

Climate Plan

Update
December
2023



Climate Plan purpose

This Climate Plan provides an overview of the key actions and targets we have identified to decarbonize our local brands' operations and value chain. Building on last year's Climate Plan, we have refined our decarbonization levers with quantified potential greenhouse gas (GHG) emission reductions. From an operational perspective, we remain focused on refrigerant transition, renewable energy development and electrification (pp. 8 - 11). From a value chain perspective, we focus on engaging suppliers and farmers and encouraging development of lower emission assortments (pp. 12 - 19).

Our focus is on gathering data to make material reductions and drive towards our interim targets. Decarbonizing the value chain is a long-term ambition that will require all parties in the chain to work together. There are numerous challenges and opportunities on the path to decarbonization, not only for Ahold Delhaize but our entire industry. We are committed to continuing to work together with our partners on these challenges. For residual emissions that remain hard to abate, we provide our position on carbon removals and how we may approach it in the future (pp. 20 - 21).

In our Climate Plan, we focus on our decarbonization efforts and how we impact the environment. We acknowledge that climate change will also have an impact on us. We present our approach to climate scenario analysis and climate-related risks and opportunities within our [CDP](#) response and our latest [Annual Report](#).

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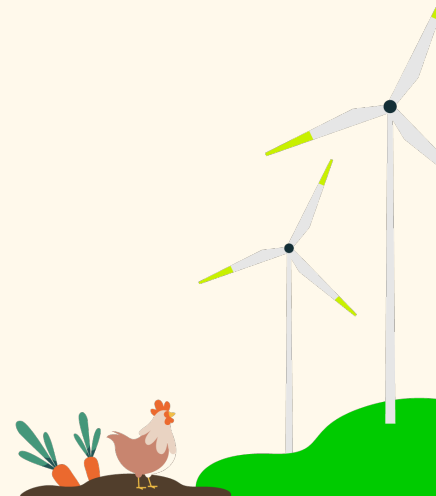
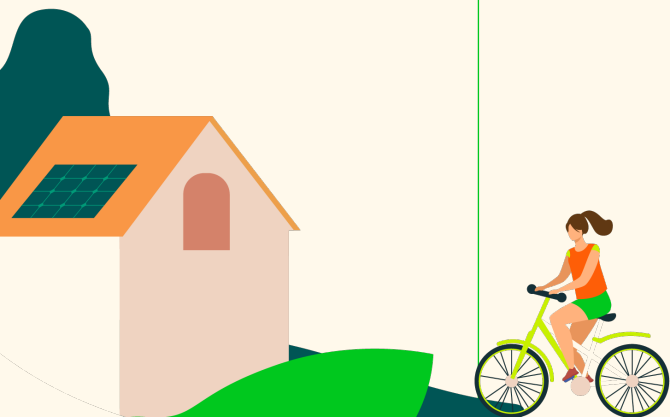
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Foreword

Dear reader,

No matter where we are on the planet, the climate crisis affects us all. It is a challenge that extends its reach into every corner of our interconnected world, affecting nature, businesses, consumers and society at large.

Humanity has lived beyond its means for a long time, depleting planetary resources and stretching the boundaries of what our Earth can carry. Ahold Delhaize wants to take action. We lead the transformation to a healthy and sustainable food system.

We acknowledge the gravity of this challenge, which is why, in 2022, we included climate-related risks in our Enterprise Risk Management assessment, underscoring the need for a strategic and concerted response. In aligning our purpose, vision, values and strategic priorities to our material Environmental, Social and Governance (ESG) topics, principal risks and our contribution to the Sustainable Development goals, we aim to create an integrated overview of our business and its contribution to society.

Through our conviction that healthier people and a healthier planet are intrinsically linked, and the belief that what our customers put on their plates has a direct impact on the world beyond the kitchen table, we based our Healthy and Sustainable strategy on fostering healthy communities and a healthy planet.

To support this, we have set science-based emission reduction targets for our own operations (scope 1 and 2) as well as our entire value chain (scope 3) in line with the UN's goal to limit global warming to 1.5 degrees Celsius. Additionally, we conducted extensive research to identify the levers we need to pull for each scope and presented these in our Climate Plan last year. In this update of our Climate Plan, we've further sharpened the approach we are taking to our decarbonization pathway with a better understanding of potential emissions-reduction opportunities. We also share the challenges we face and our position to carbon removals.

We actively collaborate across our industry to address the systemic challenges we face. As Co-Chair of the Consumer Goods Forum (CGF) since August 2023, we are championing CEO-led coalitions focusing on critical areas such as product data, food waste, net-zero, Collaboration for Healthier Lives and the Sustainable Supply Chain Initiative. These efforts are pivotal in propelling industry-wide decarbonization and support the transformation to a healthy and sustainable food system.

Across Ahold Delhaize, our cross functional teams work to ensure that we have a health and sustainability lens on everything we do. That is why we are advancing our activities in sustainable finance, and have seen some initial successes, including our MSCI ESG rating being upgraded from AA to AAA and the issuance of our €500 million Green Bond, which reinforces our commitment to achieving net-zero.

I am proud of our Climate Plan, which covers not just our own operations but also our supply chain. There is much work to be done, and part of the map is still being drawn. We might not always be able to get it right the first time, but we will accept

feedback and apply what we learn to improve. Let's work together to inspire everyone to eat and live better, for a healthier future for people and planet.

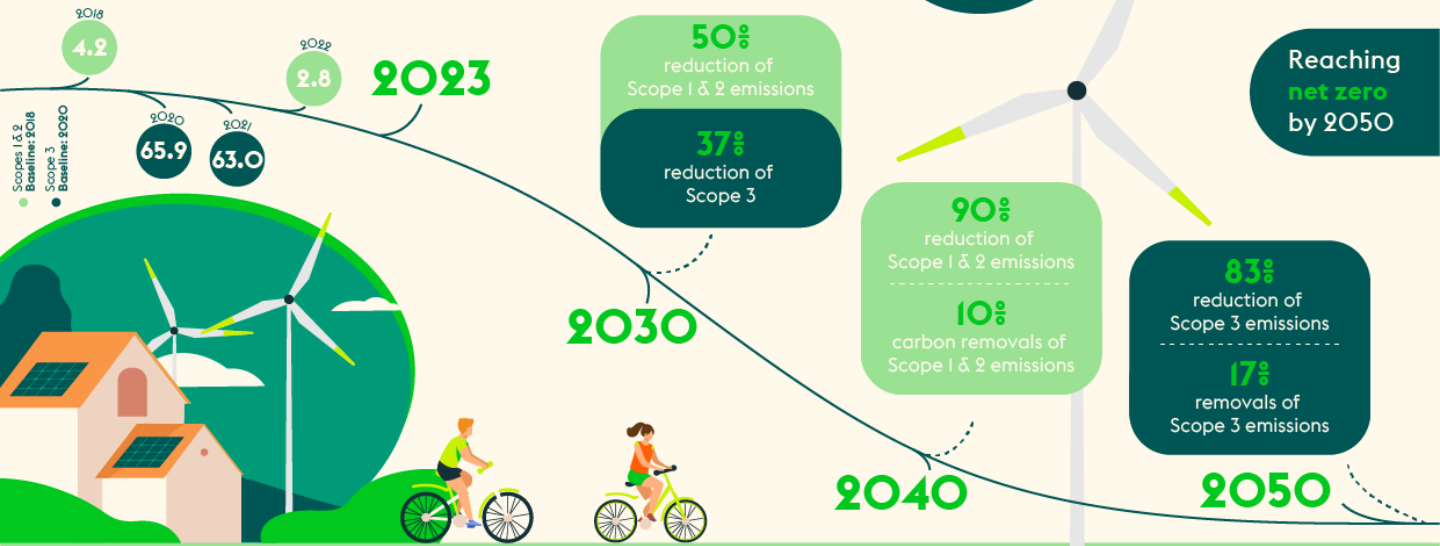
Frans Muller

President and CEO Ahold Delhaize

Ahold Delhaize | Climate change



Targets and performance



Estimated reduction potential of scope 1 and 2 levers to 2030



Estimated reduction potential of scope 3 levers to 2030

Engage suppliers, farmers and customers to progress sustainability measures in:



Targets

Ahold Delhaize developed science-based targets (SBTs) for scopes 1, 2 and 3 in 2019, and submitted targets to the Science Based Target initiative (SBTi) for validation in 2020. In accordance with SBTi technical guidance on setting SBTs, 2018 was selected as the baseline year, since it was the most recent year with robust scope 1 and 2 footprint data. In 2022, we updated our scope 3 target in line with the latest guidance on net-zero and agriculture-related emissions to align with the 1.5-degree scenario (our previous target was aligned with the well-below 2-degree scenario). We submitted updated scope 3 targets to SBTi in 2023 and they are pending validation. We selected 2020 as the baseline year for scope 3 given the improved quality and robustness of our local brands’ purchasing and supply chain data for that year.

