to the consumption of animal proteins. These products are intended for a wide variety of consumers: vegan, vegetarian, people concerned about animal welfare, and flexitarians. Carrefour pays great attention to the quality and nutritional profile of these products.

In November 2022, Carrefour unveiled an ambitious new target as part of its Carrefour 2026 strategic plan: to increase sales of plant proteins in Europe to €500 million by 2026 (+65% compared with 2022).

To achieve its objective, Carrefour is implementing a strategy based on:

- a comprehensive and innovative product offering: with its Carrefour Sensation brand (formerly Carrefour Veggie), 100% vegetarian, certified v-label and accessible to all, Carrefour launched the development of its pulse and plant-based alternatives offering. In 2023, Carrefour Sensation offered 146 products in Europe. Carrefour also develops a range of protein and plant alternatives through its other brands. In 2023, for example, Carrefour received an LSA trophy for adding white haricot beans to its Carrefour Bio brand of French-produced organic pulses.
- collaboration with suppliers: In 2023, Carrefour launched an international coalition to accelerate sales of plant-based alternatives with 7 industrial groups (Danone, Unilever, Bel, ANDROS, Bonduelle, Nutrition & Health, Savencia). The coalition is committed to achieving €3 billion in sales of plant-based alternatives by 2026 through a set of coordinated actions.
- a promotional scheme to encourage the consumption of plant proteins: since 2022, Carrefour and Danone have co-deployed the operation “Monday is veggie but also Tuesday, Wednesday ...”. This campaign aims to promote healthy eating (Nutriscore A or B), including vegetarian and vegan.
- in its stores and on its website, Carrefour has made changes to the product display hierarchy to flag up vegetarian and low-carbon products. In March 2023 Carrefour Belgium supported the Veggie Challenge, which encouraged consumers to eat more plant products for 20 days. Throughout the month of March, vegetarian recipes were showcased in Carrefour’s social media platforms. In France, Carrefour France promotes low-carbon vegetarian recipes through a partnership with the WWF. These recipes are available at <https://www.carrefour.fr/recettes/manger-durable>.

⁵⁴United Nations, climate action: Food and climate change: healthier eating for a healthier planet: <https://www.un.org/fr/climatechange/science/climate-issues/food>

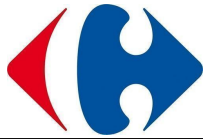


Illustration: Encouraging innovation to support the food transition with the launch of the international Plant-Based Contest

In its endeavours to facilitate the food transition for everyone, Carrefour announced the launch of its new international Plant-Based Contest, running from 31 March until 8 May 2022. To take part, start-ups from all over the world looking to showcase their innovations in the field of plant-based diets had to register on a dedicated website. A shortlist was then drawn up by a panel of leading advocates of a low-meat diet, with the selected candidates attending the finals on 9 June.

The panel, chaired by Carine Kraus, the Carrefour Group's Executive Director of Engagement, and Guillaume de Colonges, Executive Director of Merchandise, includes representatives of suppliers and partners such as the BEL Group, Unilever via The Vegetarian Butcher, Oatly, Proveg, Daphni, Beyond Animal, Capital V and Unovis.

The 5 winners had their innovations showcased on Carrefour's supermarket and hypermarket shelves (as well as its e-commerce websites) and featured in tasting sessions for consumers.

The panel awarded prizes to selected start-ups in three categories. Their innovations are assessed on the basis of a set of criteria:

- Range of vegetable protein-based products
- Marketing concept
- Innovative service offering which encourages consumers to transition to plant-based products.

Farming practices and regenerative agriculture:

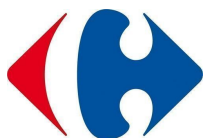
Carrefour's carbon footprint shows that 52% of its Scope 3 emissions is linked to food products. Agriculture accounts for the highest share of GHG emissions from food products, with packaging and transport a long way behind.

Various greenhouse gases - methane (CH₄), nitrous oxide (N₂O), and carbon dioxide (CO₂) - are emitted by agricultural production, which makes the sector atypical in relation to other industries. Improvements in agricultural practices could reduce GHGs by 10-20%.

Carrefour is operating several levers to reduce its Scope 3 carbon impact. Carrefour is supporting its organic and Carrefour Quality Lines in order to facilitate implementation of sustainable, environmentally friendly farming practices. In particular, the Group aims to have all of the products in its Carrefour Quality Lines produced using an agroecological approach by 2025. Suppliers who are partners in this approach have committed to progress plans designed to reduce the use of synthetic pesticides and nitrogen fertilizers, improve soil carbon structure and sequestration, and reduce GHG emissions from agricultural production.

Carrefour is also working to introduce an Agriculture and Climate strategy. In November 2023, a stakeholder panel bringing together around sixty people including Carrefour representatives, suppliers, banks and insurance companies, associations and consumers was organized to work collectively on this strategy. As part of its strategy, Carrefour is working on five priority products: beef, pork, dairy, fruit and vegetable, and cereals.

