climate decode

Market Insights · Food, beverage and agriculture · November 2026

From Reduction to Residual

An end-to-end climate programme for food, beverage and agriculture: the 2026 policy, the challenges of decarbonisation, insetting and offsetting, and what 295 companies and their peers are doing

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Executive summary: Key findings

Food, beverage and agriculture companies are now expected to reduce emissions in their own supply chains and to treat purchased credits as a separate programme for what remains. The eight findings below follow the report from policy, through the challenges of decarbonisation, insetting and offsetting, to an end-to-end solution.

Policy

Four instruments adopted in 2026 keep purchased credits outside the targets.

The FLAG Guidance v1.2, the GHG Protocol land sector standard, the SBTi Net-Zero Standard V2 and the EU ban on offset-based product claims draw the same line around the value chain.

View finding

Challenges · decarbonisation

FLAG and Scope 3 emissions arise on farms the company does not own.

Only 7% of companies engage suppliers on carbon according to EcoVadis and Kearney, and reduction plans rarely connect the plant, the supplier and the group.

View finding

Challenges · insetting

Insetting counts only where it is traced, monitored and claimed once.

Projects need funding and supplier agreement, removals must be mapped to the sourcing region, and the same tonne must not be claimed by farmer, processor, brand and customer.

View finding

Challenges · insetting

Leading peers are already investing in their own supply chains.

PepsiCo reports 4.7 million acres of regenerative agriculture, FrieslandCampina paid member farmers €228 million in 2025 and Mars deducted 42,000 tonnes of supply-chain removals.

View finding

Challenges · offsetting

72.7% of own-name retirements were renewables, industrial gases and REDD+.

Of 9.2 million credits retired in food companies' own names since 2022, removal types were 7.4%, and none of the volume counts towards a FLAG target.

View finding

Challenges · offsetting

Carbon neutral claims are being withdrawn.

Nestlé stepped back from offsetting in 2023, Mars dropped claims on Mars bars and Royal Canin, Arla may no longer use a net zero claim in Sweden, and the EU ban now applies.

View finding

Solutions · TerraNova

One platform for Scope 1, 2 and 3 reductions, supply-chain risk and insetting.

TerraNova reports emissions from the company's own data, maps suppliers and sourcing regions with their climate risk, and supports developing or joining insetting programmes.

View finding

Solutions · Canopy

Residual emissions handled with credits that stand up.

Canopy sizes the residual volume, screens every project through an eight-question due-diligence engine with scientist sign-off, and procures through the company's own system.

View finding

Summary

A large part of the emissions of food, beverage and agriculture companies arises on the farms and in the forests from which their raw materials are sourced, and since 2022 the Science Based Targets initiative (SBTi) has asked companies in food production, processing and retail to set a separate target for these forest, land and agriculture (FLAG) emissions.[1] Four instruments adopted or revised in 2026 now count reductions and removals only within the company's own value chain, admit supply-chain removals to the inventory only where they are traced and monitored, keep purchased credits outside targets and prohibit product claims in the EU that rest on offsetting.[1–4]

The registries tracked by Climate Decode Market Watch attribute 32.0 million credits to the 295 companies in the sector with the largest credit use from January 2021 to June 2026, and 73% of the 9.2 million retired in companies' own names came from renewables, industrial gases and REDD+, so that most of what the sector has bought sits outside the supply chains in which its targets will now be met.

The report proceeds in three sections and an appendix. Section 01 sets out the policy, being the four instruments, what each counts, the further pressure from consumer law and supply-chain requirements, and the clean fuel markets of North America and the EU that reward fuels made from the sector's residues and manure. Section 02 sets out the challenges, first of decarbonising Scopes 1, 2 and 3, then of insetting, through projects, mapping and recording, with the programmes twelve peers report, and then of offsetting, through quality, reputation and communication, with the registry record of the sector. Section 03 sets out an end-to-end solution, in which TerraNova carries reductions, supply-chain and risk mapping and insetting, and Canopy carries the residual programme, with clean fuels as a lever that earns a compliance value as it reduces emissions, followed by a free peer benchmark.

The analysis rests on retirements recorded on public registries and on companies' own published reporting, so that supply-chain programmes which do not issue credits are described from company disclosures and contracted volumes not yet retired fall outside its scope.

32.0 Mt

credits used by 295 companies, January 2021 to June 2026

73%

of own-name retirements from renewables, industrial gases and REDD+

7%

of companies engage suppliers on carbon (EcoVadis and Kearney)[5]

How the report runs

The report follows one line of argument across three sections, in which the rules adopted in 2026 move a food company's targets into its own supply chain, the work of reducing, insetting and offsetting under those rules meets three sets of challenges, and an end-to-end programme answers each of them, so that each section sets up the question the next one answers.

01
Policy
WHAT CHANGED?

Four instruments count only reductions and removals within the company's own value chain and keep purchased credits outside targets and EU product claims, while clean fuel markets in North America and the EU put a compliance value on low-carbon fuels made from the sector's residues and manure.

Four instruments	07
What counts where	08
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→

02
Challenges
WHY IS IT HARD?

FLAG and Scope 3 emissions arise on farms the company does not own, insetting counts only where it is traced, monitored and claimed once, and most of the 32.0 million credits the sector has used since 2021 were avoidance credits that now sit outside its targets.

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03
Solutions
WHAT DOES A COMPANY DO?

TerraNova reduces emissions across Scopes 1, 2 and 3, maps supply and risk, supports insetting and values clean fuel routes, and Canopy sizes, screens and procures what remains, in a five-step playbook that a company can begin with a free peer benchmark.

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THE THREAD The rules move the target into the supply chain → the supply chain is hard to measure, inset and record, and past credits sit outside it → reduce and inset first, earn from clean fuels where the activity allows, and manage the residual with credits that stand up.

01

Policy

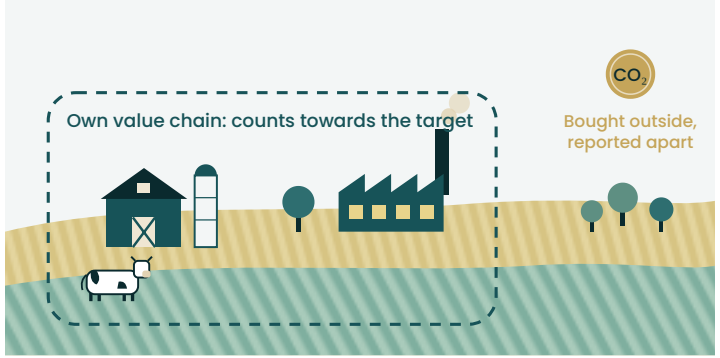
Four instruments adopted or revised in 2026 govern how a food company may count reductions, removals and purchased credits against its targets, in its inventory and in its product claims.

