



# FrieslandCampina Climate Plan

On the way to climate-neutral dairy



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# Foreword

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FrieslandCampina has a strong and clear purpose: *Nourishing by nature*. We want to give people across the world daily access to good, nutritious, affordable, tasty food, produced in balance with the planet. Significantly reducing the greenhouse gas emissions of our activities - to contribute to the goals of the Paris agreement - is therefore one of the key priorities of our sustainability programme *Nourishing a better planet*. We believe that in the future, we will be able to produce net climate-neutral dairy by reducing our footprint worldwide, by way of a robust, realistic and substantiated programme. We are fully aware of the urgency of this endeavour. Our many years of experience in sustainability gives us confidence to achieve our goal and encourages us to keep taking steps towards achieving a more sustainable future each day.

In this document, we will state FrieslandCampina's vision on sustainability, our climate goals, our achievements in recent years, where we are now and what our plans are as well as how we are working on realising them. It also provides insight into how we are calculating and accounting for this.

# Sustainability at FrieslandCampina

FrieslandCampina is a dairy cooperative with a history stretching back to 1871. Throughout our long, rich history, we, as a cooperative and as a company, have always adapted to what the market and what society wants from us. For a long time now, this is no longer just a question of nutrition, quality and taste, but has also become about making the chain that we are a part of more sustainable. From reducing greenhouse gas emissions and improving biodiversity on the farm, to recyclable packaging and less waste for consumers. We have therefore been working on making our chain more sustainable for many years, integrally and together with parties who pursue the same goal. The Sustainable Development Goals of the United Nations are the starting point for our nutrition- and sustainability policy. Contributing to the prevention of hunger and poverty by providing healthy, affordable and sustainably produced food that is accessible to everyone, is at the core of what we do, see figure 1. Our aim is to reduce our footprint and impact on the climate year on year. We have set targets for 2030 that should lead to significantly lower greenhouse gas emissions and keep us on track towards our net climate neutral ambition by 2050 the latest.

## Sustainability: cooperative and comprehensive

The company royal FrieslandCampina N.V. ('FrieslandCampina') is fully owned by Zuivelcoöperatie FrieslandCampina U.A. (the 'cooperative'). 10,564 dairy farms in the Netherlands, Belgium and Germany hold 15,703 memberships in the cooperative. Together, they supply 9,745 million kilos of milk to FrieslandCampina<sup>1</sup>. Greenhouse gases emitted by the production of milk on member dairy farms therefore are part of the Company's scope 3 emissions. The Company and the Cooperative both view the reduction of emissions as a key responsibility and together they are taking steps to reduce emissions.

As we see it, sustainability is an integrated concept rather than something one-dimensional. As a global company, we see sustainability from an international perspective. The priorities of our sustainability programme are relevant to our entire chain and to all our companies worldwide. Everyone contributes to the goals for reducing greenhouse gas emissions, making packaging more sustainable and reducing (plastic) waste. We use an integrated approach: progress made on one particular priority should not have a negative impact on one of the other sustainability themes.

The cooperative was set up on the belief that together you can achieve more than on your own. Putting cooperation and our common interests above individual interests has always been very much in our blood. We believe in 'cooperative sustainability': joining forces, sharing knowledge and learning from others who can help us move forward. Within the dairy sector as well as with customers, NGOs, the government and academia.

Figure 1: Our contribution to the Sustainable Development Goals



<sup>1</sup> [FrieslandCampina annual report 2021](#)

## Collaboration within the sector

We have translated the objectives of the Paris Agreement and the Dutch Climate Agreement into targets for FrieslandCampina, worldwide. We annually monitor and report on the progress that has been made on these objectives. To reach the targets we work together with other actors in the Dutch dairy sector. We are working on sustainability with the intention of activating and motivating the entire dairy sector. We have developed a carbon footprint calculation module allowing every FrieslandCampina dairy farm in the Netherlands and Belgium to calculate its own footprint in 2016. This tool became available for all Dutch dairy farmers in 2017. Another initiative is the Sustainable Dairy Chain, which is a partnership of dairy farmers and dairy companies. FrieslandCampina's CEO chairs the Global Dairy Platform<sup>2</sup>, a partnership whose principal objective is to achieve a net climate-neutral future.

## Collaboration with customers

In order to achieve long-term sustainability, it is vital that all parties in the chain contribute. This is why FrieslandCampina is a participant in the independent 'On the way to PlanetProof' sustainability quality label, with a large percentage of our Dutch dairy products meeting the requirements. Dairy farmers who supply milk under this label make additional efforts with regard to biodiversity, climate and animal welfare.