Carrefour has started building simulations to assess the reduction potential of each priority product. A preliminary study assessed the potential levers for achieving net zero in bottled



milk production in France by 2030. In 2024, Carrefour is assessing the operational implementation of these levers over two principal vectors:

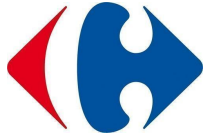
- development of a sourcing strategy favouring low-carbon goods (e.g. Bleu Blanc Coeur eco-methane). Increasing the market share of responsibly-sourced milk would reduce the carbon footprint of Carrefour France's milk sales.
- helping conventional milk producers implement low-carbon agricultural practices on the ground. Carrefour Quality Line producers are key partners in implementing low-carbon practices. The levers identified at farm level are detailed in Table 17 below.

Table 17: Net zero actions for milk production in France

Lever	Description	Possible CO2 reductions by 2030 ⁵⁵
Optimized herd management	Examples of levers: optimizing calving ages, reducing renewal rates, reducing milk waste, increasing production of milk from concentrates.	9,000 tons of CO2
Animal feed	Examples of levers: <ul style="list-style-type: none"> - Changing animal feed to make it more balanced and consistent with the production obtained. - Replacing carbohydrates with unsaturated fats in ruminant feed to reduce enteric CH4 production. - Reducing protein intake via animal feed to limit nitrogen levels in effluents and reduce N2O emissions. - Replacing soya feed with rapeseed cake to reduce greenhouse gas emissions linked to raw material transportation. 	29,000 tons of CO2
Waste management	The aim is to make better use of animal manure and avoid GHG emissions during storage and spreading. Example of lever: covering manure pits reduces N2O emissions and nitrogen losses to the air (ammonia), developing methanization.	10,000 tons of CO2
Grassland management	<ul style="list-style-type: none"> - Optimize grassland management to encourage carbon sequestration and reduce N2O emissions. - Lengthen grazing periods, introduce temporary grassland. - Develop agroforestry and hedgerows to promote carbon sequestration in soil and plant biomass. Develop hedgerows on the periphery of agricultural plots 	No figures on sequestration yet

By 2023, 16,872 producers worldwide were CQL partners, and 7.4% of CQL products make an agro-ecological claim (compared to 6.5% in 2022). For more information on agroecology, CQLs and other environmentally friendly agricultural practices, see the "Protecting biodiversity" report available from our CSR library: <https://www.carrefour.com/fr/bibliotheque-rse>

⁵⁵ Perimeter - Carrefour France for controlled and national brand products.



These roadmaps to decarbonize the production of priority raw materials will be deployed for all five priority raw materials in France in 2024. They can be replicated in the other Carrefour Group countries and can be extended to all other raw materials.

Supplier commitment: the “20 megatonnes” project and the Food Transition Pact

Special attention is paid to products sold by Carrefour and supplied by leading national brands. Carrefour gives preference to the partnership approach for these products with the development of the Food Transition Pact. As of the end of 2023, more than 306 suppliers had signed up to the international pact and its local iterations. The Carrefour Group's aim is to secure the commitment of 500 suppliers by 2030.

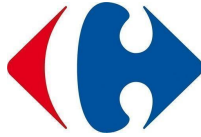
In 2019, Carrefour launched the Food Transition Pact, a network of Carrefour suppliers committed to the food transition for all. The Pact offers a platform for engaging in discussion, sharing best practices, discovering new opportunities for collaboration with Carrefour, and sharing progress with consumers. The Pact is structured around four pillars: packaging, biodiversity, climate, and health/nutrition. Suppliers (of food or non-food products) wishing to join the Food Transition Pact must submit an ambitious action programme addressing at least three of the four pillars making up the Pact. This programme is validated by a panel of internal experts, and suppliers are required to report regularly on their progress. Working groups meet throughout the year.

For the “climate” pillar, the 20 megatonnes project was launched in 2020 to encourage suppliers to make commitments to reduce their emissions, measure their progress, involve consumers and offer them consumption options that generate fewer CO2 emissions. In 2023, 78 suppliers had committed to the 20 Megatonnes project. In 2021, Carrefour launched a dedicated website offering a collaborative platform open to all its suppliers. This platform enables the Carrefour Group to monitor the commitments and progress of its suppliers in tackling global warming, and highlight their most innovative actions. It was developed as part of the Food Transition Pact Climate Working Group co-led by PepsiCo. Other members are Johnson & Johnson, Essity, Beiersdorf, Mars, Danone, Soufflet, Coca-Cola, Kimberly Clark, Heineken, Reckitt, Innocent, L'Oréal, Kellogg's, Andros and Savencia. Each supplier has the duty to report its greenhouse gas emissions and reduction targets, as well as the progress it has made in reaching these targets year after year. The method used is aligned with industry benchmarks (Greenhouse Gas Protocol and Carbon Disclosure Project).