WHAT CHANGED? · IN THIS SECTION

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4

instruments, from the SBTi, the GHG Protocol and the European Union, each keeping purchased credits outside the targets



Four instruments

The SBTi, the GHG Protocol and the European Union each adopted or revised an instrument in 2026 that governs how a food company may count reductions, removals and purchased credits, and the four together draw the same line between the company's own value chain and everything bought outside it.

SBTi FLAG Guidance v1.2[1]

Removals within the company's own value chain count towards the FLAG target where traceable, and credits bought outside it do not. A no-deforestation commitment with a 2020 cut-off is required, and FLAG targets apply to food production, processing and retail.

19 Mar 2026
revised

GHG Protocol Land Sector and Removals Standard[2]

Removals enter the inventory only with physical traceability to the sourcing region and monitoring of storage for as long as they are claimed, and purchased credits are reported separately from the inventory.

1 Jan 2027
effective

SBTi Corporate Net-Zero Standard V2.0[3]

Credits do not count towards near-term or long-term targets, and purchases beyond the value chain are recognised through an ongoing emissions responsibility, voluntary at first and intended to become mandatory from 2035.

1 Feb 2027
effective

EU Directive 2024/825, empowering consumers[4]

Claims that a product has a neutral, reduced or positive environmental impact are prohibited where the claim rests on offsetting, so that carbon neutral labels in the EU can no longer rest on credit purchases.

27 Sep 2026
applies

Next · What counts where →

01 Policy

What counts where

A removal on a supplying farm counts towards a FLAG target only where the company can show that the farm sits in its supply chain, that the carbon is stored and monitored, and that no other party claims the same tonne, so that insetting carries an evidential burden which offsetting does not, while offsetting no longer counts towards the target at all.

Activity	FLAG target (FLAG Guidance v1.2)	Inventory (land sector standard, from Jan 2027)	EU consumer claims (from 27 Sep 2026)
Reductions in operations and supply chain Fertiliser management, feed additives, deforestation-free sourcing	Count towards the target	Reported as lower emissions	May be communicated where substantiated
Removals in the supply chain (insetting) Agroforestry and soil carbon on supplying farms	Count where within the value chain and traceable	Count where traceable to the sourcing region and monitored	Outside the offsetting prohibition, subject to substantiation
Credits from projects in own sourcing regions Credits issued by projects on supplying land	Count only as the underlying value-chain removal, claimed once	As for supply-chain removals, accounted once	A claim resting on the credit is treated as offsetting
Credits bought outside the value chain (offsetting) REDD+, renewables, industrial gases, cookstoves, distant afforestation	Do not count	Reported separately, outside the inventory	Prohibited as the basis of a neutral or reduced impact claim

Under the Corporate Net-Zero Standard V2, purchased credits in the last two rows are recognised through the ongoing emissions responsibility rather than towards targets. Source: the instruments in notes 1 to 4.

01 Policy

Further pressure

The four instruments are reinforced by consumer and competition law, by the data that customers now request from their suppliers and by the tightening of the quality rules applied to credits, each of which raises the evidence a food company needs for its reductions, removals and claims.

Consumer and competition law

Canada amended its Competition Act in 2024 so that environmental claims about a business must be substantiated in accordance with internationally recognised methodology, alongside the EU directive on product claims.

2024
Competition Act, Canada

Customer and supplier requests

Buyers with their own Scope 3 and FLAG targets now ask suppliers for primary emission data and reduction plans, and the CBAM adds product-level reporting for exporters to the EU in covered sectors.

Scope 3
data requests cascade

Credit quality rules

Programmes that recognise credits, such as airport accreditation and CORSIA, now accept only removals or approved methodologies, and the ICVCM has not approved grid-connected renewable energy methodologies.

CCP
quality labels tighten

01 Policy

Clean fuel markets

Alongside the instruments that govern targets and claims, compliance fuel standards in North America and the European Union require fuel suppliers to lower the carbon intensity of transport fuel or to raise its renewable share, and they reward fuels made from the oils, fats, sugars, residues and manure of food and agriculture supply chains, so that part of the sector's feedstock and waste carries a compliance value beyond its commodity price.

Programme	Requirement	Development in 2025 and 2026	Food and agriculture inputs
Canada, Clean Fuel Regulations[18]	Required reduction in the carbon intensity of gasoline and diesel rising by 1.5 gCO_2e/MJ a year to 14 gCO_2e/MJ in 2030	Amendments proposed on 31 October 2026 give credit multipliers of 1.3 to 1.8 to fuel produced in Canada from 1 January 2026, for liquid fuels only on North American feedstock, and reserve half of the gaseous credit limit for Canadian biogas, renewable natural gas, propane and hydrogen	Canola, corn and other North American crops, and biogas from manure and food waste
California, Low Carbon Fuel Standard[19]	Carbon intensity of the transport fuel pool reduced by 30% by 2030 and 90% by 2045	Amendments in effect from 1 July 2025 require crop and forestry feedstocks to be tracked to their point of origin and independent certification for biomass-based diesel and SAF, and phase out avoided methane crediting for biomethane used as a combustion fuel	Dairy and swine manure biomethane, tallow, used cooking oil and corn oil
United States, Section 45Z credit[20]	Clean fuel production credit for transport fuel sold to 31 December 2029	From 2026 the fuel must derive exclusively from feedstock produced or grown in the United States, Mexico or Canada, indirect land use change is excluded from the emissions rate, and fuel from manure may receive a rate below zero	North American crops, residues and manure
European Union, Renewable Energy Directive III[21]	29% renewable energy in transport or a 14.5% reduction in greenhouse gas intensity by 2030	A combined 5.5% sub-target for advanced biofuels and renewable fuels of non-biological origin, a 1.7% cap on used cooking oil and animal fats, and national quotas such as Germany's 26.5% reduction in 2030	Manure, biowaste and other advanced feedstocks, with capped use of oils and fats

Oregon, Washington and British Columbia run comparable carbon intensity standards, and the US Renewable Fuel Standard sets volume obligations alongside them. Climate Decode Market Watch tracks the North American programmes as one competing fuel pool. Sources: notes 18 to 21.