We are also working alongside major international customers on improving our sustainability performance. Specifically in the field of greenhouse gas reduction, for example, we have been working with major food companies and retailers. A three-year partnership with Danone, for example, led to a reduction of over 17 percent in greenhouse gas emissions. This reduction was achieved by dairy farmers who implemented sustainable farming practices and green energy projects.

## Collaboration with NGOs

We developed the Biodiversity Monitor in partnership with the World Wildlife Fund and Rabobank. The Biodiversity Monitor allows us to measure the impact on biodiversity at the level of individual farms and allows us to reward member dairy farmers in a targeted manner for improving the biodiversity on their farm. The indicators of the Monitor were chosen in such a way so as to avoid a negative impact on other goals, such as greenhouse gas reduction. All dairy farmers have access to the Biodiversity Monitor and 81 percent of member dairy farms have registered their active nature and landscape management activities with FrieslandCampina. This monitor was made available to the entire Dutch dairy sector from 2019 onwards.

At our Dutch Campina brand, we work closely with Natuurmonumenten in the context of 'On the way to PlanetProof'. This partnership is geared towards strengthening nature in the Netherlands. We are also collaborating with the bird conservation organisation Vogelbescherming Nederland, in which farmers are rewarded for their efforts to protect meadow birds on their land.

## Collaboration with academia and government

We also work closely with the scientific community, such as Wageningen University & Research (WUR) including the Dairy Campus in Leeuwarden, as well as with the government, both at national, provincial and municipal level to continuously drive new innovations and insights to drive the transition to a future proof dairy system.

<sup>2</sup> [Global Dairy Platform](#)

## Our sustainability journey to date

Since FrieslandCampina was created in 2009 as a result of a merger, we have built on the sustainable foundations of our predecessors. This led to a long-term strategy with international and cross-sector partnerships and transparent reporting on progress achieved towards sustainability goals. We believe in measurable results and we use validated tools to achieve this. Within the supply chain, we monitor progress achieved in terms of energy and water efficiency and absolute greenhouse gas emissions worldwide using the energy- and water model. This solid foundation tells us where we are, where we can speed things up and where we need to calibrate our

strategy. Furthermore we developed the RESPAKT packaging sustainability tool. We measure progress on the farm down to the level of the individual farms using various instruments, such as the carbon footprint monitor, the Biodiversity Monitor, KoeMonitor and KringloopWijzer.

As many member farmers want to contribute where possible, we launched a range of large-scale green energy projects for farmers, turning them into energy farmers (solar, wind and manure) as well as dairy farmers. More than 3,300 of the members now supply green electricity. 100 percent of electricity consumption required for our production is renewable, with 50 percent coming from member dairy farmers. One of

## Key developments in sustainability since the merger in 2009

### 2010

- Development of the route2020 strategy, with a target for climate-neutral growth

### 2011

- Southeast Asia Nutrition Survey, a large-scale study of dietary health, dietary needs and eating patterns of nigh on 17,000 children aged 0-12 in Southeast Asia
- Launch of sustainable milk transport programme aimed at making equipment more sustainable, efficient fuel use and optimising route planning

### 2012

- Foqus planet quality and sustainability programme launched. The programme, among other things, establishes requirements for sustainable production, quality, food safety and grazing. The programme is mandatory for all member dairy farms and is supported by workshops
- Partnership with Agriterro aimed at supporting farming in developing countries and making it more sustainable through FrieslandCampina's Dairy Development Programme
- KringloopWijzer developed to make it easy to chart mineral cycles for a particular dairy farm
- Global water and energy efficiency programme adopted in 2015 as part of the continuous improvement programme for the supply chain

### 2014

- Introduction of the KoeKompas, the management instrument by all member dairy farmers to ensure good animal health

### 2015

- Introduction of a sustainability-based performance premium for member dairy farmers. Through the 'Sustainable development' component of Foqus planet, dairy farmers are encouraged to make their business more sustainable in the area of climate change and biodiversity

our production facilities is connected to biogas from manure from the region. In other parts of the world, production facilities are running on sources such as rice husks from local farmers' waste flows or on pruning waste.

Furthermore, deforestation is an important lever to reduce carbon emission. Also here we will improve our commitments and efforts. Over the past years we have been sourcing our raw materials where possible with certificates that ensure sustainable production. E.g. for palm oil we have been sourcing RSPO palm oil for a long time. Also, for soy products member -dairy farmers have been sourcing RTRS soy for feed.