Supplier commitment: the Carrefour Group's top 100 suppliers

In November 2022, Alexandre Bompard announced Carrefour's decision to delist products from our 100 largest suppliers unless these suppliers commit to the 1.5°C trajectory, as certified by an external auditor. This commitment has profound implications for our relationship with our leading suppliers. Carrefour's 100 suppliers accounted for 11% of its Scope 3 emissions and 28% of its total sales in 2021. Achieving this target will enable it to reduce its Scope 3 CO2 emissions by about 6 megatonnes – that's a 4.4% reduction in Scope 3 emissions as a whole.

In 2023, a Road to 1.5°C convention was held to inspire and create momentum around the TOP 100 suppliers objective. The aim of the agreement was to enable each supplier to identify key milestones for realizing the 1.5°C trajectory and to identify good practices in the sector. The Carrefour Group's Merchandise Department also received training on climate change and the supplier commitment. The training equipped all merchandise managers with the knowledge and the tools they need to better manage their future discussions with the



Carrefour Group's key partners. By the end of 2023, 44% of suppliers had committed to the 1.5°C trajectory, as validated by SBTi.

Focus on Carrefour & Bel

Innovative trade agreement

Through a business agreement of 1 February 2023, the Bel Group and the Carrefour Group are renewing the foundations of the retailer-manufacturer relationship to enable everyone to enjoy a healthy and sustainable diet and help tackle climate change. The combined measures will form a comprehensive platform for consumers, while protecting the dairy sector and helping to restrict global warming to 1.5°C.

The agreement signed by the two groups covers several areas:

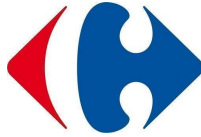
- A broad and diversified product portfolio that meets all consumer needs – in particular, a broader crop offering and formats that meet accessibility requirements across all distribution channels
- Support for the milk sector with an increase in the price of milk in line with the 2023 agreement between Bel and the Association des Producteurs de Lait Bel Ouest
- A revision clause factoring in changes in the price of milk, in accordance with the "trickle-down" principle, and in accordance with the principles established by the EGALIM 2 Law
- Managing targets via business indicators, as well as lower carbon footprints for Bel products sold at Carrefour

Outbound transport:

Carrefour is aiming for a 20% reduction in transport-related CO₂ emissions by 2030, compared with 2019, by optimizing its logistics models and developing alternatives to diesel. In each country, supply chain teams work closely with carriers to improve truck filling, optimize distances travelled and promote alternative modes of transport, in accordance with the Carrefour Group's policy. In France, Carrefour is modernizing its fleet, with 750 trucks now running on biomethane (as of the end of 2022). These vehicles generate less pollution and noise (under 60 dB) and are PIEK-certified. These vehicles feature increasingly prominently in the fleet of the Carrefour Group as a whole, in proportions expected to reach 24% by the end of 2025 and 30% by the end of 2030.

Carrefour has committed to using alternatives to diesel so that it can phase it out completely by 2030, particularly by expanding its fleet of vehicles running on biomethane – a fuel produced from non-consumable organic waste generated by its stores. Biomethane-powered vehicles eradicate fine particle emissions and cut CO₂ emissions by 75%, as well as reducing noise pollution by 50%.

Miscellaneous initiatives:



This category of action, shown under “Other” in the graph above, includes various initiatives to combat the effects of global warming.

- **Challenges linked to deforestation** Carrefour is implementing a series of action plans to reduce the climate impact of its own-brand products. As part of the Carrefour 2026 strategic plan, the Carrefour Group has committed to achieving 50% of “zero deforestation” Brazilian beef in its own brands by 2026, and 100% for other brands by 2030.

For more information about the Carrefour Group's zero deforestation policy and the targets it has set itself, see the “Tackling deforestation” report in the Carrefour Group's CSR library at <https://www.carrefour.com/fr/bibliotheque-rse>

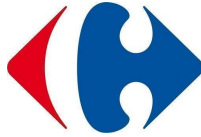
- **Challenges linked to short supply chains and local seasonal products** By 2026, the Carrefour Group plans to double the quantities of fruit and vegetable that it sources via short supply chains in Europe (where the supplier is located less than 50 km from the store). In France, this nationwide system has evolved in tandem with the emergence of a fresh local fruit and vegetable format known as “Potager City”. These new city-centre stores offer highly specialized fresh produce at prices customers would expect to find in a general store.

In Spain, Carrefour works to promote seasonal products while helping to create regional jobs and reduce greenhouse gases. Carrefour Spain sold more than 25,000 tons of locally-grown watermelons, 10% more than in 2022. The company is thus strengthening its commitment to over 100 local and regional authorities.

To expand its range of local and seasonal products, the Carrefour Group contracts with local producers in all countries where it operates, with 50,000 partner producers by 2026.