02

Challenges

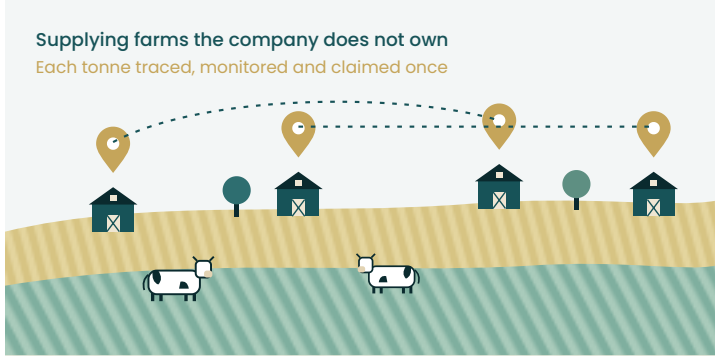
The challenges of decarbonising Scopes 1, 2 and 3, of insetting through projects, mapping and recording, and of offsetting through quality, reputation and communication.

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3

challenges, set out with the programmes peers report and the registry record of the sector



Decarbonising Scopes 1, 2 and 3

A food company's FLAG target is met on farms it does not own and its energy and industry target in plants it does, so that the data, the supplier relationship and the plan for each have to be built together if the group target is to be met.

Scope 3 and FLAG data

Most emissions arise on farms and in supplier plants the company does not own, and are estimated from spend or averages rather than measured, so that reductions on the farm do not show in the inventory.

70 to 90%

typical Scope 3 share of emissions[5]

Supplier engagement

Few companies work with suppliers on carbon, while the largest emitters among suppliers are connected to many buyers, so that one supplier programme can serve several customers at once.

7%

of companies engage suppliers on carbon[5]

Plant-level plans

Processing plants face carbon prices, energy costs and physical climate risk, and reduction plans rarely connect each plant's levers, costs and incentives with the supplier programme and the group target.

Plant

to group, rarely connected

Climate and transition risk

Sourcing regions face drought, heat and flooding, and plants face carbon pricing and policy change, so that the reduction plan and the sourcing strategy need the same risk view.

Risk

by site and sourcing region

Insetting: projects, mapping and recording

Fonterra's farm incentives are co-funded by Mars and Nestlé and pay 10 to 25 cents per kilogram of milk solids for measured reductions, which shows how a single on-farm tonne can sit in the inventories of a cooperative and two of its customers at once, so that the recording rules matter as much as the projects themselves.[11]

Projects

Finding farm interventions that work in each sourcing region, funding them, agreeing with suppliers who pays and who benefits, and deciding whether to develop a programme or join one that a supplier, cooperative or trader already runs.

Develop

or participate

Mapping

Tracing each reduction and removal to the sourcing region and to the specific suppliers and farms, which the land sector standard requires from January 2027 before a removal can enter the inventory.

Trace

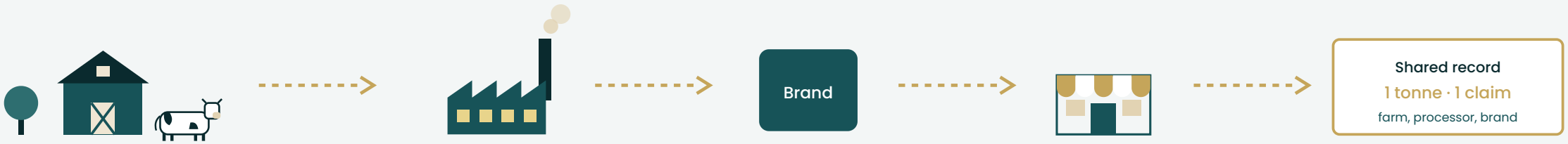
to the sourcing region

Recording

Monitoring stored carbon for as long as it is claimed, reporting reversals, and keeping one record so that the farmer, the processor, the brand, its customers and any credit buyer do not each claim the same tonne.

Once

one tonne, one claim



Next · What peers report in their supply chains →

What peers report in their supply chains

Each card sets out what the company reports about its own supply chain, with its credit record from Climate Decode Market Watch and the Verra registry in the band beneath.

Nestlé

Switzerland

27.6% of key ingredients sourced from farmers adopting regenerative agriculture in 2025, and Scope 3 FLAG emissions 32.4% below the baseline. Stepped back from offsetting in 2023.[6]

3.8 Mt

credits used 2021 to H1 2026

Danone

France

Fresh-milk methane 29.8% below 2020 at the end of 2025, and about 42% of key ingredients from farms transitioning to regenerative agriculture.[7]

1.3 Mt

credits used, mostly renewables and IFM

Mars

United States

About 42,000 tonnes of land-based removals on suppliers' farms deducted from Scope 3 in 2024, with half held in a buffer. Dropped carbon neutral claims on Mars bars and Royal Canin.[8]

0.9 Mt

afforestation credits used in 2023 and 2024

FrieslandCampina

Netherlands

Foqus planet pays member farmers up to €1.50 per 100 kg of milk, €228 million in 2025, and member-farm emissions are 22% lower per kilogram since it began.[9]

0.6 Mt

credits used, almost all in 2023 and 2024

Arla Foods

Denmark

FLAG target of a 30.3% cut in raw milk and whey emissions by 2030, delivered through the FarmAhead incentive model. A net zero claim was ruled out in Sweden in 2023.[10]

60,000

coal mine methane credits retired on Verra in Feb 2026

Fonterra

New Zealand

Farm incentives of 10 to 25 cents per kilogram of milk solids for measured reductions, co-funded by Mars and Nestlé, behind a FLAG target of a 30% cut per tonne of milk by FY2030.[11]

26,000

credits retired in its own name since 2022

What peers report, continued

PepsiCo

United States

Regenerative agriculture on 4.7 million acres at the end of 2025 against a goal of 10 million by 2030, with programmes such as Soil Capital on 35,000 acres in Europe.[12]

10,000
credits retired in its own name since 2022

Kellanova

United States

Five-year insetting programme with Varaha for 5,000 smallholder maize farmers on 12,500 acres in Maharashtra, with about 100,000 tonnes expected under digital monitoring.[13]