In 2021 we have committed to shift from certified to certified and segregated soy as soon as reasonable possible. That is why we collaborate with Agrifirm to ensure that the member farmers can buy segregated deforestation free soy. We have drafted a

'no deforestation or conversion policy" to make our policies explicit and enable deforestation- and conversion free resources.

In recent months, we have included two key initiatives in our aim to reduce greenhouse gas emissions: the introduction of deforestation-free soy and of feed additives, which reduces methane emissions from cows.

We gained a lot of experience – and by no means did everything go as planned (initially). And yet this experience did give us confidence in the future and in our ability to accomplish our goals. At the end of *route2020*, we introduced an improved sustainability programme with new interim targets for 2030: *Nourishing a better planet*.

## 2016

- Jumpstart cooperative set up for mono-fermentation of manure on the farm
- Development of FrieslandCampina Global Nutritional Standards with nutritional criteria guiding the development and reformulation of products
- Development of the carbon footprint calculation module allowing dairy farms to calculate their farm specific footprint

## 2017

- Development of the Biodiversity Monitor in partnership with the World Wildlife Fund and Rabobank aimed at measuring and improving the biodiversity performance of a dairy farm
- All production facilities in Europe switch to 100 percent green electricity, partly purchased from member dairy farmers
- Start of Solar programme, which sees FrieslandCampina encouraging dairy farmers to install solar panels on cowshed roofs

## 2018

- The introduction of Campina dairy with the 'On the way to PlanetProof' label of the Stichting Milieukeur

## 2019

- First integrated annual report containing the financial results and the developments and results in the area of sustainability and value creation for 2018
- Introduction of RESPAKKT: a software tool developed by FrieslandCampina that can be used to analyse environmental impact and recyclability during the packaging development process
- Support of member dairy farmers through the 'Winning with Climate and Nature' programme, with workshops aimed at improving the climate, cycles and nature

## 2020

- Introduction of the *Nourishing a better planet* sustainability programme with six key priorities for sustainability improvements across the entire chain
- Introduction of a customised sustainability tool for member dairy farmers: a simulation programme developed by FrieslandCampina that can be used to forecast sustainability impact of mitigation options on individual farms

## 2021

- All production facilities worldwide switch to 100 percent green electricity
- Announcement of step up from RTRS to the use of segregated deforestation-free soy (segregated flow)

## Our sustainability programme *Nourishing a better planet*

*Nourishing a better planet* consists of the following priorities:



### Better nutrition, affordable for everyone

In line with the United Nations' Sustainable Development Goals, is providing good nutrition the starting point for our sustainability programme. Providing better, affordable, accessible and sustainably produced nutrition to the world's growing population is the crux of what we do.



### Better living for farmers

The cooperative was established to create a better living for farmers. These days this extends beyond our own member dairy farmers to farmers operating locally in countries such as Nigeria, Pakistan, Indonesia and Romania through Dairy Development. Supporting these local farmers helps them to improve their business processes and make them more sustainable.



### Better climate, a climate-neutral future

By 2030, we want to have reduced our emissions on member farms by 33 percent in comparison to 2015. For our production facilities and transport, our goal is to reduce our emissions by 63 percent in comparison to 2015.



### Better nature, improving biodiversity

We are already measuring improvements in biodiversity for each individual farm using our Biodiversity Monitor. We want to have a net positive biodiversity impact at the cooperative's dairy farms by 2050. 80 percent of member dairy farms operate with active nature and landscape management.



### Better packaging, 100% circular

By 2025, we aim to have 100 percent of our packaging to be recyclable and/or reusable and by 2050 it must be circular and climate-neutral.



### Better sourcing, 100% responsible

Our aim is for 100 percent sustainably sourced of our most important agricultural raw materials and 95 percent of palm oil, soya, pulp & paper and cocoa purchased by the company to be traceable back to source by 2025.

*The following sections will each examine an individual aspect of our Nourishing a better planet sustainability plan: 'Better climate – a climate-neutral future', as well as set out our climate plans.*



# Climate Plan executive summary

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The Paris Climate Agreement sets out a commitment to put in place measures worldwide that contribute to limiting global warming to well below 2 degrees Celsius ('well below 2°C') and preferably to 1.5 degrees Celsius ('1.5°C'). Our detailed climate plan demonstrates how we contribute to achieving that target. This summary provides a brief outline of our plan.

## Our aim: reduction in line with the '1.5°C' pathway

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By 2050, we want to achieve net climate-neutrality in terms of our scope 1, 2 and 3 emissions. This means that we will be reducing emissions as much as possible and compensating for what we cannot reduce.