	Scope 1	Scope 2	Scope 3
Baseline year	• 2018		• 2020
Short-term target	• 34% reduction by 2025		<ul style="list-style-type: none"> • Suppliers who represent 70% of our footprint will be asked to commit to SBTi by 2025 • All our suppliers will be asked to report on scope 3 by 2025 • All food retail brands in Europe have committed to baseline current protein ratio and set protein ratio targets by the end of 2024¹
Mid-term target	• 50% reduction by 2030		• 37% reduction by 2030 ²
Long-term target	• net-zero: 90% reduction and 10% removals by 2040 ³		• net-zero: 83% reduction and 17% removals by 2050 ²
Top priority opportunities (not exhaustive)	<ul style="list-style-type: none"> • Low-Global Warming Potential (GWP) and natural refrigerants • Transition from fossil fuels 	<ul style="list-style-type: none"> • Energy efficiency • Renewable energy 	<ul style="list-style-type: none"> • Engage suppliers to set science-based targets • Engage suppliers and farmers to implement sustainable practices (e.g., in agriculture, livestock farming, processing, deforestation and food loss and waste) • Seek to develop a lower emission assortment • Encourage customers to purchase lower emission products

Ahold Delhaize is a family of great local brands serving millions of customers each week in the United States (U.S.), Europe and Indonesia. This Climate Plan was developed in collaboration with our local brands and stakeholders. Each of our local brands have different ways of approaching climate action and they are all at different stages of the journey. Some of our local brands have set more ambitious targets than the Ahold Delhaize group targets presented here. We facilitate open communication across our local brands so they can each learn from each other to accelerate progress.

1. Protein ratios are discussed further in our 2022 [Annual Report](#).
 2. Committed to but not yet validated by SBTi, the target is based on a 1.5-degree decarbonization pathway. Target coverage: 100% of calculated emissions from GHG Protocol categories 3, 4, 5, 6, 7, 9, II, I2 and 67% of calculated emissions from category I. Categories I4 and I5 are included in the scope 3 inventory, but excluded from the target boundary. These inclusions and exclusions are in line with SBTi guidance and are driven by the level of influence Ahold Delhaize has on reductions in each category.
 3. Committed to but not yet validated by SBTi, the target is based upon a 1.5-degree decarbonization pathway.

Health and sustainability at Ahold Delhaize

Our ambition

Our Health and Sustainability strategy, “Grounded in Goodness”, is centered around our belief that what is healthy and sustainable should be accessible and available to all. To deliver on our strategy, we focus on healthier people and a healthier planet and the idea that the world’s health crisis and climate crisis are intrinsically connected. Acting responsibly today is imperative to securing a better tomorrow for generations to come.

This approach enables the decisions we make to be grounded in doing the right thing for people – customers, communities and associates – and planet, with a focus on impacts from our own operations and working with farmers and suppliers to reduce our impacts across the entire supply chain.

We collaborate closely with our partners and local brands to empower customers to make healthy and sustainable choices. Our local brands operate as part of a complex value chain comprised of thousands of producers that help them provide products and services to customers. To transition to a healthier and more sustainable food system will require the whole value chain to work together.

Interdependencies

There are many topics related to healthier people and planet that share complex interdependencies with climate, which can be both positive and negative. It is not always easy to always make decisions that provide mutual benefits across health and sustainability. We always strive to accentuate the co-benefits and reduce any adverse impacts.

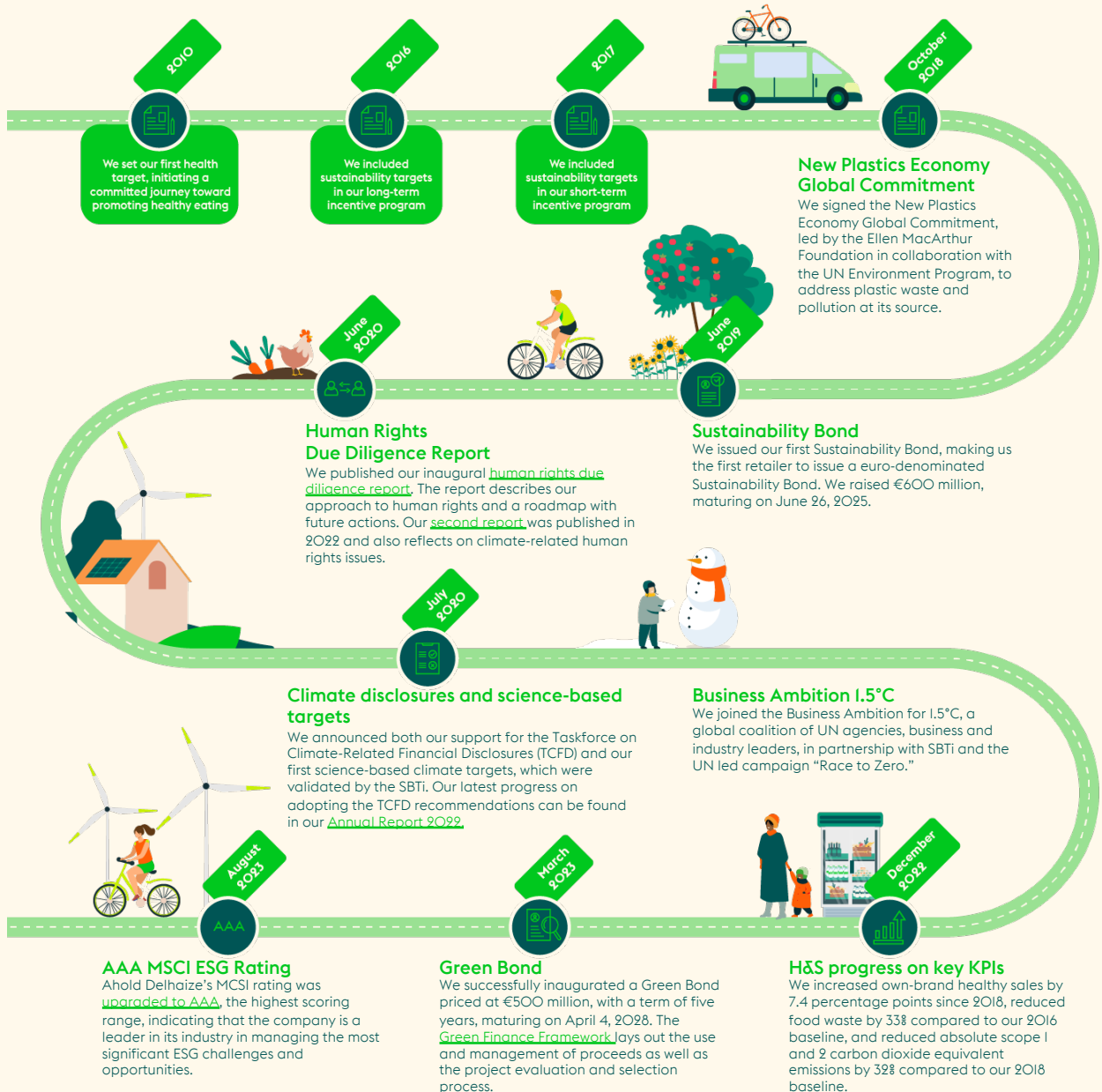
Areas of where we see interdependencies with climate include:

- **Health and climate:** Dietary decisions may impact individual health but may also have implications for the environment. Diets rich in plant-based foods can contribute to lower greenhouse gas emissions, reduced land and water usage and mitigated deforestation. As a global food retailer, we aim to make healthy and sustainable food affordable and accessible for all customers.
- **Circularity and climate:** Packaging and plastic use and food waste contribute to greenhouse gas emissions and deplete natural resources. The food production system is estimated to contribute one quarter of total global greenhouse gas emissions and approximately one quarter of these emissions are due to food loss and waste¹. We donate unsold food to local food banks and charities, and continually strive to align our use of resources with a circular and sustainable approach as we strive to reduce GHG emissions caused by food loss and waste. Downstream food waste can also contribute to increasing greenhouse gas emissions; we seek to educate customers on the environmental impacts of food waste so they can make informed purchasing decisions.
- **Nature and climate:** The link between nature and climate impact underpins our aim to promote sustainable and regenerative agricultural practices. Natural ecosystems such as forests and wetlands play an important role in absorbing and storing GHG emissions and emissions can adversely impact the function of natural ecosystems. Improved agricultural and livestock practices are also a key lever for reducing GHG emissions in our local brands’ supply chains.

1. Source: [Our World in Data](#)

Our health and sustainability journey

We are proud of our progress on sustainability and want to highlight a few of our actions over the last few years. You can find many more brand-level actions in our Annual Reports, on our website and in disclosures by our local brands.



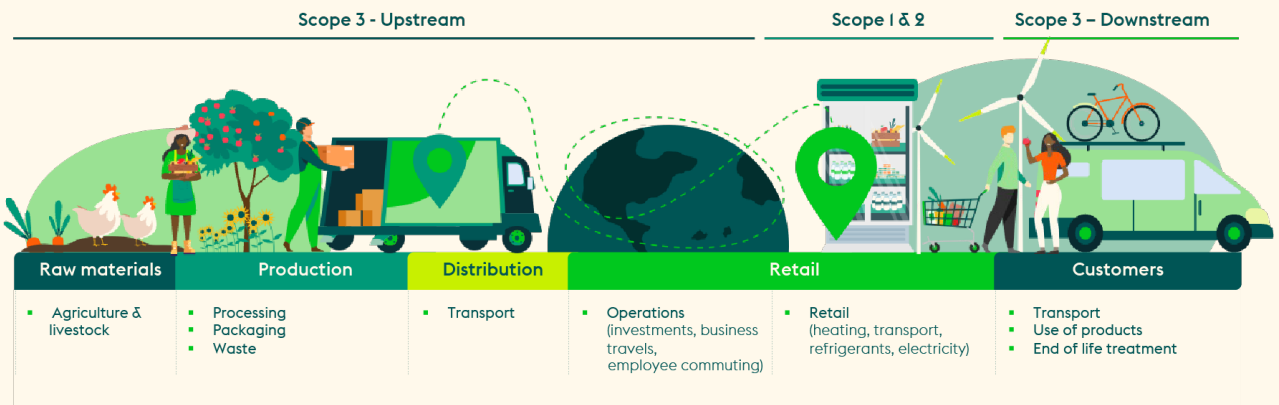
Our climate mission

Our local brands are privileged to serve millions of customers in their communities every week. We have the opportunity to reduce our emissions across the value chain, helping our brands' customers make healthier and more sustainable choices and engaging our suppliers to reduce emissions related to food production and offer our consumers product choices with lower carbon footprints.

Within our climate mission, we are guided by the standards of the Greenhouse Gas (GHG) Protocol, which defines a global standardized framework for the measurement and management of greenhouse gas emissions from the private and public sectors. The GHG Protocol defines scope 1, 2 and 3 emissions. Scope 1 emissions are direct greenhouse gases from owned or controlled sources. Scope 2 emissions are indirect emissions resulting from the generation of purchased energy and scope 3 emissions are all other indirect emissions in the upstream and downstream value chain of an organization.

We set climate targets aligned with the SBTi, a partnership among several non-governmental organizations: CDP, the United Nations Global Compact, World Resources Institute and the World Wildlife Fund for Nature. The initiative defines and promotes a standard for corporate climate targets in line with the latest climate science. SBTi is the most widely referenced guidance to set climate targets by companies.

It is our climate mission to become net-zero across our operations by 2040 (scope 1 and 2) and the value chain by 2050 (scope 3). Our definition of net-zero is aligned to SBTi and requires reducing scope 1, 2 and 3 emissions to a level consistent with a 1.5-degree Celsius scenario and neutralizing any residual emissions. As per SBTi guidelines, we have identified short- and long-term targets and priority opportunities across all GHG Protocol scopes. This Climate Plan presents these targets, as well as a short summary of our progress.



Climate Plan – Operations

Targets

Our first goal is to reduce emissions from our local brands’ operations. This is a relatively small part of the emissions from our value chain, but these are the emissions over which we have a direct influence. We are focusing primarily on four areas: transition to low-GWP and natural refrigerants, renewable energy, transition from fossil fuels in heating and transportation and increased energy efficiency.

Scope 1 and 2 targets

Direct targets:

- 34% reduction by 2025
- 50% reduction by 2030
- net-zero: 90% reduction and 10% removals by 2040

Indirect milestones:

- 100% zero-emission electricity by 2035

Baseline and progress

Our scope 1 and 2 emissions are mainly driven by energy consumption, refrigerant leakage, heating and transport. Below is an overview of our performance in reducing our GHG emissions from 2018 for scope 1 and 2.

Scope 1 and 2 emissions¹

CO ₂ e market based [in thousand tonnes]	2018	2019	2020	2021	2022
Scope 1 refrigerant leakage	1,583	1,441	1,258	1,182	1,185
Scope 1 heating	321	284	269	295	309
Scope 1 own transport	319	257	277	316	329
Scope 2 electric energy use	1,922	1,833	1,490	1,079	995
Scope 2 use of imported heat	19	20	20	21	19
Total scope 1	2,223	1,982	1,804	1,794	1,823
Total scope 2	1,941	1,853	1,510	1,099	1,014
Total scope 1 & 2	4,164	3,835	3,314	2,892	2,837

In 2022, emissions decreased by 32% compared to a 2018 baseline. The main drivers for this reduction were the increased ratio of zero-emission electricity consumed and more efficient and environmentally friendly refrigeration systems.

¹ As a result of a data improvement project some identified errors present in the emission data were corrected in 2022. In our Annual Report 2022 we disclosed these adjustments and included the restatements for 2021 as well as the baseline year 2018. Therefore, these restatements have an impact on the comparability between the results of the mentioned years and the years 2019 and 2020 as these two years have not been restated accordingly.

Energy & Fuel Consumption	2018	2019	2020	2021	2022
Energy consumption [in gigawatt hours]	7,210	6,620	6,561	6,835	6,973
Fuel consumption [in million liters]	97	78	84	95	99

Fuel consumption increased in 2022 due to improved tracking of volumes consumed in transportation.

Refrigerant Leakage	2018	2019	2020	2021	2022
Refrigerant leakage [in %]	14.1%	13.2%	12.7%	11.4%	12.5%
Average GWP (based on total refrigerant charge)	2,747	2,666	2,615	2,512	2,508

The current mix of refrigerants causes 42% of our total scope 1 and 2 emissions (2022 actuals). Both refrigerant leak rates as well as the average GWP of our brands' refrigeration systems decreased over the last four years. This is mainly due to our brands' installation of more sustainable refrigeration systems, including natural refrigeration systems, when remodeling stores.