- **Issues linked to food wastage and waste recovery** Carrefour shares the Consumer Goods Forum's goal of reducing food waste by 50% by 2025 (compared with 2016). Carrefour's overall food waste reduction policy is based on three pillars: in-store action, constructive collaboration with suppliers, and raising customer awareness. In 2023, the Carrefour Group's rate of food waste was (36)% vs 2016 (vs (40)% in 2022) while donations represented 48 million meal equivalents worldwide (+5 million vs. 2022). The Carrefour Group's action plan to tackle food waste is implemented along the entire length of the product's life cycle. From order placement to the end of product life, the Carrefour Group implements solutions to recover value from food products. This includes reducing the amount of in-store markdown and making use of food products that do not get sold in stores (e.g. converting them into biomethane). In 2023, Carrefour became the first retailer to be awarded the national “anti-food waste” label for its Montesson hypermarket. This label was issued by Bureau Veritas following a successful audit of both the Montesson store and the Carrefour Group's head office. The label was issued in recognition of the company's long-standing commitment to reducing food waste.

For more information about the Carrefour Group's initiatives to tackle food waste, see the “Combating food waste” report in the Carrefour Group's CSR library at <https://www.carrefour.com/fr/bibliotheque-rse>



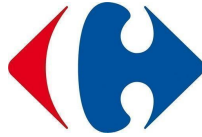
- **Challenges related to the promotion of low-carbon products:** major retailers have an important role to play in raising consumer awareness of the importance of responsible eating. That's why Carrefour France promotes low-carbon vegetarian recipes under a partnership with the WWF. These recipes are available on the Sustainable Eating page of the Carrefour.fr website and a calendar of seasonal fruits and vegetables is displayed in all Carrefour formats. In France, a special catalogue promotes these products.

And Carrefour is taking action to steer consumers towards low-carbon alternatives by promoting products on display or on its websites. To promote low-carbon vegetarian products in stores and on the website, Carrefour has made changes to the hierarchy in which products are displayed on its website (it now highlights products that have been awarded an eco-score of A) and has implemented initiatives to flag up certain products visually in stores.

The Carrefour Group has also developed initiatives to promote the consumption of local products. It has launched the 0 km project, for example, which encourages stores to list and display a range of products made within a radius of 30 km, as well as initiatives celebrating locally made products in all types of Carrefour stores in France: these involve promoting local products and expertise via in-store events and tasting sessions.

- **Challenges linked to recovering, reusing and recycling electrical and household products** The production of electrical and electronic equipment generates significant CO2 emissions. For example, a laptop computer produces 169 kg of CO2 equivalent throughout its life cycle, the same as a 600 km plane journey. In France, the Carrefour Group works alongside eco-organizations to collect neon lights and batteries from its integrated stores. The Carrefour Group's hypermarkets recover small and large appliances and, as of 2022, large furniture with no purchase obligation. To encourage consumers to return their used devices, Carrefour launched television and sound bar recovery campaigns in October in exchange for vouchers.

Carrefour is working with Cash Converter on setting up "second-hand" corners in its stores throughout France. To date, Carrefour has 21 dedicated spaces for buying and reselling second-hand products in hypermarkets. These second-hand corners give a new lease of life to old phones, small appliances and computer equipment, as well as books, DVDs, games, jewellery and leather goods.



4. Adapting to climate change

Carrefour has identified several types of risk associated with climate change, including physical risks affecting stores, regulatory risks, market risks and risks involved in securing supplies of raw materials (1.3. Risks and opportunities).

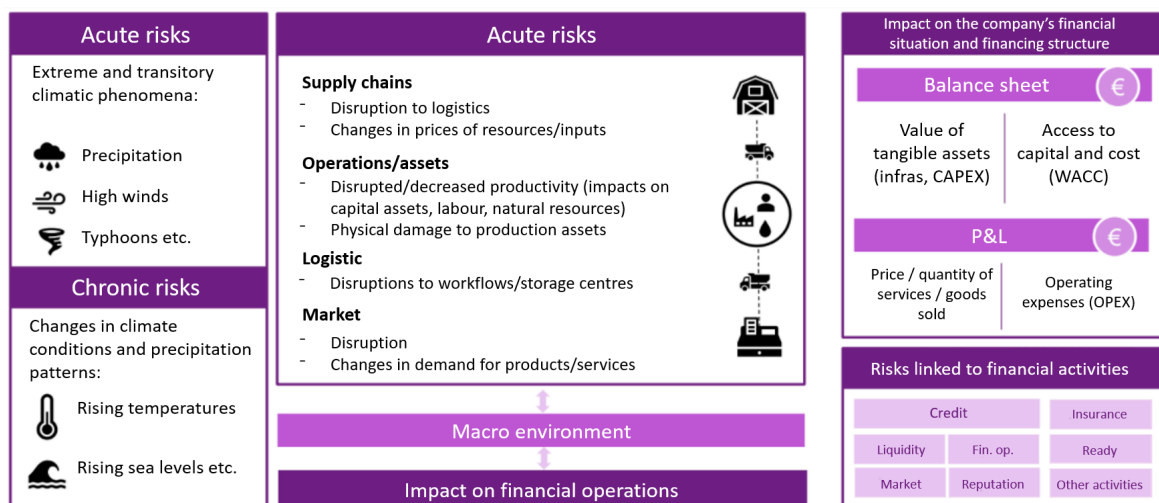
Adapting Carrefour stores to climate change

A study on emerging climate risks was conducted in 2021 and again in 2022 at sites trading under the Carrefour banner, warehouses and head offices in the eight countries in which the Carrefour Group operates directly. The findings of this study present the actual and prospective physical risks affecting Carrefour sites, i.e. the risks associated with weather events that could cause the destruction of buildings and/or disruption to business.