FrieslandCampina contributes to the reduction of greenhouse gas emissions and has committed itself to the so-called Science Based Targets Initiative (SBTi). By setting out our near-term goals for 2030, based on the relevant SBTi criteria, we expect to be on the right reduction pathway to achieve the '1.5°C' scenario in the long term (2050).

We have submitted our near-term goals to the SBTi and expect these targets to be validated in the second quarter of 2022.

## Reporting and publication

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Our progress is reported in our annual reports using the relevant *Greenhouse Gas Protocols*. Our reports have been audited by an external auditor for limited assurance since 2015. Since 2018, we have reported our emissions and progress in an integrated annual report (in accordance with GRI standards, core option).

As stated previously, our sustainability programme *Nourishing a better planet* ensures the implementation of our six key sustainability priorities with a specific roadmap for each individual priority.

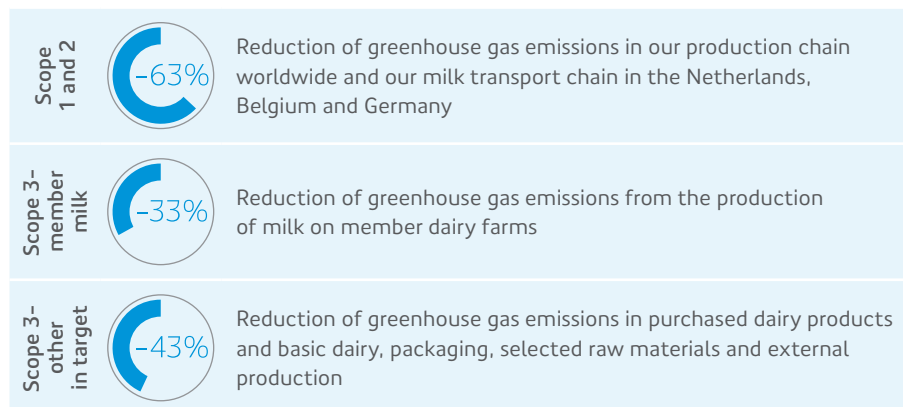
Figure 2: Our commitments

Scope category	Emissions in 2015 (Mton)	Percentage emissions of total (2015)	Emissions in 2020 (Mton)	Reduction target 2030 (compared to 2015)
Scope 1 and 2	1.0	3.6%	0.7	<b>63%</b>
Scope 3-member milk	13.8	50.4%	12.3	<b>33%</b>
Scope 3-other in target	~6.2	~22.6%	~6	<b>43%</b>
Scope 3-other targets to be set	~6.4	~23.3%	~6.4	-

Targets set for >70% of total scope 3 emissions.

Scope 1 and 2 emissions and scope 3 emissions from member milk have been monitored for many years, with high data quality and reduction roadmaps are in place. Data quality for 'other scope 3 categories' is reasonable. However, especially for downstream emissions data quality is very limited. Based on a screening of our scope 3 emissions (targets to be set), we expect them to be about 6.4 Mton in 2015 and about 23 percent of the total emissions (scope 1, 2 and 3). Before we can set realistic targets for this, we have to improve our inventory, whilst working on reducing emissions simultaneously.

The targets for 2030 for the 'Better climate' priority (reference year: 2015) are:



Targets set for >70% of the total scope 3 emissions.

With regard to all three targets, we are continuously implementing plans, we evaluate whether the existing plans are feasible and sufficient and where the plans and projects could be refined or expanded in order for us to reach our targets, and adjust them accordingly.

We have fully fleshed out roadmaps and reduction plans for both scope 1 and 2 and scope 3 member milk. We are currently working on fleshing out the pathway towards achieving net climate-neutral production for scope 3 - other. In line with the SBTi guidelines, we have established targets for more than 70 percent of the total scope 3 emissions.

In addition to the emissions on member dairy farms, the emissions of farmers abroad, and those of several major suppliers, form a substantial part of total scope 3 emissions. In Dairy Development, we have long-term programmes focusing on a number of topics, including making dairy farms of farmers abroad more sustainable. Each dairy development country will develop quantitative reports on sustainability and develop plans.