Action Plan

To address the emissions in our brands' operations, we identified four key levers:

1. Transition to low-GWP and natural refrigerants
2. Transition to renewable energy
3. Transition from fossil fuels in heating and transportation
4. Increased energy efficiency.

In this section we set out examples of actions we have taken under each lever. Please note, this is not a full list of our activities to reduce scope 1 and 2 emissions.

1. Transition to low-GWP and natural refrigerants

Our 2022 mix of refrigerant types and associated leakage accounts for 42% of our total scope 1 and 2 emissions. We are aiming to reduce refrigerant emissions to reach net-zero by 2040 compared to our baseline year by executing local brand climate plans.

In order to achieve our net-zero plan, we need to replace or retrofit our refrigeration systems with low climate-impact alternatives that can use natural or low-GWP refrigerants, minimize leakage and consume less energy.

We want to transition, year by year, to natural and low-GWP refrigerants. Natural refrigerants have negligible climate impact and are more energy efficient. Our U.S. businesses are planning to convert equipment for compatibility with low-GWP or natural refrigerants (these plans are under revision due to PFAS legislation). For our European businesses, all refrigerant equipment will use natural refrigerants by 2040.

Cumulative emission reduction potential 2024-2030

0.5 MtCO₂e

2. Transition to renewable energy

In 2022, 35% of our emissions (scope 1 and 2) were caused by electricity consumption. Our total electricity consumption is forecast to further increase due to the electrification of our transportation and heating systems. We plan to reduce electricity emissions to zero by 2035.

A portion of this will be accomplished by generating our own electricity by installing solar panels in both the U.S. and Europe. In addition, we plan to source 100% renewable energy through Power Purchase Agreements (PPAs) and Renewable Energy Certificates (RECs). In Europe, we already use 73% green electricity, compared to a share of 26% in the U.S.

Cumulative emission reduction potential 2024-2030

8.0 MtCO₂e



Example

This year, Food Lion received two awards from the U.S. Environmental Protection Agency for reducing emissions by switching to refrigeration systems with zero-ozone depleting potential and low-GWP refrigerants.

Some of our other brands, such as Albert Heijn in the Netherlands, are also successfully replacing cooling with chemical refrigerants to installations with natural refrigerants. At Albert Heijn, they already account for approximately 68% of own-store installations.



Example

We actively invest in renewable energy initiatives. Our solar projects include widespread photovoltaic installations. In the U.S., a contracting was recently finalized for the 45-50 Maryland stores in the Giant Food brand to be an offtaker for a new utility scale solar project. Construction will start in 2024.

Our European brands are also working on renewables – for example, Alfa Beta in Greece is installing photovoltaic systems at its stores. In the Netherlands, Albert Heijn already uses 100% renewable electricity. To incentivize renewable electricity generation, Albert Heijn is entering into a long-term partnership for the purchase of green energy from a new wind farm to be built.

3. Transition from fossil fuels in heating and transportation

Our fossil fuel-related emissions come mainly from two sources: transport and heating. Transport by our own fleet includes distribution between facilities, e-commerce services, delivery to customers and business trips, using both owned and leased vehicles. These activities account for 12% of our total scope 1 and 2 emissions. Our long-term vision is to achieve 100% fossil fuel-free transport in both Europe and the U.S. by 2040.

Technological maturity plays a role in how fast we can transition to cleaner energy sources. In the U.S., we are facing challenges in infrastructure readiness for electrified fleets and equipment. Likewise, we will need to evaluate fleet electrification viability in Europe on a country-by-country basis.

The natural gas and propane used for heating comprises 11% of our scope 1 and 2 emissions today. Our aim is to gradually electrify our heating systems to eliminate fossil fuel use in both the U.S. and Europe by 2040.

Cumulative emission reduction potential 2024-2030

0.3 MtCO₂e

4. Increase energy efficiency

In addition to the switch to renewable energy and the electrification of transportation and heating, we are implementing energy efficiency measures across all our local brands, to reduce our total energy consumption. We are installing energy-efficient equipment, such as LED lights, doors on cabinets, heat recuperation, heat pumps, new refrigeration systems and improved insulation. When remodeling stores, taking measures like these is enabling us to create some of the most energy-efficient stores of the future.

Cumulative emission reduction potential 2024-2030 (so far identified)

5 ktCO₂e



Example

In Romania, Mega Image started to convert their distribution cars to electric or natural gas vehicles, following the ambition to reach 19% natural gas and 23% electric shares in their fleet by 2030.

We are making significant changes to the heating systems in our stores. Our Mega Image brand, for example, is taking a decisive step towards sustainability by equipping its stores with heat pumps, so they are no longer dependent on traditional heating methods using fossil fuels. Our Albert Heijn stores are on their way to becoming entirely gas-free, in line with our commitment to reduce GHG emissions.



Example

Many of our brands, in both Europe and the U.S., have switched to energy-efficient LED lighting in the stores to reduce overall electricity consumption.

Brands including Mega Image, Delhaize Belgium, Food Lion, Giant Food and The GIANT Company are upgrading their refrigeration systems. They are retrofitting older freezer doors and replacing them with the latest passive doors, which significantly minimizes energy loss, as only the door frames are equipped with frost protection, resulting in higher efficiency compared to conventional active doors.

Climate Plan – Value chain

Targets

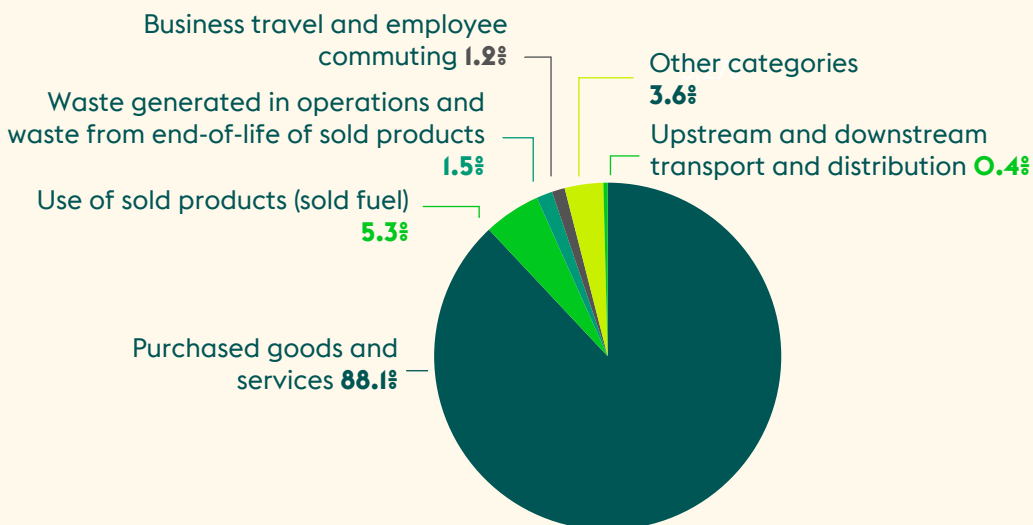
The majority of emissions in our brands' value chains are from the products purchased from suppliers. Ahold Delhaize and its brands have committed to reach net-zero in the value chain by 2050.

- 37% reduction by 2030 compared to our 2020 baseline^I
- net-zero by 2050, which corresponds to an 83% reduction compared to our 2020 baseline and 17% removals^I

Baseline and progress

Below is an overview of our performance on scope 3 emissions from 2020 (our baseline year) to 2021. Due to data availability and resource requirements, we report scope 3 emissions on a one-year delay; the 2022 figures will be available in our 2023 Annual Report. We have expanded the breakdown of categories in this Climate Plan compared to previous years to increase transparency over our GHG inventory. We have grouped categories from the GHG protocol both thematically and based on materiality.