0.1 Mt
renewable energy credits used in 2023 and 2024

Cargill

United States

RegenConnect passed one million enrolled acres for the 2025 US season, paying about 1,500 farmers for carbon sequestered.[14]

8,400
REDD+ credits retired on Verra, mostly before 2022

Mondelēz

United States

Harmony wheat covers about 98% of European biscuit wheat, and Cocoa Life works with more than 257,000 farmers.[15]

6,600
credits retired in its own name since 2022

Heineken

Netherlands

UK regenerative malting barley programme paying farmers a premium, with Muntons, Boortmalt, Cefetra and Soil Capital, aiming at almost half of UK malted barley in 2027.[16]

130
credits retired on Verra by operating companies

McCain Foods

Canada

69% of global potato acreage onboarded to its regenerative agriculture framework, with all acreage targeted by 2030.[17]

5,900
biomass credits retired on Verra, 2025 to 2026

Offsetting: quality, reputation and communication

Purchased credits no longer count towards targets but remain the means by which a company takes responsibility for emissions it has not yet reduced, so that the challenge shifts from volume to the quality of each project, its effect on reputation and what may be said about it.

Quality

Renewables, industrial gases and REDD+ made up 72.7% of own-name retirements and removal types 7.4%, while the ICVCM has not approved grid-connected renewable methodologies and Verra has replaced its older REDD+ methodologies.

Reputation

Every retirement on a public registry names the buyer and the project, so that a REDD+ portfolio questioned for over-crediting, or coal mine methane credits bought by a dairy, becomes part of the company's public record.

Communication

Nestlé stepped back from offsetting in 2023, Mars dropped carbon neutral claims on Mars bars and Royal Canin, Arla may no longer use a net zero claim in Sweden, and the EU prohibition on offset-based product claims has applied since 27 September 2026.

73%
of own-name retirements

Public
every retirement named

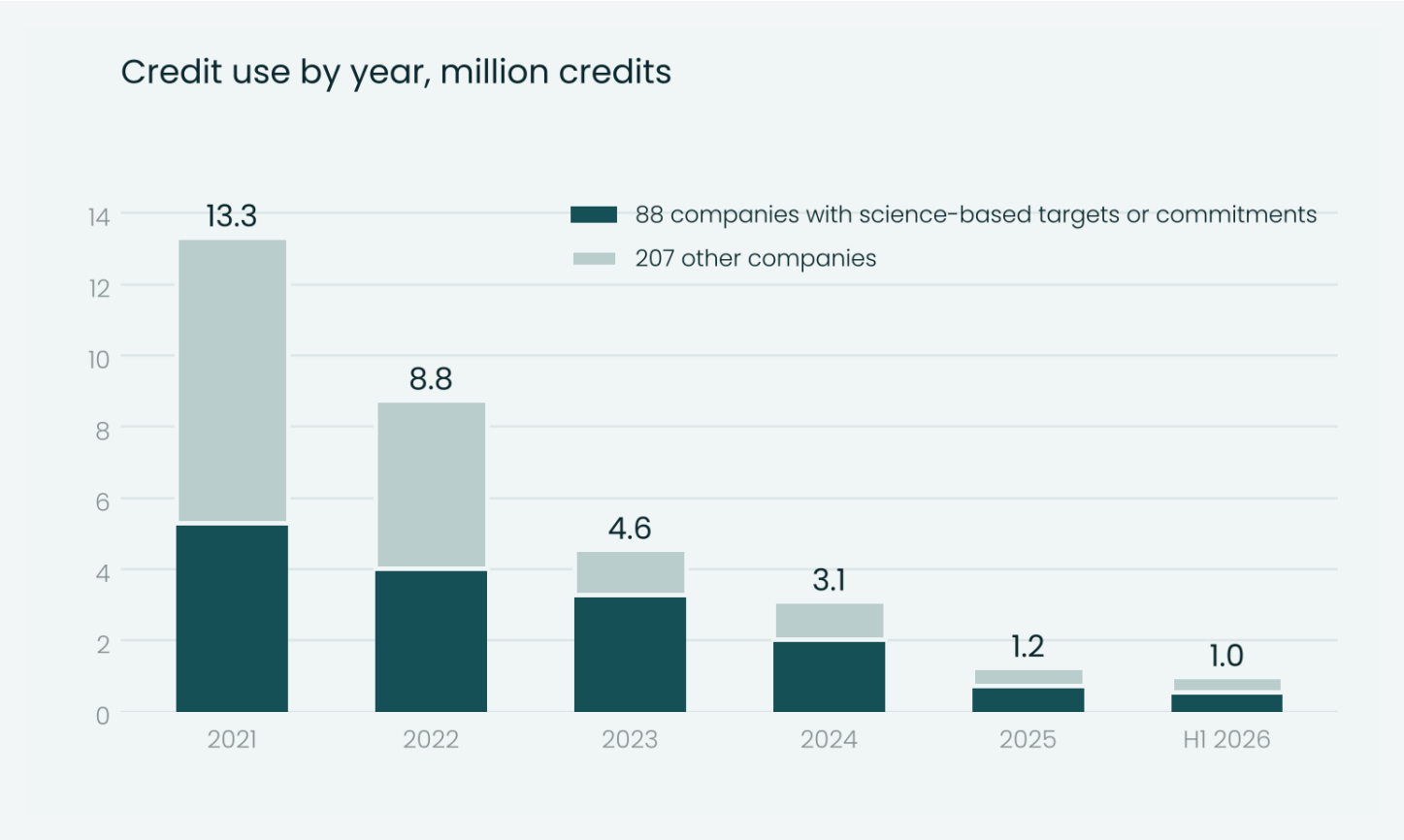
3
major brands withdrew claims

Next · Credit use, 2021 to 2026 →

Credit use, 2021 to 2026

The registries tracked by Market Watch attribute 13.3 million credits to the 295 companies in 2021, 8.8 million in 2022, 4.6 million in 2023, 3.1 million in 2024 and 1.2 million in 2025, and a further 1.0 million in the first half of 2026, being 79% of the volume for the whole of 2025.

The number of companies using credits ranged between 117 and 130 a year from 2021 to 2024, fell to 84 in 2025 and stood at 60 in the first half of 2026, while the 88 companies with science-based targets or commitments used 15.9 million credits, half of the total.