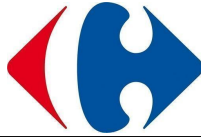
Focus on physical risks

Physical risks resulting from climate change may be related to events (acute) or longer-term (chronic) changes in climate models. Physical risks can have financial implications for organizations, such as direct damage to assets and indirect impacts due to supply chain disruption. Financial performance may also be affected by changes in the availability, supply and quality of water, food security, and extreme temperature changes affecting the assets and operations of organizations, the supply chain, transportation needs and employee safety etc.

In 2022, Carrefour conducted the first risk assessment of climate change on its real estate portfolio. This climate diagnostic assesses the current exposure of sites to future impacts of climate change (now, and in 2030, 2050, and 2100) and under different climate scenarios (IPCC RCP scenarios 2.6, 4.5 and 8.5). The table below details the risks and impacts analysed for more than 8000 sites in the countries included in the Carrefour Group.



Based on the analysis of current site exposure, river flooding is the predominant acute risk. The main conclusions are as follows:



- **Fire:** Overall, Carrefour's current exposure to natural fire risks is relatively low. Certain assets in specific countries are slightly more exposed than the rest of the portfolio (Spain in Europe, Argentina and Brazil in Latin America), but the risk is not a major priority for the Carrefour Group at present.
- **Heatwave:** Similar to fire risks, the Carrefour portfolio's current exposure to heatwave risk is relatively low in Europe. By contrast, some stores in South America are already exposed (Brazil, Northern Argentina).
- **Precipitation and bad weather:** The risks associated with heavy rainfall and bad weather are relatively high for the Carrefour Group's portfolio, particularly for stores in Taiwan, certain parts of Europe (south-eastern Europe, west coast of the Iberian Peninsula) and South America (northern Brazil, northern Argentina).
- **Rising sea levels:** the risks linked to rising sea levels and flooding are already high for Carrefour. Areas of northern France, Belgium, as well as the Atlantic coast in France, the Buenos Aires region and Taiwan are exposed.

By 2100, river flooding will be the predominant acute risk. Significant chronic risks to Carrefour over the longer term are heatwaves, droughts and rising sea levels (see Section 4, Adapting to climate change).

The study concludes with a look at the potential risks in light of RCP climate projection scenarios 2.6 - 8.5. By 2100, river flooding is the predominant acute risk in all Group countries, and is also linked to rising sea levels. Fire risks are low for the Carrefour Group, while heatwaves are a significant risk for the South American portfolio. These can impact employee productivity and store footfall, cause losses due to cold chain disruption, and increase air conditioning and refrigeration costs.

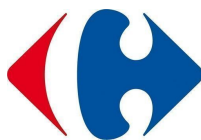


Figure 10: Number of sites at acute risk and breakdown of risk level in 2100
percentage value of assets at acute risk