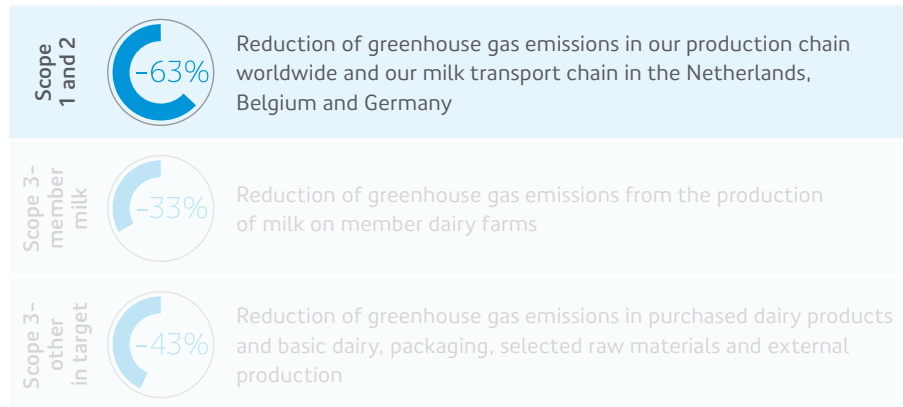
Within our scope 3-other, we have a clear overview of what steps our largest suppliers are taking, who all have their own ambitious sustainability goals and have likewise committed themselves to the SBTi. This gives us confidence that we are working on the right reduction pathway needed to achieve the '1.5°C' scenario in the long term (2050), in line with the current SBTi criteria and the Paris Climate Agreement.

## How do we intend to achieve our climate goals?

FrieslandCampina takes net climate-neutral production to entail the following:

- Reducing fossil CO<sub>2</sub> emissions to zero in our scope 1 and 2 by energy saving, electrification and switching to renewables. We will also pursue the same strategy for our scope 3;
- Minimise other remaining emissions (non-fossil emissions such as methane from dairy cattle or from manure management) and compensating any residual emissions that cannot be reduced through carbon sequestration inter alia in the soil. We prefer reducing and compensating within our own chain.

## Scope 1 and 2: Our production and transport chain



Targets set for >70% of the total scope 3 emissions.

Our strategy consists of investing in our production chain to reduce energy consumption and stimulate the use of renewable electricity from projects we initiate at the member dairy farms. Since 2015, our renewable electricity consumption has led to a CO<sub>2</sub> reduction of 0.16 Mton CO<sub>2</sub> equivalents and our scope 1 emissions reduced 0.14 Mton CO<sub>2</sub> equivalents.

Our reduction strategy for the period from now until 2026 is based on a reduction of approximately 49 percent. The investment plans for this period have been approved. It is also clear what can be done to further reduce emissions to our 2030 target of 63 percent reduction in greenhouse gas compared to 2015.

For our renewable electricity strategy, we have, since 2011, a programme in place<sup>3</sup> to buy guarantees of origin for renewable electricity; since 2017 we support member-dairy farmers in making investments in renewable energy production and by buying their Guarantees of Origin. In 2021, 100 percent of our electricity use was renewable of which 50 percent was generated by member dairy farmers<sup>4</sup>. It is our target to buy 100 percent of our Guarantees of Origin from member dairy farmers in 2025.

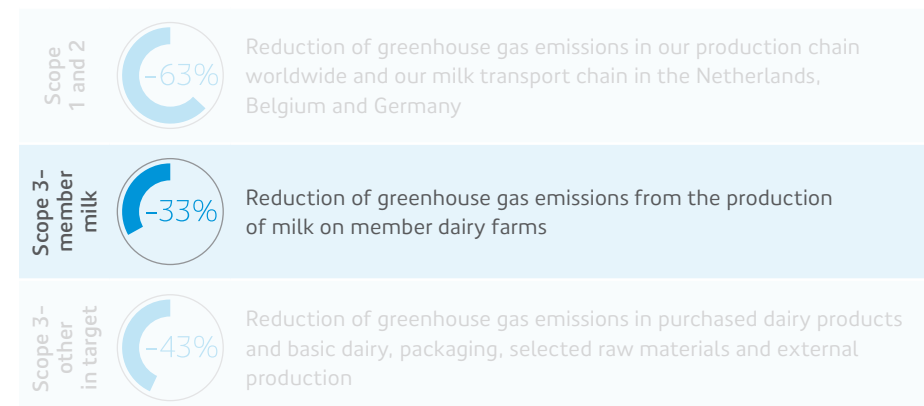
<sup>3</sup> FrieslandCampina pays its member directly for their sustainable energy (2020) Available at: <https://www.frieslandcampina.com/news/frieslandcampina-pays-its-member-directly-for-their-sustainable-energy/> | | Annual Report Royal FrieslandCampina N.V. p.258

<sup>4</sup> Campina completely produced using green electricity generated by farmers (2021) available at: <https://www.frieslandcampina.com/news/campina-completely-produced-using-green-electricity-generated-by-farmers/>

Focus areas in our reduction plans are:

- Reducing energy consumption by improving energy efficiency through the use of energy management systems, improvements in insulating, lighting and cooling, and replacing outdated production processes by more efficient technology;
- Electrification of outdated fuel-consuming processes through new technologies like filtration, mechanical vapour recompression and absorption processes;
- Supply chain footprint optimisation worldwide;
- Fossil energy substitution with renewable energy such as biogas, pruning wood, rice husks;
- Renewable electricity consumption from electricity produced at FrieslandCampina facilities and member dairy farms;
- Subsidy schemes for greenhouse gas reductions in the Netherlands and Belgium.