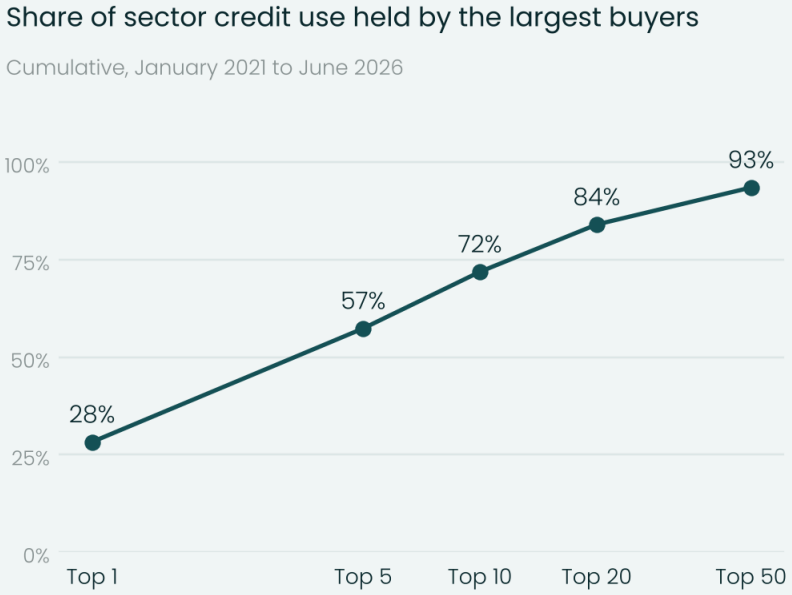
Source: Climate Decode Market Watch, registry data to June 2026.

Next · Concentration and largest users →

Concentration and largest users

Raízen alone accounts for 28% of the volume used from 2021 to June 2026, almost all of it in 2021 and 2022, and the five largest users account for 57%, the ten largest for 72% and the twenty largest for 84%, so that the sector total moves with the decisions of a small number of companies.

Raízen	9.0 Mt	28% of sector use
Nestlé	3.8 Mt	12% of sector use
Maple Leaf Foods	2.2 Mt	7% of sector use
Barilla	2.0 Mt	6% of sector use
Danone	1.3 Mt	4% of sector use



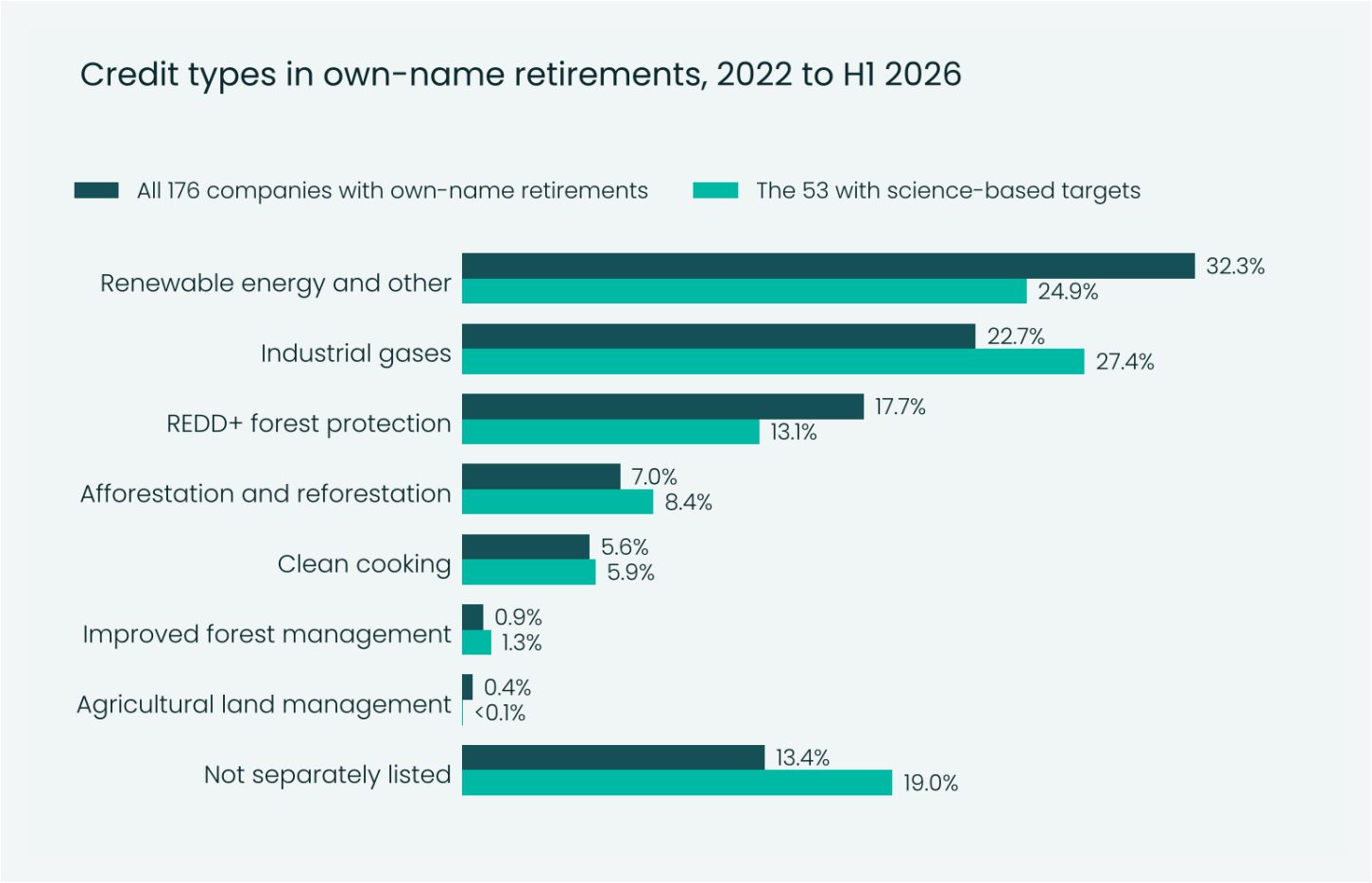
Source: Climate Decode Market Watch, registry data to June 2026. The full list of companies with science-based targets is in the appendix.

Next · Credit types retired →

Credit types retired

Of the 9.2 million credits that 176 companies retired in their own names from 2022, renewable energy accounted for 32.3%, industrial gas projects for 22.7% and REDD+ forest protection for 17.7%, with afforestation and reforestation at 7.0% and clean cooking at 5.6%.