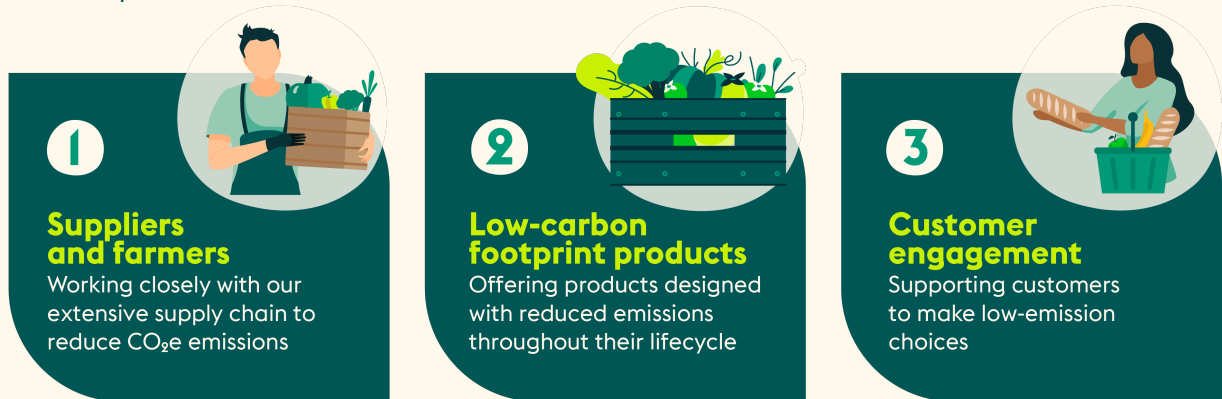
Scope 3 emissions type (with GHG Protocol categories referenced in brackets)	2020 [in million tonnes CO ₂ e]	2021 [in million tonnes CO ₂ e]
Purchased goods and services (category I)	58.0	55.5
Use of sold products (sold fuel) (category II)	3.2	3.3
Waste generated in operations and waste from end-of-life of sold products (categories 5 and I2)	0.9	0.9
Business travel and employee commuting (categories 6 and 7)	0.8	0.8
Other categories (categories 3, I4 and I5)	2.8	2.2
Upstream and downstream transport and distribution (categories 4 and 9)	0.3	0.2
Total scope 3	65.9	63.0



I. Committed to but not yet validated by SBTi, the target is based on a 1.5-degree decarbonization pathway. Target coverage: 100% of calculated emissions from GHG Protocol categories 3, 4, 5, 6, 7, 9, II, I2 and 67% of calculated emissions from category I. Categories I4 and I5 are included in the scope 3 inventory but excluded from the target boundary. These inclusions and exclusions are in line with SBTi guidance and are driven by the level of influence Ahold Delhaize has on reductions in each category.

Action Plan

Our value chain climate plan focuses on our scope 3 emissions from the purchased goods and services category, as emissions from this category account for the largest proportion of total scope 3 emissions. We have identified three key priorities: engaging our suppliers and farmers, providing an assortment with a lower carbon footprint, and encouraging our customers to choose lower emission products.



We have identified seven decarbonization levers that are estimated to have the most significant impact on our value chain emissions.

Suppliers and farmers

1. Livestock farming
2. Processing
3. Food loss and waste
4. Deforestation-free supply chain
5. Agricultural practices

Low-carbon footprint products

6. Assortment of products

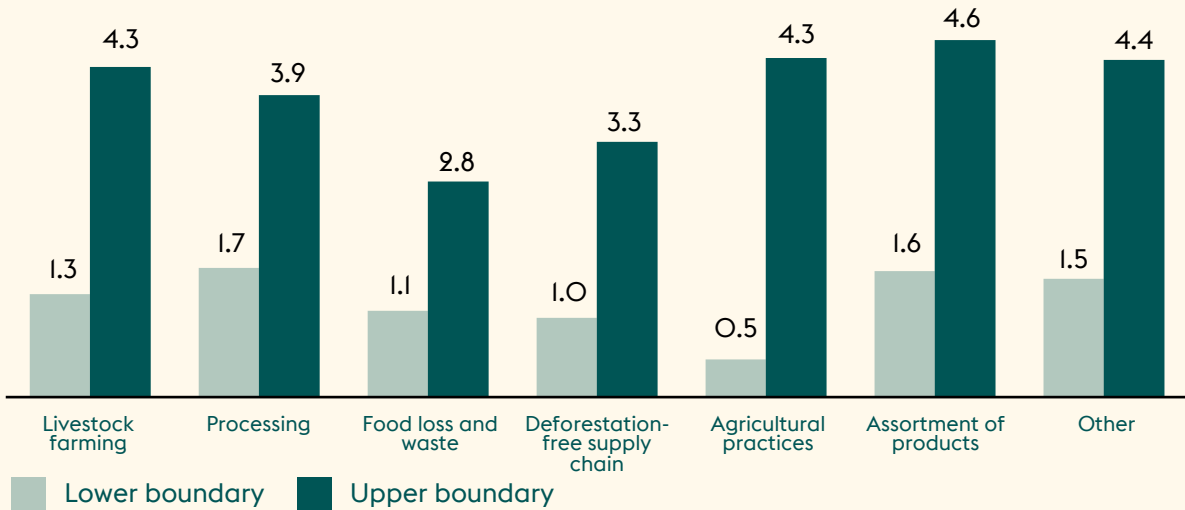
Customer engagement

7. Proactively engaging with customers (unquantified impact)

In this section we set out examples of actions we have taken under some of the levers; however, these are not exhaustive of our activities to reduce scope 3 emissions.

In addition to the reduction levers mentioned above, we are also engaging with our value chain on initiatives in transportation, raw materials, sustainable packaging and carbon removals (these are reflected in the 'Other' category).

Cumulative estimated reduction potential of scope 3 decarbonization levers by 2030 [in MtCO₂e]



For the estimated reduction potential for scope 3 (category I), we identified six levers plus an ‘other’ category to be quantified. Two scenarios were considered in the analysis, the theoretical reduction potential of the levers remained the same across the scenarios; however, in the lower boundary moderate achievability was assumed and in the upper boundary accelerated achievability was assumed. We analyzed these two scenarios to understand what the outcomes may be with limited engagement and what would be possible with accelerated engagement. The lower boundary would not achieve sufficient reductions for us to meet our 2030 scope 3 target. We are engaging our value chain stakeholders to maximize the reduction potential of these levers so we can meet our climate goals.

Engaging suppliers to set science-based targets and implement sustainable practices

We engage our suppliers to set emissions-reduction targets in line with the latest science. These emissions-reduction commitments will accelerate improvements in livestock farming, raw material sourcing, processing, transport, packaging, deforestation and food waste reduction. These actions could address the majority of our scope 3 emissions by 2030. As of November 2022, more than 50 of Ahold Delhaize’s top 100 suppliers have either set science-based targets or are committed to doing so¹.

1. [SBTi Companies Taking Action](#)

1. Livestock farming

GHG emissions from livestock can be reduced by focusing on enteric fermentation and manure management. This involves strategies such as using feed additives (e.g., bovaer and red algae) to reduce methane emissions, harnessing biogas from liquid manure, and adjusting manure pH with sulfuric acid. Implementation of these technologies and practices in our value chain, has a potential to reduce GHG emissions from live livestock by an estimated 1.3 – 4.3 million tCO₂e by 2030.

Cumulative emission reduction potential 2020-2030

1.3 - 4.3
MtCO₂e



Example

Delhaize Serbia, in collaboration with the University of Belgrade, conducted a study to determine the impact of feed additives on GHG emission reduction in the domestic livestock sector in Serbia. The study tested the effect of “Eubiotics” as an additive for pig and chicken feed. It was found that the ability of the animals to digest nutrients improved with the use of these feed additives, and, with it, the overall gut health of the animals. This resulted in lower CO₂e emissions in the digestive process and increased resistance of piglets and chickens to disease.