## Scope 3: the production of milk on member dairy farms



Targets set for >70% of the total scope 3 emissions.

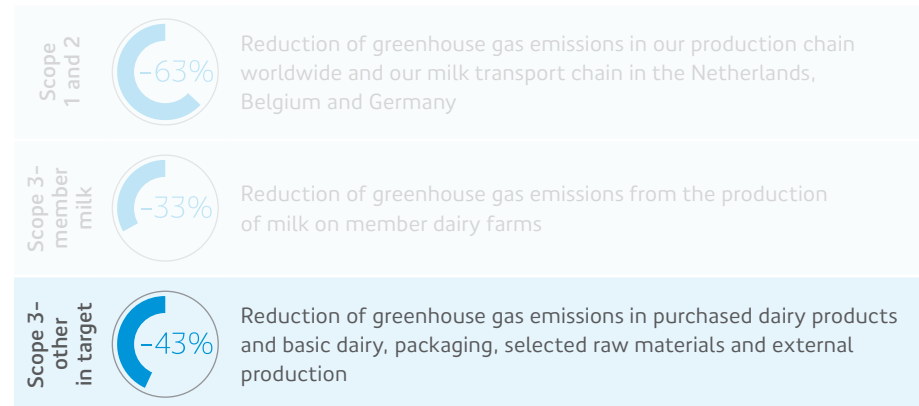
A large percentage (approximately 50 percent, see figure 2) of greenhouse gas emissions within our chain comes from the production of milk on member dairy farms. In that regard, we distinguish four categories for reduction (feed, livestock, manure and energy) and each dairy farmer is able to work on reducing emissions and draw up a targeted reduction plan for his own dairy farm by using our measures tool.

A range of options is available, which vary from applying effective agricultural practices, realising green energy on the farmyard using solar, wind and manure fermentation, alternative feed solutions (such as deforestation-free soy<sup>5</sup>) and reducing methane emissions including through the use of feed additives<sup>6</sup>. CO<sub>2</sub> sequestration in the soil and preventing emissions from peatlands are likewise measures that dairy farmers can take or are already taking to reduce emissions on their farms, despite the fact that this has not yet been included in all monitoring systems. Member dairy farmers are given the opportunity by FrieslandCampina to gain knowledge of and experience with these measures through workshops, visits to farms, the engagement of experts and knowledge transfer from fellow dairy farmers.

### Scope 3-other: purchased milk products and basic dairy, packaging, raw materials and external production

The emissions from milk production at the member dairy farms – through the cooperative, the member dairy farmers own the company FrieslandCampina – form the largest part of our scope 3 emissions. The emissions associated with procured dairy products (not originating from member dairy farms) are another contributor.

For procured dairy and dairy products, data quality is reasonable. All other scope 3 emissions have been estimated for our SBTi target validation submission in 2021, which requires a 'scope 3 screening'. This estimation was done by using the Greenhouse Gas Protocol tool 'Scope 3 evaluator'<sup>7</sup>. A distinction is made between upstream emissions (all emissions originating from processes from primary production through processing until our 'factory gate') and downstream emissions (all emissions after the products have left our production facilities).



Targets set for >70% of the total scope 3 emissions.

We have carried out an impact assessment on the procured dairy products, sugar, packaging and external manufacturing. The target for 2030 is a 43 percent reduction compared to 2015. We have started the opportunity assessment and are currently developing the reduction plan.

*In the next chapter, we will be discussing our Climate Plan in detail.*

<sup>5</sup> <https://www.frieslandcampina.com/news/frieslandcampina-and-agrifirm-united-in-the-pursuit-of-quaranteed-deforestation-free-soy-in-livestock-feed/>

<sup>6</sup> <https://www.frieslandcampina.com/news/frieslandcampina-and-dsm-take-major-step-to-reduce-greenhouse-gas-emissions-from-dairy-cattle/>

<sup>7</sup> Scope 3 Evaluator | Greenhouse Gas Protocol (<https://ghgprotocol.org/scope-3-evaluator>)

# Climate Plan

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We aim to have an emission reduction plan that concretely outlines our pathway to a net climate-neutral 2050. More specifically, our plan consists of a robust standardised process with a category-specific approach, in order to build credible and effective reduction plans.