The 53 companies with science-based targets that retired in their own names account for 6.2 million of those credits, with industrial gases leading at 27.4%, and removal credits make up 8.5% of their total, none of which counts towards a FLAG target unless it lies within the buyer's own value chain.



Renewable energy and other comprises project types outside the nature-based and industrial-gas clusters, mostly renewable energy. Source: Climate Decode Market Watch, registry data to June 2026.

Next · Insetting and the credit record →

02 Challenges

Insetting and the credit record

The twelve companies in the spotlights fall into two groups, those whose supply-chain programmes are measured in millions of acres, hundreds of millions of euros or tonnes of verified removals, and those whose record on the registries remains larger than anything they report about their own supply chains, and the 2026 rules count only the first.

Three of the largest buyers have already withdrawn or lost carbon neutral and net zero claims, Nestlé in 2023, Mars on Mars bars and Royal Canin, and Arla in Sweden, while Maple Leaf Foods continues to neutralise all remaining Scope 1 and 2 emissions and 6.8% of Scope 3 with offsets, which Canada's Competition Act now requires to be substantiated.

The evidential test for the first group is the land sector standard from January 2027, under which supply-chain removals count only where they are traced to the sourcing region, monitored, and claimed once across the farmer, the processor, the brand and any credit buyer, which is a particular question where customers such as Mars and Nestlé co-fund a supplier's farm programme, as at Fonterra.

4.7m acres of regenerative agriculture reported by PepsiCo at the end of 2025[12]

€228m paid to FrieslandCampina member farmers for sustainability in 2025[9]

42,000 t of supply-chain removals deducted from Scope 3 by Mars in 2024[8]

7% of companies engage suppliers on carbon, across the EcoVadis network[5]

03

Solutions

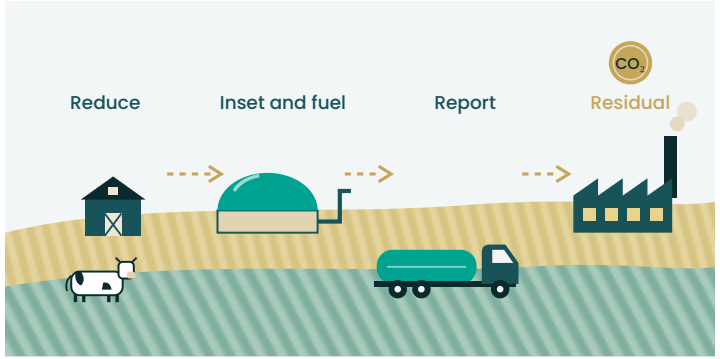
An end-to-end programme, in which TerraNova carries reductions across Scopes 1, 2 and 3, supply-chain and risk mapping, insetting and the clean fuel routes that earn a compliance value, and Canopy carries the residual programme.

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platforms on one set of emission data, from the plant and the farm to the retired credit



03 Solutions

TerraNova

TerraNova is the reduction side of Climate Decode, the enterprise workspace for climate action, and carries the first three steps of the programme on the company's own emission data, from the plant to the farm.

Decarbonise Scopes 1, 2 and 3

Activity data taken from the company's own accounting and ERP systems, emissions reported on the GHG Protocol including FLAG and Scope 3, and the decarbonisation plan built plant by plant against carbon prices, risk and available incentives, then rolled up to group targets.

01
reduce

Visualise supply and risk

The supply chain mapped by commodity, supplier and sourcing region, with emission hotspots, data gaps and the physical, transition and policy risk of each plant and each region, so that the reduction plan and the sourcing strategy share one view.

02
map

Develop or join insetting

Supply-chain projects identified and tracked from design to monitoring, whether developed with suppliers or joined through programmes run by suppliers, cooperatives and traders, with the grants and incentives each can draw on and a single record so that each tonne is claimed once.

03
inset



Plant and fleet data from ERP and accounts → Scopes 1, 2 and 3, including FLAG → Suppliers, sourcing regions and risk → Insetting projects recorded once → Clean fuel routes valued

More at climate-decode.com/platform/terranova →

03 Solutions

Canopy

Canopy is the residual side of the workspace and takes over where TerraNova's reductions and insetting end, so that the purchased-credit programme is sized from the plan rather than set independently of it.

Residual sizing

The volume that remains after reductions and traceable insetting, sized against the net-zero commitment and the chosen ongoing emissions responsibility.

04
size

Due diligence

Every project screened through the Canopy due-diligence engine on eight questions, from baseline and additionality to safeguards and reputation, before a scientist signs off.

8
questions per project

Procurement

Credits procured through the company's own procurement system, from request to retirement, with the supply from screened projects alongside.

05
procure

Reporting and claims

Reductions, insetting and credits reported on separate lines, credits outside the inventory, and product claims checked against the EU prohibition.

06
report



Residual sized from the plan → Eight-question due diligence → Procured through own system → Retired and reported outside the inventory

More at climate-decode.com/platform/canopy →

03 Solutions

Clean fuels

Clean fuel markets give a food company three routes in which a reduction in its own or its suppliers' emissions also earns a compliance value, and TerraNova Clean Fuels values each route against the programmes into which the fuel can be sold, so that a digester, a fleet conversion or a residue contract is assessed on its credit revenue as well as on its abatement.

Manure and food waste to biomethane

Digesters on supplying dairy and pig farms or at processing sites capture methane that would otherwise be emitted and produce biomethane for trucks or the grid, which earns credits under the LCFS, the CFR and RED III, where manure and biowaste count as advanced feedstock. Danone plans small-scale digesters for 6,500 dairy farms, and 11% of Arla's farmers produce biogas or supply manure to it.[22,23]

6,500
farms in Danone's digester plan

Fleet fuel switch

Milk collection and distribution fleets running on biomethane, renewable diesel or electricity reduce transport emissions in Scope 1 or Scope 3, and the low-carbon fuel generates credits for its supplier or the fleet operator. FrieslandCampina expects about half of its milk collection fleet to move to bio-CNG with seven hauliers, part of it from members' manure.[24]

50%
of FrieslandCampina's milk fleet to bio-CNG

Residues and oils as feedstock

Used cooking oil, animal fats, distillers corn oil and canola from the company's processing or sourcing carry a premium where programmes reward North American or advanced feedstock, as under Section 45Z from 2026 and the proposed CFR multipliers, while RED III caps oils and fats at 1.7% of transport energy.[18,20,21]

1.3 to 1.8
proposed CFR multipliers

Accounting and claims

The methane avoided on the farm and the credit sold with the fuel rest on the same activity, so that the company records which party claims the reduction and keeps the farm reduction and the fuel attribute on separate lines, while California phases out avoided methane crediting for combustion fuel and the record-low values of some dairy pathways have been contested.[19,25]

1
claim per tonne



More at climate-decode.com/markets/clean-fuels →

03 Solutions

The end-to-end playbook

TerraNova carries steps 1 to 3 and Canopy steps 4 and 5. Steps 1 and 2 determine whether the FLAG target is met and step 3 how much of the remaining gap the supply chain can close, so that the size of the purchased-credit programme in step 4 follows from the earlier steps rather than being set independently of them.