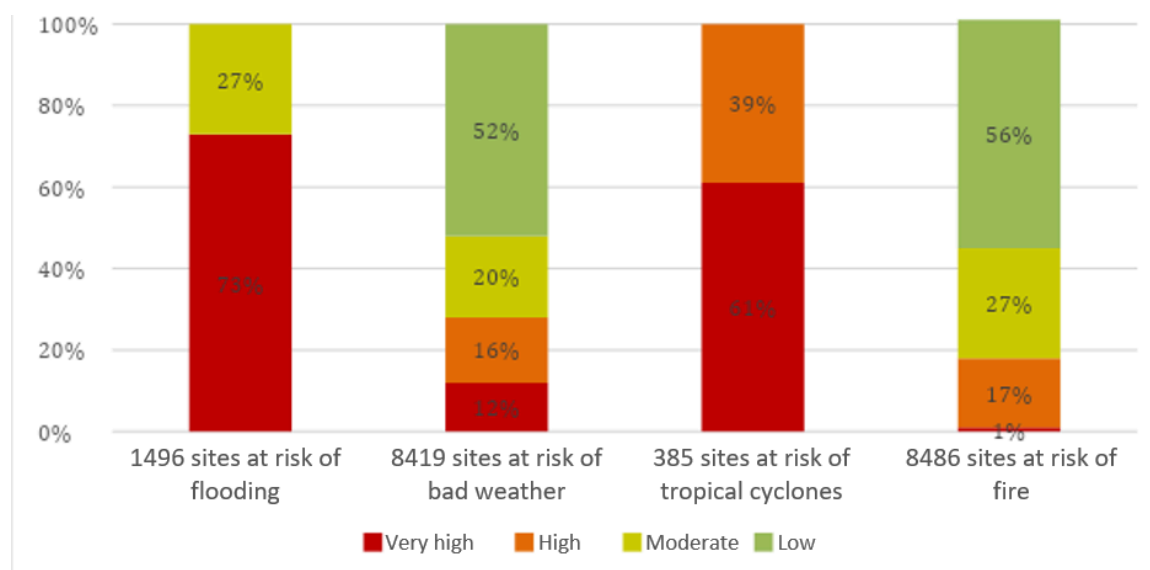
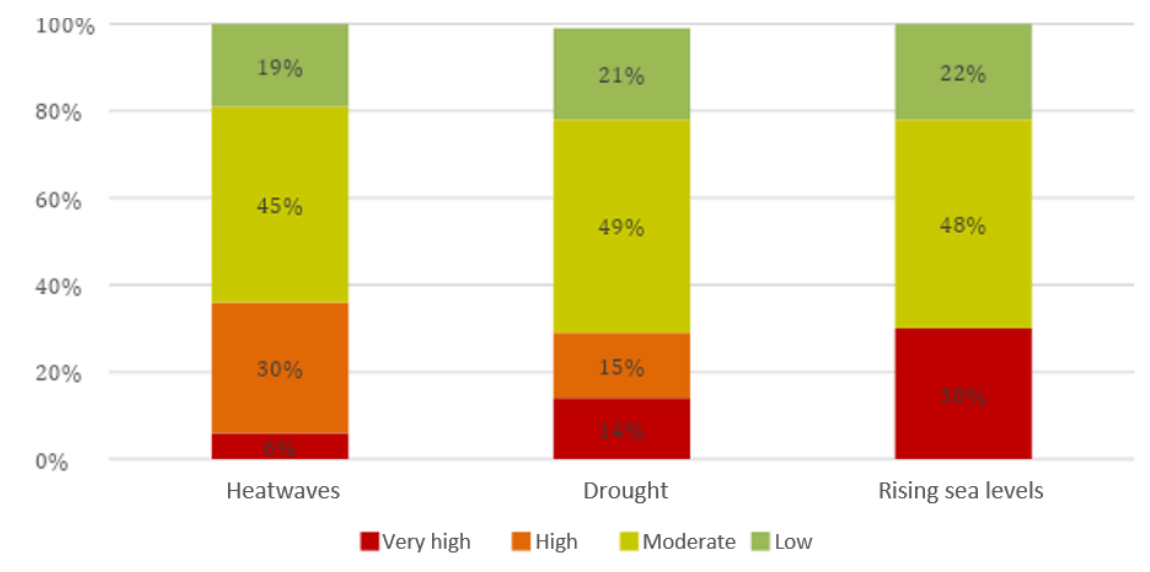


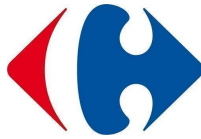
Figure 11: Breakdown of the risk level for sites at risk of heatwave, drought or rising sea levels in 2100
percentage value of 8486 assets exposed to chronic risks



Heatwave risk:

To tackle the risk of heatwave, Carrefour is looking into certain initiatives to improve the wellbeing and health of its employees and customers while reducing the costs and emissions associated with air conditioning and refrigeration. These include early placement of orders for basic-necessity products, changing store opening hours during heatwaves, rotating employees during hot periods of the day, and replacing refrigerant fluids.

Flooding and water shortage risks:



Thanks to this 2022 study and a 2020 study analysing water stress and flood indicators (using the WRI's Aqueduct tool) at Carrefour sites, Carrefour has fully mapped its sites located in flood zones. All Carrefour sites have Business Continuity Plans (BCPs), a common emergency management framework for maintaining site supplies in the event of incidents. Carrefour also monitors water consumption in all countries.

Case studies:

In France, Spain and Italy, 100% of new shopping centres and expansions of over 2,000 m² are now BREEAM (Building Research Establishment Environmental Assessment Method) certified. 100% of new shopping malls are BREEAM New Construction certified. BREEAM-In-Use certifications are renewed every 3 years, subject to an audit.

As part of the real estate operations of Carrefour Property and Carmila, the Carrefour Group has established a sustainable construction policy in France, Italy and Spain. It is based on BREEAM Construction certification, which aims to ensure that new buildings are beneficial to the environment and the health and safety of their occupants, and to conserve biodiversity.

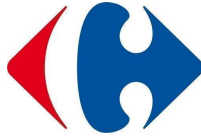
- Spain: An action plan has been launched to anticipate the consequences of future regulations to combat water shortages. This action plan has been rolled out in all hypermarkets and is currently being applied to supermarkets (297 sites, i.e. 51% of all Spanish sites).
- Brazil: Carrefour Brazil conducts online monitoring of water consumption at all of its stores, and has started work on upgrading its water supply lines to improve the management of water consumption against a backdrop of growing water scarcity in the country.

Monitoring at-risk raw materials and deploying a procurement strategy appropriate to the risk:

The Carrefour Group monitors raw materials exposed to social and environmental risks in consultation with stakeholder NGOs. The risk of contribution and/or sensitivity to global warming is one of the seven risks addressed, together with deforestation, impact on biodiversity and land use, local water consumption and pollution (soil, air, water), human rights and working conditions, living wage and consumer health and safety. A materiality study for the Carrefour Group is then used to define which raw materials to prioritize. To date, action plans have been produced for around ten raw materials exposed to environmental risks (see 3. Low-carbon consumption). This strategy involves co-developing action plans with suppliers, so that less impactful agri-environmental measures can be prioritized, and finding alternative raw materials that are less sensitive to these problems, while at the same time avoiding shifting supply pressures onto these raw materials.