Sustainability is at the heart of our purpose *Nourishing by nature* and is one of the four pillars of FrieslandCampina's strategy. With *Nourishing a better planet* we have an ambitious and comprehensive sustainability programme, which goes beyond our response to climate change and carbon emissions, and also covers improving biodiversity, nutrition, recycling of our packaging, sustainable sourcing and providing a better living for farmers.

In accordance with our purpose, FrieslandCampina invests in a sustainable future for the company and the cooperative. Therefore, FrieslandCampina aims to provide dairy and nutrition whilst reducing its impact on the climate<sup>8</sup>. Furthermore, we aim to have the milk produced with a fully regenerative farming system<sup>9</sup> that improves biodiversity and ensures circularity in the supply chain by 2050 at the latest. FrieslandCampina encourages the efforts of member dairy farmers in the areas of pasture and animal welfare and works on reducing the use of scarce natural resources such as water, raw materials and fossil fuels.

## FrieslandCampina's long term ambition: net-zero emissions by 2050

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FrieslandCampina has a long-term ambition to achieve 'net-zero emissions in 2050'. For this, we have set intermediate targets for 2030 that we have submitted to SBTi and which are currently being validated.

### Our goals for 2030

Since 2010, we have set ourselves targets for scope 1 and 2 emissions, and for the scope 3 emissions from milk production at member dairy farms. The progress we have made has been reported in our CSR reports, using the relevant Greenhouse Gas Protocols<sup>10</sup>. Since 2015 our scope 1 and 2 emissions and scope 3 emissions from

<sup>8</sup> For scope 1, 2 and 3 emissions

<sup>9</sup> Since 2018 FrieslandCampina is part of a public private partnership that aims to define regenerative farming and to clarify how to get to such as system <https://regenerativefarming.nl/>

<sup>10</sup> 2021 Annual Report Royal FrieslandCampina N.V p. 57 / p.259 Available at: <<https://www.frieslandcampina.com/about-frieslandcampina/financials/financial-and-sustainability-reports/>>| [Ghgprotocol.org](https://ghgprotocol.org). 2022. Greenhouse Gas Protocol [online] Available at: <https://ghgprotocol.org/standards>.

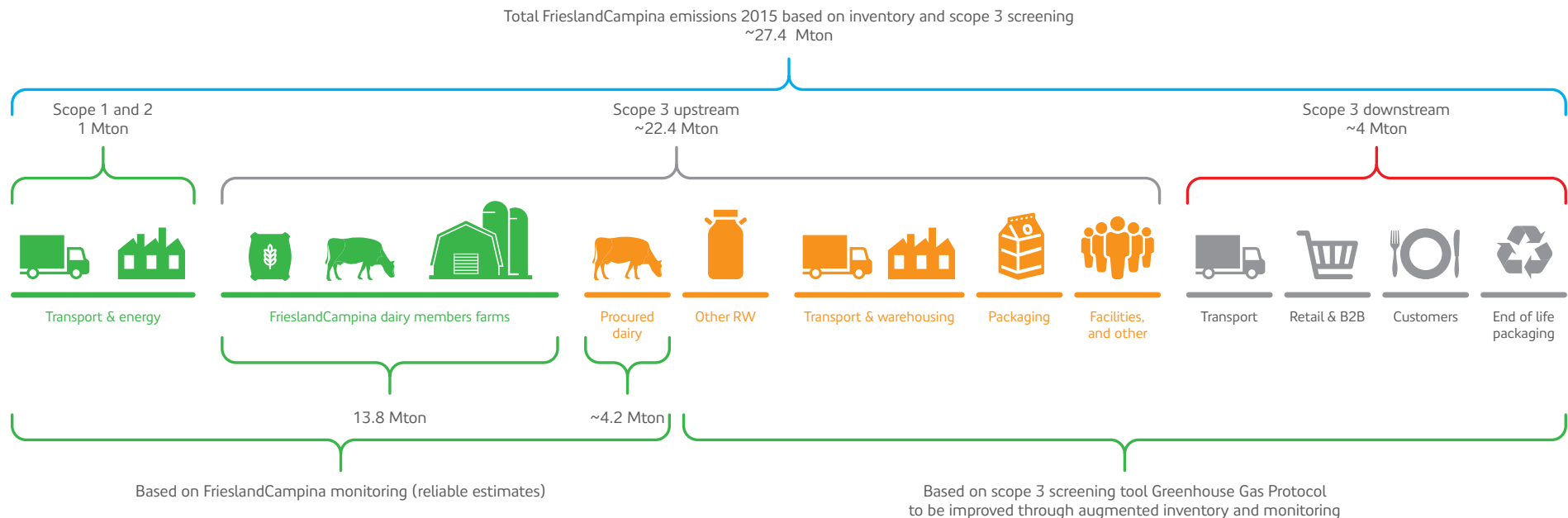
member dairy farmers have been audited for limited assurance<sup>11</sup>. Since 2018 we have been reporting our emissions and progress in our Integrated Annual Report (following GRI standard level 'core'<sup>12</sup>), also externally assured (see also appendix A: Accountability).