2. Processing

Encouraging supplier optimization of production processes through energy efficiency, new machines or switching to renewable energy sources has an estimated emissions-reduction potential of between 1.7-3.9 million tCO₂e by 2030.

Cumulative emission reduction potential 2020-2030

1.7 - 3.9
MtCO₂e



Example

Many of our biggest suppliers are in the process of transitioning to renewable energy sources. They are either converting their energy purchases to renewable energy sources or starting their own production – for example, installing PV systems to cover (part of) their electricity consumption through their own renewable energy production.

3. Food loss and waste

We seek to combat food loss and waste throughout the value chain across all product categories. This includes losses in agriculture (e.g., due to machine failure), post-harvest losses (e.g., due to quality defects), losses during processing, and operational waste within our supermarkets. We tackle food waste through various approaches, including maximizing product utilization (e.g., through upcycling), refining product management (e.g., through enhanced demand planning) or enhancing product distribution (e.g., through decreased transit times or optimized routes). Food loss and waste reduction has a potential reduce between 1.1-2.8 million tCO₂e by 2030.

Cumulative emission reduction potential 2020-2030

1.1 - 2.8 MtCO₂e



Example

As a founding member of the IOx2Ox3O Food Loss and Waste Initiative, all our brands are partnering with key suppliers to tackle the challenge of food waste across the supply chain. Ahold Delhaize brands have so far partnered with fourteen major suppliers to root out food loss and waste in the food supply chain. Arla Foods, Barba Stathis, Cargill, Chobani, Delta, General Mills, Hilton Foods Holland, Hoogesteger, La Linea Verde d.o.o., Mars Incorporated, PepsiCo, Vezet and Yuhor have committed to reduce food waste by 50% in their own operations by 2030.

4. Deforestation-free supply chain

Ahold Delhaize and our local brands target zero deforestation for private label critical commodities. To minimize the risk of deforestation in our supply chains we work with globally recognized schemes such as Roundtable on Sustainable Palm Oil (RSPO), Round Table on Responsible Soy (RTRS) or Rainforest Alliance. Moving to a full-store deforestation-free supply chain has a potential to reduce our scope 3 emissions by between 1.0-3.3 million tCO₂e by 2030.

Cumulative emission reduction potential 2020-2030

1.0 - 3.3 MtCO₂e



Example

Albert Heijn's pork and chicken (meat and egg) Better For Nature and Farmers program measures to become fully free of deforestation and land conversion before the end of 2024. Strategies to achieve this include a variation of:

- Replacing soy in feed with other protein sources without risk of deforestation or land conversion, and;
- Sourcing certified soy and/or physically segregated deforestation and land conversion free soy for use in feed.

5. Agricultural practices

Most of our products are agriculture based. Agriculture can have net positive or negative emissions, depending on the underlying practices used. Ahold Delhaize local brands seek to engage with suppliers and farmers to reduce or sequester emissions by incentivizing sustainable change through longer-term contracts with concrete environmental requirements and co investments on farms. Activities under this lever include optimizing the use of fertilizers and pesticides, using regenerative agricultural methods such as no-till farming and cover cropping, and taking measures related to agroforestry, afforestation and reforestation. These agricultural initiatives, has a potential to reduce emissions by 0.5-4.3 million tCO₂e by 2030.

Cumulative emission reduction potential
2020-2030

0.5 - 4.3 MtCO₂e

6. Assortment of products

In collaboration with our suppliers, we seek to reduce the carbon footprint of our local brands' assortments. Our local brands remain committed to empowering customers to make environmentally conscious choices. This strategy varies across our different local brands and can include promoting a health-focused and reduced GHG emissions product lineup, investing in product development, and transitioning from high emission protein sources to lower emission (e.g. moving from red meat to white meat or plant-based alternatives). All our food retail brands in Europe have committed to baseline their current protein ratio (animal versus plant-based) and set protein ratio targets by the end of 2024. For example, Albert Heijn is helping customers transition to a plant-based diet by aiming to have 60% of proteins consumed come from plant-based sources by 2030. These actions have a potential to reduce emissions by 1.6-4.6 million tCO₂e by 2030.

Cumulative emission reduction potential
2020-2030

1.6 - 4.6 MtCO₂e

7. Proactively engaging with customers

Customers are encouraged to shift towards lower emission products. Our local brands continue to help customers understand the impact of their buying decisions and make choices that fit their needs, their tastes and their values. They do this by stimulating and rewarding sustainable choices through loyalty programs and discounts, increasing product transparency through navigation systems and product labelling, improving assortments and products with more vegan and vegetarian choices, and increasing knowledge about a healthy lifestyle by giving access to free dietitians and knowledge platforms. Recognizing the challenges of behavior change, we focus on addressing customer-identified barriers. We aim to facilitate easier, informed choices through accessible information, inspiration, and incentives. Our commitment includes continuous improvement of our product offerings, ensuring that affordable, healthy, and sustainable options remain accessible.



Example

The Albert Heijn Terra range is a clearly defined vegan assortment that has been made accessible through an extensive marketing campaign. Affordability is addressed through a 10% discount on the full range with Albert Heijn premium subscription and 25% of the assortment is part of the price favorites.

Challenges

Collective action is essential to reduce emissions in our value chain; we must work closely with our suppliers and customers to reach our scope 3 targets.

Accuracy of scope 3 data

Obtaining accurate scope 3 data is a challenge across industries. We encourage our suppliers to report their emissions to our local brands through surveys so that we can account for the emissions in our inventory. This reporting process is resource intensive for our suppliers, and the task of validating the data provided also puts a burden on our local brands. Due to the resource requirements of reporting scope 3 data, we are only able to report on scope 3 emissions on a one-year delay. In the absence of verified supplier data we must estimate the emissions in our value chain with standard emission factors. Using standardized factors creates barriers to fully understanding our emissions profile, measuring progress and identifying opportunities for reduction.

Supplier action

Our ability to drive scope 3 emission reduction depends on how well we can collaborate with our suppliers and customers. The size and diversity of our supplier network presents challenges in influencing, scaling and tracking decarbonization practices. In some of our local brands' operating regions, industry bodies are not pursuing climate action until 2030; this inaction will create barriers to value chain decarbonization. Our local brands are encouraging suppliers to set science-based climate targets and engaging with them on specific decarbonization measures, as mentioned in our previous examples.

Customer action

Addressing the behavior action gap is complex to do as it requires a multi layered approach and there are many individual and societal factors at play, many of which are not within our direct circle of influence. Offering lower emission product choices to customers won't be enough without engaging them in the positive climate impact of consuming products with a lower carbon footprint. We will need to close the gap between talk and action; we see consumers wanting to buy, but not actually buying low-carbon products, for example, because of higher prices that reflect decarbonization measures in the supply chain. It is not easy to communicate the intricacies of scope 3 initiatives through on-pack labels. And our commitment to providing healthy and sustainable food at an affordable cost clashes with the current reality of market inflation, requiring a nuanced approach to strike a balance between economic constraints and environmental goals.

Carbon removals/neutralization of remaining emissions

Ahold Delhaize is committed to decarbonizing its operations and value chain and has set reduction targets in line with the SBTi. Nevertheless, a certain amount of GHG emissions in the food sector will be difficult to abate. Even though we see technologies and business cases evolving in the industry to further reduce emissions, we must also plan carbon removal strategies for residual emissions. This is applicable for the following areas:

Scope 1 emissions from refrigerant leakages, heating and transportation

- Representing approximately 10% of our 2018 scope 1 and 2 baseline

Scope 3 emissions coming from products and services

- Representing approximately 17% of our 2020 scope 3 baseline

While there are some levers available today to reduce emissions in the agriculture sector, complete elimination of these emissions remains a challenge. Carbon-removal strategies, including regenerative agriculture practices, hold promise, but their efficacy depends on the health and quality of the soil, making them context-specific solutions. As a result, beyond working to reduce our agricultural emissions as much as possible, we are also exploring further carbon-removal strategies, which also fall under the neutralization of hard-to-abate emissions category, according to SBTi.