Support for the Carrefour Group's supplier farmers to secure the partner approach over the long term:

Carrefour contributes to the development of local economies and brings dynamism to the ecosystems and regions in which it pursues its business. Each store has the independence necessary to adapt its product assortment portfolio of services to local needs and build close relationships with its customers. Carrefour has set itself the target of having 50,000 regional and local partner producers by 2026 for organic farming and its Carrefour Quality Lines. In 2023, Carrefour had 46,013 producer partners worldwide. Carrefour continues to strengthen



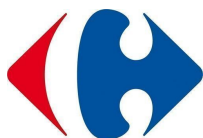
its partnerships with local businesses around the world. In particular, the Carrefour Group is committed to helping small and medium-sized enterprises expand by implementing specific SME plans. These plans are designed to strengthen Carrefour's cooperation with SMEs operating in all sectors, food and non-food. Finifac, the Carrefour Group's financial services provider, has developed credit solutions for SMEs and farmers.

To develop business with SMEs, each country has implemented project discussions and specific contracts. In France, to facilitate these partnerships, the Carrefour Group has introduced a simplified two-page ultra-local contract template that can be used by all stores. The contracts with these partners guarantee fair prices. Partner producers enjoy special relationships with Carrefour, enshrined by specific multi-year contracts with commitments in relation to price and volume, simplified 48-hour listing terms and faster payments within seven days. In 2022 in France, the Carrefour Group reasserted its commitment by signing more than 3200 contracts with local and regional SMEs (representing 3264 suppliers). By the end of 2023, 1855 producers - mainly market gardeners, fish farmers and suppliers of grocery products - had entered into partnerships with Carrefour under ultra-local contracts. Carrefour has also worked to make multi-annual agreements permanent. The three-year commitment provides all types of supplier with additional security.

Carrefour also offers financial support for various organic and/or agroecological projects. In 2019, the crowdfunding platform [JeParticipe.carrefour.com](https://jeparticipe.carrefour.com) was launched in partnership with MiiMOSA to fund agricultural projects for the food transition. In total, more than 250 projects were funded through this platform and over 100,000 euros was paid to the winners by Carrefour in late 2023.

Carrefour also invested €5 million in the MiiMOsa crowdfunding platform in 2021 to support the food transition. By the end of 2023, more than 250 projects had been funded through this platform, and Carrefour has contributed over 100,000 euros in prizes to the project winners.

The Carrefour Foundation supports associations that promote agricultural practices such as agroecology, the switch to organic farming and urban agriculture. In 2023, 29 sustainable and community farming projects were funded by the Foundation in a total investment of €2,246,740 (29% of the overall budget). In Belgium, for example, the Carrefour Foundation helps advocate for and train Belgian agricultural stakeholders so as to promote regenerative agriculture alongside three associations (Farming for Climate, Renegacterre and Farm for Good). In Brazil, the IDH sustainable trade initiative supports veal producers that respect forest resources. The Carrefour Foundation helps ensure fair and regular remuneration for producers.



5. Reporting methodologies and alignment with reference standards

5.1 Reporting methodologies

Evaluation of performance:

Quarterly reporting is conducted in all of the Carrefour Group's eight countries to ensure that the situation is properly assessed with regard to the environmental issues identified. The Carrefour Group's CSR teams regularly review the performance of the Carrefour Group's countries in order to ensure that the objectives of the CSR index and food transition are properly implemented. Audits are conducted by an independent third-party organization twice a year to confirm the reliability of the consolidated data for the Carrefour Group.

Carrefour completes questionnaires from rating agencies to assess its economic, social and governance performance. In 2023, the Carrefour Group received an "A-" rating from the Carbon Disclosure Project (CDP) for its commitment to combatting climate change.

Reporting methodology - Scope 3 carbon:

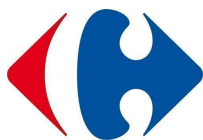
Perimeter and method

The Carrefour Group uses the GHG protocol methodology to calculate its carbon assessment for Scopes 1, 2 and 3. The carbon assessment covers emissions associated with the Carrefour Group's activity over the entire calendar year from 1 January to 31 December.

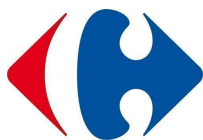
The Carrefour Group's activities include retail, financial and merchant services (Carrefour Banque and Carrefour Voyages), logistics and supply chain operations, as well as real estate. Due to the significance of their contributions to the emissions of the Carrefour Group, certain activities were not included in the perimeter of the assessment: these activities are financial and merchant services, particularly the activities of Carrefour Voyages and Carrefour Banque, as well as the activities of franchisees outside the Carrefour Group's eight integrated countries. Operating expenses (e.g. provision of services) were also excluded from the perimeter.