Measurement

FLAG emissions measured separately from energy and industry emissions and attributed to commodities and sourcing regions, from activity data in the company's own systems.

01
Step 1

Reduction plan

A plan built plant by plant and sourcing region by sourcing region, each lever valued against carbon prices, climate and transition risk and available incentives.

02
Step 2

Insetting

Supply-chain projects developed or joined, assessed for traceability, permanence and monitoring, with supplier terms that stop the same tonne being claimed twice.

03
Step 3

Residual procurement

The remaining volume sized against the net-zero commitment and ongoing emissions responsibility, and each project screened for integrity before purchase.

04
Step 4

Reporting and claims

Reductions, removals and credits on separate lines, credits outside the inventory, and every EU product claim checked against the offsetting prohibition.

05
Step 5



Free peer benchmark

How does your company compare with the peers in this report?

Climate Decode will prepare, free of charge, a peer benchmark and residual-emissions assessment for a food, beverage or agriculture company with a FLAG or net-zero target, covering how its credit use compares with the 295 companies in this report, the reductions its targets still require, the residual volume they imply and how the credits it already holds stand up on due diligence, together with a demonstration of TerraNova and Canopy.

Book a call or write to vjain@climate-decode.com



insights.climate-decode.com/meetings/vaibhav2

The 88 companies with science-based targets or commitments

#	Company	Headquarters	SBTi	Credit use 2021 to H1 2026 (kt)	Own-name retirements 2022 to H1 2026 (kt)	Main types in own-name retirements
1	**Nestlé**	Switzerland	1.5°C	3,798.1	1,875.1	REDD+ 38%; Clean cooking 18%
2	**Maple Leaf Foods**	Canada	WB2°C	2,163.1	1,758.7	Industrial gases 80%; Renewables and other 10%
3	**Barilla International**	Netherlands	1.5°C	2,047.8	3.0	Renewables and other 100%
4	**Danone**	France	1.5°C	1,292.8	70.1	Renewables and other 56%; IFM 32%
5	**Remy Cointreau**	France	1.5°C	1,175.1	595.0	Renewables and other 67%; Afforestation and reforestation 18%
6	**Mars**	United States	1.5°C	910.8	380.0	Afforestation and reforestation 100%
7	**Jorge**	Spain	1.5°C	692.3	417.9	Renewables and other 100%
8	**Frieslandcampina**	Netherlands	1.5°C	645.1		
9	**Societe De Distribution De Produits Maraichers Et Horticoles Du Maroc**	France	1.5°C	581.6	389.2	Renewables and other 51%; Industrial gases 36%
10	**Kirin Holdings**	Japan	1.5°C	368.5		
11	**Ambev**	Brazil	1.5°C	295.6		
12	**Charoen Pokphand Foods Public**	Thailand	1.5°C	274.9		
13	**Cranswick**	United Kingdom	1.5°C	157.9	102.5	Renewables and other 72%; REDD+ 22%
14	**Lotus Bakeries Nv**	Belgium	1.5°C	136.9	9.2	Renewables and other 100%
15	**Kellanova**	United States	1.5°C	127.3	3.2	Renewables and other 100%
16	**Ingredion**	United States	WB2°C	120.3	116.4	Industrial gases 100%
17	**Anheuser-Busch Inbev**	Belgium	1.5°C	117.4	68.0	IFM 70%; Industrial gases 15%
18	**Arla Foods**	Denmark	1.5°C	91.1	45.0	Renewables and other 100%
19	**Fevertree Drinks**	United Kingdom	1.5°C	83.3	33.3	REDD+ 75%; Afforestation and reforestation 25%
20	**Coca-Cola Europacific Partners**	United Kingdom	1.5°C	74.5		
21	**Dilmah Ceylon Tea**	Sri Lanka	1.5°C	63.8		
22	**Nespresso**	Switzerland	1.5°C	50.0		

The 88 companies with science-based targets or commitments, continued

#	Company	Headquarters	SBTi	Credit use 2021 to H1 2026 (kt)	Own-name retirements 2022 to H1 2026 (kt)	Main types in own-name retirements
23	**Red Bull Gmbh.Â**	Austria	1.5°C	41.7	28.9	Renewables and other 66%; Clean cooking 24%
24	**Paulig**	Finland	1.5°C	41.4	14.6	REDD+ 83%; Afforestation and reforestation 17%
25	**Juustoportti Oy**	Finland	1.5°C	40.1	31.2	Industrial gases 50%; Renewables and other 32%
26	**Asahi Group**	Japan	1.5°C	37.9	41.0	Renewables and other 69%; REDD+ 19%
27	**Suntory**	Japan	1.5°C	36.6	1.8	Renewables and other 100%
28	**Gruppo La Doria S.P.A.**	Italy	1.5°C	32.9		
29	**Fonterra Co-Operative**	New Zealand	1.5°C	32.1	26.4	Renewables and other 55%; Clean cooking 28%
30	**Rema1000**	Norway	1.5°C	26.6		
31	**Keurig Dr Pepper**	United States	1.5°C	21.7	10.9	IFM 69%; Afforestation and reforestation 31%
32	**Remia**	Netherlands	Committed	21.5	15.0	Renewables and other 100%
33	**Hochland**	Germany	1.5°C	20.3		
34	**Société De Services, De Participations, De Direction Et D'Elaboration**	Belgium	1.5°C	20.0	20.0	Renewables and other 100%
35	**Igor S.R.L.**	Italy	Committed	18.6	19.2	Industrial gases 100%
36	**Conagra Brands**	United States	1.5°C	18.1	20.0	Renewables and other 86%; IFM 10%
37	**Lyka Wellness Pty**	Australia	Committed	16.0	16.0	REDD+ 100%
38	**Mondelez International**	United States	1.5°C	15.4	6.6	Renewables and other 67%; Industrial gases 33%
39	**Cargill**	United States	2°C	11.7	0.8	REDD+ 100%
40	**Diageo**	United Kingdom	1.5°C	11.3	9.6	Afforestation and reforestation 90%; Agricultural land mgmt 10%
41	**Sucesores De Jose Jesus Restrepo Y Cia. S.A., Pudiendo Emplear Las Expresiones Abreviadas Casaluker S.A. O Luker**	Colombia	1.5°C	10.9	7.1	Afforestation and reforestation 84%; REDD+ 16%
42	**Sapporo**	Japan	1.5°C	10.0	10.0	Renewables and other 100%
43	**Berglandmilch**	Austria	1.5°C	10.0		
44	**Del Monte Foods**	United States	1.5°C	10.0	10.0	REDD+ 100%