Nature-based solutions

As part of our comprehensive climate action plan, we are investigating nature-based solutions within and outside of our operational value chain. This approach includes afforestation and reforestation projects, the use of bioenergy, the preservation of natural carbon sinks and the restoration of ecosystems. While these strategies are valuable, they offer relatively short-lived carbon storage solutions.

Technological solutions for long-lived storage

Complementing our natural and nature-based efforts, we are evaluating engineered solutions for long-term carbon storage. These methods aim to capture GHG emissions and store them safely over an extended period of time.

When looking for effective carbon-capture solutions, we take several key considerations into account. These guiding principles influence our decision-making process and shape our approach to carbon capture technologies. These considerations include:

Permanence and long-term effectiveness

- We are looking for carbon-capture solutions that not only capture emissions, but also ensure the sustainable removal of carbon over longer periods of time.

Potential scalability

- Our focus is on strategies that can be expanded and adapted to address a broader range of emissions, maximizing their impact and reach.

Environmental impact

- We assess the environmental impact and strive to minimize any negative impact of implementing carbon-capture solutions.

Displacement of emissions

- We remain aware of the risk of emissions displacement, where emissions are simply shifted from one area or sector to another. Our strategy involves a thorough examination to ensure that our efforts do not result in emissions displacement that undermines our carbon-reduction objectives.

Mitigation hierarchy

- We set priorities based on their effectiveness and sustainability. We explore all feasible means of reducing emissions and reserve carbon-capture solutions as a last resort when better options have been exhausted.

In 2024, we will continue to develop our long-term plan for carbon removals to address hard-to-abate emissions. However, our focus now remains on investing in decarbonization opportunities across our local brands' operations and value chains.

The impact of climate on us

As food retailers, we are aware of the profound impact of climate change on our businesses and the environment. In 2020, we conducted a climate risk and opportunity assessment using two climate scenarios aligned to 2-degrees Celsius and 4-degrees Celsius trajectories which identified 17 climate-related vulnerabilities. We expanded this analysis in 2021, with a focus on selected material risks (e.g. impact of agricultural yield on revenue and gross margin; increasing energy costs; changing customer diets). In 2023, increased awareness and training on climate-related risk management was provided to Brand Management Teams and all other associates at Vice President level and above for our entire organization, in combination with the Cambridge Institute for Sustainability Leadership (CISL).

See our 2023 [CDP response](#) for further detail how we are responding to climate impacts.

Collaboration

We engage with our broader network, including non-governmental organizations (NGOs), industry associations and governments, to further advance sustainable development and accelerate the policy framework in line with our strategy. We are open to collaboration with a broad range of stakeholders and we want to keep the conversation open to learn, grow and adapt as we continue on our decarbonization journey.

NGOs

We collaborate with NGOs and are a founding partner and member of various ESG-related networks and institutions, including:

- Founding partner of the World Resources Institute's (WRI's) IOX2OX3O initiative.
- Member of the Ellen MacArthur Foundation to mitigate the impact of plastics.
- Signatory of the UN Global Compact

Industry associations

Ahold Delhaize and its brands are members of various local, national, regional and global industry associations, such as:

- Consumer Goods Forum (Global)
- FMI: The Food Industry Association (U.S.)
- National Retail Federation (U.S.)
- EuroCommerce (European Union)

Governments

We (are invited to) engage with public policy makers to share views in order to create a favorable policy and regulatory framework for both Ahold Delhaize and society, its brands, and for our sector in the long term. Central to our efforts in engaging with public policy makers is our Ahold Delhaize Leading Together Strategy and our four long-term growth drivers, including elevating healthy and sustainable and the associated climate commitments, that help us to prepare our brands and businesses for tomorrow.

- Ahold Delhaize co-signed an open letter from business to European Union (EU) policy makers to uphold, strengthen and enforce the proposed EU Nature Restoration Regulation.
- Ahold Delhaize engaged in conversations with the European Commission officials in Directorate-General Agriculture and Rural Development (DG AGRI) on the EU Farm to Fork strategy and our efforts in making the agricultural supply chain more sustainable from farm to fork.

Governance and disclosure

The Management Board and Executive Committee collaborate to support our business objectives, take into account stakeholder needs and ensure strict adherence to applicable rules and regulations. Their combined efforts steer the company toward sustainable growth and responsible business practices.

In our commitment to transparency and responsible business conduct, we adopted the recommendations of the TCFD. By aligning our reporting practices with these recommendations, we provide relevant information regarding our climate-related financial impacts and strategies. Additionally, our active participation in the annual CDP disclosure process underscores our dedication to transparently communicating our environmental performance and progress.

We have strengthened the connection between executive compensation and sustainability by elevating our emphasis on ESG factors. We increased the weight of these factors in our short- and long-term incentive programs from 20% in 2021 to 25% in 2022. In tandem, our Global Reward Opportunity (GRO) long-term share-based incentive plan ties performance shares to the company's overall performance over a three-year vesting period. Notably, we raised the weighting of ESG factors, particularly healthy and sustainable practices, from 15% to 25%, while decreasing the emphasis on Earnings Per Share (EPS) from 35% to 25%, effective from 2022. This adjustment reflects Ahold Delhaize's commitment to aligning executive compensation with sustainability objectives, integrating climate-linked metrics into compensation structures.

Embedding decarbonization investment requirements

We have quantified decarbonization CAPEX and OPEX requirements for scope 1 and 2 emission reductions and included the costs in our budgets for the near term (up to 2026). These estimates are still volatile and subject to change. We plan to further refine these estimations as we continue to build out our decarbonization roadmap in the context of routine business planning and performance tracking. In the coming year, our local brands will continue to refine costed plans towards 2030 to meet decarbonization interim targets on a local level. We will disclose scope level costs in our 2024 Annual Report.

Appendix Methodology

Scope 1 and 2

Boundary Conditions

Ahold Delhaize has defined its organizational boundaries by applying the financial control approach.

Methodology

We report our scope 1 and 2 GHG emissions data according to the GHG Protocol Corporate Standard. GHG emissions data consists of a calculated CO₂ equivalent (CO₂e), defined as actual CO₂ emitted plus equivalent emission from other GHGs such as methane (CH₄), nitrous oxide (N₂O) and various refrigeration blends, including HFCs.

The GHG emissions calculation methodology follows the guidelines of the World Business Council for Sustainable Development (WBCSD)/World Resources Institute (WRI) GHG Protocol regarding corporate greenhouse gas accounting and reporting.

We use the latest available emission factors in our reporting. We source location-based electricity emission factors from the International Energy Agency (IEA, 2022 edition; 2020 data) for European countries and from the Environmental Protection Agency (EPA) (based on eGrid 2020 values, issued in March 2022) for the United States. The source we use for the market-based (residual mix) emission factors for our U.S. brands is Green-e edition 2022, 2020 data, and for our European brands is the European residual mix, edition 2022, 2020 data. We source fuel emission factors from GHG Protocol 2014 wherever available, and otherwise from other appropriate sources. For refrigerant leakages, GWP values of all refrigerant blends used in Ahold Delhaize facilities were calculated based on GWP values of refrigerants from the Intergovernmental Panel for Climate Change Assessment Report 6, AR6 Chapter 7 (2021).

Data collection and considerations

Data on energy consumption, leakage of refrigerant substances and liters of diesel used for owned transport is collected on a quarterly basis on site level at each local brand.

The sources of this data include invoices, remote meter records, third-party service provider reports and internal reports. Source data is reviewed internally and reported to the group through an internal reporting tool that stores the conversion factors to calculate the GHG emissions. Absolute GHG emissions are calculated by multiplying the source data with the relevant conversion factors.