Breakdown of emissions sources under the GHG Protocol methodology

Scope 1	<p>Direct emissions:</p> <p>Emissions generated by leakage of refrigerant gases in Carrefour stores:</p> <ul style="list-style-type: none"> ● Refrigerant refill data (for food cooling or store air conditioning) (kg fluid) ● IPCC (Intergovernmental Panel on Climate Change) emission factors <p>- Emissions from liquefied petroleum gas (LPG) consumption:</p> <ul style="list-style-type: none"> ● Data on MWh HHV consumed ● DEFRA (Department for Environment, Food & Rural Affairs - UK) emission factors <p>- Emissions from natural gas consumption:</p> <ul style="list-style-type: none"> ● Data on MWh consumed ● DEFRA (Department for Environment, Food & Rural Affairs - UK) emission factors <p>- Emissions from fuel oil consumption by stores:</p> <ul style="list-style-type: none"> ● Data on MWh consumed ● DEFRA (Department for Environment, Food & Rural Affairs - UK) emission factors
Scope 2:	Indirect emissions:



	<ul style="list-style-type: none"> – Emissions from electricity consumption: <ul style="list-style-type: none"> ● Data on MWh consumed ● Emission factors from: <ul style="list-style-type: none"> - The AIB for European residual mixes - The Ministry of Science, Technology and Innovation in Brazil - The transparency report on climate, based on CAMMESA data for Argentina
Scope 3	<p>Indirect emissions not included in scopes 1 and 2.</p> <p>The following sources have been taken into account:</p> <ul style="list-style-type: none"> ● Purchases of goods and services: This category takes into account emissions linked to purchases of goods and services for all Carrefour stores, integrated and franchise, in the 8 countries in which the Carrefour Group operates directly. ● Upstream energy emissions ● Inbound transport ● Waste generated during activity ● Employee journeys to and from work ● Business travel ● Outbound transport ● Use of products sold ● End of life of products sold ● Downstream leasing ● Franchises: In franchise stores, Scopes 1 and 2 cover emissions linked to energy consumption and the use of refrigerant fluids. This costing takes into account energy consumption by franchise stores in the eight countries in which the Carrefour Group operates directly, as well as franchise stores in partner countries. ● Investments ● Purchases of fixed assets <p>Upstream leasing, the processing of the products sold were excluded as not relevant to the Carrefour Group's business. Customer journeys have not been included in the analysis at this stage due to lack of data. Data on purchases of goods and services from franchise stores in partner countries has not been included.</p> <p>Scope 3 data (excluding outbound transport) was calculated in relation to operational activity data for France (e.g. units of products purchased in the main product categories) and the Agribalyse emission factors for the "Transport" stage. For the other countries, emission calculations were extrapolated from the data calculated for France and the financial data.</p> <p>Calculation of the Carrefour Group's Scope 3 emissions for the purchase of goods and services category includes emissions associated with FMCG, fresh traditional produce and household, appliance and textile (non-food) purchases over the entire calendar year from 1 January to 31 December. The calculation of these emissions starts with France, where it has been possible to determine, across the perimeter, tonnages of products and the associated purchasing expenditure (€) for 53 categories of food. Combining this data with the Agribalyse and ADEME emission factors yields the carbon footprint for France for these 53 food product categories on the one hand and the 36 non-food product categories on the other. These outputs are then used to determine monetary emission factors for the 53 food categories and 36 non-food categories. This new emission factors database, readjusted for purchasing power parity by country, allows the GHG footprint to be calculated for all the countries in which the group operates (Brazil, Spain, Belgium, Italy, Romania, Argentina, Poland).</p>



	<p>Outbound transport data was calculated with operational data for the entire Group using the following methodology:</p> <ul style="list-style-type: none"> - Emissions from the Carrefour fleet's fuel consumption: <ul style="list-style-type: none"> • Data in litres consumed (L) OR data about distances travelled (km) • National emission factor or factor indicated by the carrier, and failing that standard DEFRA (Department for Environment, Food & Rural Affairs – UK)) emission factors
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E-commerce data reporting methodology

The reporting methodology used is based on the organizational logistics structure of the e-commerce site and differs depending on the order picking route. If all or part of a country's e-commerce orders are prepared in an e-commerce order fulfilment warehouse, we collect all data on energy consumption and refrigerant leakage from the warehouses concerned. If all or part of a country's e-commerce orders are prepared in stores, then we collect all data on energy consumption and refrigerant leakage from the stores concerned as a proportion of the share of e-commerce revenue generated by the stores. Data on downstream transport is calculated on a pro rata basis as a proportion of the country's share of e-commerce sales. Finally, the transport data for last-mile deliveries are collected for each country on the basis of actual data (this type of transport being specific to e-commerce).

6. To find out more

Carbon Disclosure project

Other elements

- [Food Transition Pact with suppliers](#)
- [Food Transition Pact's 20 Megatonne Platform](#)
- [Plant-Based Contest](#)