The 88 companies with science-based targets or commitments, continued

#	Company	Headquarters	SBTi	Credit use 2021 to H1 2026 (kt)	Own-name retirements 2022 to H1 2026 (kt)	Main types in own-name retirements
45	**Cofco**	China	1.5°C	9.9	11.2	Renewables and other 100%
46	**Pepsico**	United States	1.5°C	9.9	9.7	Renewables and other 99%
47	**Pip & Nut**	United Kingdom	1.5°C	9.8	9.8	Renewables and other 67%; REDD+ 33%
48	**Royal Unibrew A/S**	Denmark	1.5°C	9.4	3.2	Renewables and other 100%
49	**Aak Ab (Publ)**	Sweden	1.5°C	9.0	9.0	Clean cooking 100%
50	**Argea**	Italy	1.5°C	8.5	2.2	Afforestation and reforestation 68%; Renewables and other 32%
51	**Aryzta**	Switzerland	1.5°C	8.0		
52	**Midsona Ab**	Sweden	1.5°C	7.8	2.0	REDD+ 100%
53	**Hatch Mansfield Cellars**	United Kingdom	1.5°C	7.6	1.9	Renewables and other 100%
54	**Vina Concha Y Toro**	Chile	1.5°C	7.4		
55	**Pernod Ricard**	France	1.5°C	7.3	1.6	Renewables and other 93%; Afforestation and reforestation 7%
56	**Corbion**	Netherlands	1.5°C	7.0	1.0	Afforestation and reforestation 100%
57	**Estyria Naturprodukte Gmbh**	Austria	1.5°C	7.0		
58	**Kerry Group Public Limited**	Ireland	1.5°C	6.4	5.2	Renewables and other 100%
59	**Mccain Foods**	Canada	1.5°C	5.8	4.6	Renewables and other 100%
60	**Ebro Foods**	Spain	Committed	5.7	6.7	REDD+ 71%; Clean cooking 29%
61	**Mowi Asa**	Norway	1.5°C	4.8		
62	**Kelly Deli**	United Kingdom	Committed	4.1		
63	**R. Twining And**	United Kingdom	1.5°C	3.1		
64	**Edrington**	United Kingdom	1.5°C	3.1		
65	**Puratos**	Belgium	Committed	2.7		
66	**Frobishers Juices**	United Kingdom	1.5°C	2.5	2.5	Renewables and other 97%

The 88 companies with science-based targets or commitments, continued

#	Company	Headquarters	SBTi	Credit use 2021 to H1 2026 (kt)	Own-name retirements 2022 to H1 2026 (kt)	Main types in own-name retirements
67	**Lindt & Spruengli**	Switzerland	1.5°C	2.1		
68	**Perfetti Van Melle**	Netherlands	1.5°C	1.9		
69	**Gotlandsägg Ab**	Sweden	1.5°C	1.8		
70	**Yakult Honsha**	Japan	1.5°C	1.5		
71	**Tongwei**	China	1.5°C	1.4	1.4	Industrial gases 100%
72	**Keelings**	Ireland	1.5°C	1.4		
73	**Wimex Agrarprodukte Import Und Export Gmbh**	Germany	Committed	1.4		
74	**Highland Spring**	United Kingdom	1.5°C	1.2	4.8	Clean cooking 75%; Renewables and other 25%
75	**Team Foods Colombia**	Colombia	1.5°C	1.0		
76	**Spendrups Bryggeriaktiebolag**	Sweden	1.5°C	0.7	0.7	Industrial gases 100%
77	**Olvi Oyj**	Finland	1.5°C	0.6		
78	**Roquette**	France	WB2°C	0.5		
79	**Griffith Foods Worldwide**	United States	1.5°C	0.5	0.4	Clean cooking 78%; Renewables and other 22%
80	**Grieg Seafood Asa**	Norway	WB2°C	0.3		
81	**Bolton**	Italy	Committed	0.2		
82	**Heineken**	Netherlands	1.5°C	0.1	0.4	REDD+ 52%; Renewables and other 42%
83	**Nordzucker**	Germany	1.5°C	0.1		
84	**Lactalis**	France	1.5°C	0.0		
85	**General Mills**	United States	1.5°C	0.0	7.4	Afforestation and reforestation 100%
86	**Ajinomoto Co.**	Japan	1.5°C	0.0		
87	**Olam**	Singapore	WB2°C	0.0		
88	**Nissin Foods**	Japan	1.5°C	0.0		

Method and sources

Credit use is the volume of retirements that Climate Decode Market Watch attributes to each company across the registries it tracks from January 2021 to June 2026, including the domestic registries EcoRegistry, BioCarbon Standard, Cercarbono, the CDM registry and the Australian Carbon Credit Unit scheme alongside the international standards, and own-name retirements count only those recorded in the company's own name from January 2022. Project-level references are taken from the Verra VCU export of 2 June 2026.

The sector list covers the 295 food, beverage and agriculture companies in the Market Watch ranking of buyers by credit use, of which 283 recorded use over the period, and SBTi status records a validated 1.5°C, well-below 2°C or 2°C target or a commitment, as published by the SBTi. Credit types follow the ten-category Market Watch classification, in which renewable energy and other comprises types outside the nature-based and industrial-gas clusters and consists mostly of renewable energy.

Supply-chain programmes are described from the companies' own published reporting and from the press coverage cited in the notes, and have not been verified by Climate Decode. This report is for information only and does not constitute investment or legal advice.

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