Data is not always available in real time or immediately after quarter close. In these cases, we use data extrapolated from previously known consumption.

If data is not available at all, e.g., for a portion of stores, we use estimates calculated using locations that are comparable in size and format.

Scope 3

Methodology

Our GHG emission calculation methodology follows the guidelines of the World Business Council for Sustainable Development (WBCSD)/WRI and GHG Protocol regarding corporate greenhouse gas accounting and reporting.

To calculate carbon emission equivalents, we use emissions factors. GHG emissions data consists of a calculated CO₂ equivalent, defined as actual CO₂ emitted plus equivalent emission from other GHGs such as methane (CH₄), nitrous oxide (N₂O) and various refrigeration blends, including HFCs.

Calculating scope 3 emissions is complex. Our grocery retail brands have hundreds of thousands of products on their shelves supplied by more than 10,000 direct suppliers. All of these direct suppliers source materials and ingredients from their own suppliers, resulting in complex supply chains covering all geographies of the world.

As a result of this complexity, actual data on our scope 3 GHG emissions is currently not consistently available, and we continue to work to improve this. As our local brands continue to reach out to their suppliers, we expect increasing access to actual data, which will make our numbers more accurate.

At the moment, we fully rely on assumptions and estimations when calculating our scope 3 GHG emissions. We use two main calculation methods defined by the GHG Protocol: the average data and spend-based methods. We apply the method that is most suitable, based on the category.

Data collection and considerations

Scope 3 GHG emissions data is collected on an annual basis. We report on scope 3 emissions with a one-year delay, as information to calculate the data is, in some cases, received from third parties and, therefore, not yet available at year end.

Calculating category 1: purchased goods and services

Purchased goods and services, the most material category, accounts for 88% of our total scope 3 footprint. Several assumptions and estimates are used in our calculation of the category. We use different input data sets to calculate the emissions from products and services, depending on the information available in our brands' data systems. The following information sources were used:

- Weight of products purchased (5.8%) (2021: 6%)
- Value of products purchased (60.8%) (2021: 2%)
- Weight from products sold corrected for waste (21.3%) (2021: 26%)
- Value from products sold is corrected for margin and waste to come to the value of products purchased (12.1%) (2021: 66%). The correction for margin and waste is done at brand level but assumed to be the same for all product categories, not diversified to product category.

These average-data method calculations are based on the publicly available emission intensity of different foods.

For products with weight (27.1%), we mainly used the Big Climate Database (for all local brands except for Delhaize Belgium) and Agribalyse (solely for Delhaize Belgium). With these databases, all retail specific product categories were assigned special emission factors that enabled us to apply corresponding emission intensities for each category.

For the spend-based method (72.9%), we used the emission intensities of different food and non-food industries (source: UK Department for Environment, Food and Rural Affairs (DEFRA) for food (emission factor corrected for inflation) and Base Carbone for different non-food categories) and multiplied this by products sold (corrected for margin and waste if needed).

As a consequence, due to our ongoing efforts to implement further due diligence procedures in connection with scope 3 GHG emissions, reducing the use of assumptions and estimates, our numbers may materially change over time.

For services, the footprint is calculated using the spend-based method. Activity data is the annual brand-level purchased value of products and services multiplied by the emission intensity for relevant services.

Calculating category II: use of sold products

This category is impacted by the gasoline stations some of our local brands operate. Emissions are calculated using an average-data method, by multiplying the total volume of petrol sold to customers by the relevant emission factor from EPA.

Calculating waste related categories

Categories 5 and 12 are calculated using an average-data method. Emission factors from Ecoinvent are applied per waste processing method. For waste from operations the waste volumes per processing method are reported by the operations. For end-of-life waste from sold product the waste volumes are derived from the sold product volumes.

Calculating transportation and distribution related categories

Categories 4 and 9 are calculated using the fuel-average data method. The volumes of fuel used in vehicles outside the financial control boundary are multiplied by a Well-to-Wheel emission factor, which is sourced from DEFRA.

Calculating business travel and commuting related categories

Categories 6 and 7 are calculated using the distance-based method. Distances travelled per modality are either provided by travel booking partners or estimated based on headcount. Distance-based emission factors are sourced from DEFRA, EPA and CO₂emissiefactoren.nl.

Calculating other scope 3

This group includes fuel- and energy-related activities, franchises, investments and not-for-resale purchased goods and services. Fuel- and energy-related activities are calculated using scope 1 and 2 related activity data and emission factors from DEFRA.

Emissions from franchises are calculated by extrapolating scope 1 and 2 emissions on a store-area basis.

Emissions from investments are calculated using data reported by the investment entities.

Emissions from not-for-resale purchased goods and service are calculated using the spend-based method and emission factor from RIVM.

Cautionary notice

This communication includes forward-looking statements. All statements other than statements of historical facts may be forward-looking statements. Words and expressions such as plan(s), target(s), reduc(e)/(tions), remain, focus(ed)/(ing)/(es), will, commit(ted)/(ting)/(ment), continu(e)/(ing), challenge(s), may, future, help(ing), wants, aim(ing), vision, goal(s), belief, strateg(y)/(ies)/(ic), further, sharpened, better, initiative(s), ensure, advancing, removals, estimat(e)/(es)/(ed)/(ions), transition, opportunity(y)/(ies), ambitious, ambition, strive, long-term, roadmap, mission, milestone, forecast, future, uncertainty, hope, journey, accelerate, empower(ing), potential(s), could, seek, become, expect, guiding, growth, strengthen or other similar words or expressions are typically used to identify forward-looking statements.

Forward-looking statements are subject to risks, uncertainties and other factors that are difficult to predict and that may cause the actual results of Koninklijke Ahold Delhaize N.V. (the “Company”) to differ materially from future results expressed or implied by such forward-looking statements. Such factors include, but are not limited to, risks relating to the Company’s inability to successfully implement its strategy, manage the growth of its business or realize the anticipated benefits of acquisitions; risks relating to competition and pressure on profit margins in the food retail industry; the impact of economic conditions, including high levels of inflation, on consumer spending; changes in consumer expectations and preferences; turbulence in the global capital markets; political developments, natural disasters and pandemics; wars and geopolitical conflicts; climate change; energy supply issues; raw material scarcity and human rights developments in the supply chain; disruption of operations and other factors negatively affecting the Company’s suppliers; the unsuccessful operation of the Company’s franchised and affiliated stores; changes in supplier terms and the inability to pass on cost increases to prices; risks related to environmental, social and governance matters (including performance) and sustainable retailing; food safety issues resulting in product liability claims and adverse publicity; environmental liabilities associated with the properties that the Company owns or leases; competitive labor markets, changes in labor conditions and labor disruptions; increases in costs associated with the Company’s defined benefit pension plans; ransomware and other cybersecurity issues relating to the failure or breach of security of IT systems; the Company’s inability to successfully complete divestitures and the effect of contingent liabilities arising from completed divestitures; antitrust and similar legislation; unexpected outcomes in the Company’s legal proceedings; additional expenses or capital expenditures associated with compliance with federal, regional, state and local laws and regulations; unexpected outcomes with respect to tax audits; the impact of the Company’s outstanding financial debt; the Company’s ability to generate positive cash flows; fluctuation in interest rates; the change in reference interest rate; the impact of downgrades of the Company’s credit ratings and the associated increase in the Company’s cost of borrowing; exchange rate fluctuations; inherent limitations in the Company’s control systems; changes in accounting standards; inability to obtain effective levels of insurance coverage; adverse results arising from the Company’s claims against its self-insurance program; the Company’s inability to locate appropriate real estate or enter into real estate leases on commercially acceptable terms; and other factors discussed in the Company’s public filings and other disclosures.

Forward-looking statements reflect the current views of the Company’s management and assumptions based on information currently available to the Company’s management. Forward-looking statements speak only as of the date they are made, and the Company does not assume any obligation to update such statements, except as required by law.