With our 2010–2020 sustainability strategy we have kept our greenhouse gas emissions on the same level despite the growth of the company (climate-neutral growth). With our current sustainability strategy, we have substantially increased the ambition level of our reduction targets and included more emission categories. We chose to do so, because we are committed to contribute keeping global warming within the 1.5°C limit above pre-industrial levels in conformity with the preferable scenario of the Paris Agreement in 2015<sup>13</sup>.

To ensure our efforts are within the conformity of this 1.5°C pathway, we are in the process of having our near-term targets validated by the independent Science Based Target initiative (SBTi); validation of our near-term targets by SBTi has already started. SBTi evaluates whether individual companies' emissions reduction targets are in line with climate science and the goals from the Paris Agreement. The scientific basis should thereby aligned in our transition plans covering scope 1,2 and 3 emissions. See Appendix A: Accountability for elaboration on SBTi.

Figure 3 shows how greenhouse gas emissions are distributed throughout our value chain, based on our inventory and on the scope 3 screening tool of the Greenhouse Gas Protocol.

Figure 3: Greenhouse gas emissions (2015) throughout the FrieslandCampina value chain



<sup>11</sup> <https://www.frieslandcampina.com/about-frieslandcampina/financials/financial-and-sustainability-reports>



<sup>12</sup> Global Reporting Initiative, 2021. Full set of GRI standards 2021. full set of GRI Sustainability Reporting Standards (GRI Standards) from the 2021. [online] Amsterdam. Available at: <https://www.globalreporting.org/how-to-use-the-gri-standards/gri-standards-english-language/> [Accessed 18 March 2022].

<sup>13</sup> UNFCCC (2015) Paris Agreement Available at: <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

Our ambition to align our own greenhouse gas emission reduction strategy with a 1.5°C pathway between 2030 and 2015 requires a scope 1 & 2 reduction of 63 percent and a scope 3 reduction of 37.5 percent. The scope 3 reduction on member milk will be 33 percent and for other categories taken into scope the reduction will be 43 percent, averaging 37.5 percent. See also Appendix A: Accountability.

To improve transparency, FrieslandCampina aligns its pathway with SBTi. We already account for our greenhouse gases in line with the global reporting standard of the GHG protocol<sup>14</sup>. We report on our scope 1 and 2 emissions and our main scope 3 emissions which are from member dairy farmers. In 2022 the GHG protocol is expected to introduce specific guidance on accounting for emissions from Forest, Land-use and Agriculture (FLAG) activities, which we will adopt. SBTi will also introduce specific criteria for FLAG emissions to which we will align our reduction strategy, as most of our scope 3 emissions originate in FLAG sectors (milk production at member dairy farms and many of the raw materials we source). These criteria are expected in 2022. In our SBTi submission these emissions are already included<sup>15</sup>.

Figure 4: 4-step approach

Category CO <sub>2</sub> reduction approach	CO <sub>2</sub> Impact assessment		- Refine emission estimate in order to set target and draft reduction plan (kton CO <sub>2</sub> eq.)
	Target definition		- Set reduction target for the category
	Strategy	GAP analysis	- Assess to what extent existing supplier action already meets the RFC pathway
		Opportunity assessment	Develop CO <sub>2</sub> reduction options based on: <ul style="list-style-type: none"> <li>- Available CO<sub>2</sub> reducing options</li> <li>- Industry leaders in CO<sub>2</sub> reduction initiatives</li> <li>- RFC negotiation position versus supplier and willingness to invest</li> <li>- Willingness of suppliers to commit to a 1.5° pathway and engage in CO<sub>2</sub> reduction initiatives</li> </ul>
Implementation	CO <sub>2</sub> reduction strategy	- Develop & agree on category CO <sub>2</sub> reduction strategy	
	Data	- Develop robust quarterly reporting of activity data & CO <sub>2</sub> emission factors - Bring reporting within scope of limited assurance and include in annual report	
	Measures	- Include measures in strategic plans and plan, roll out, evaluate, adjust	
	Governance	- Embed CO <sub>2</sub> reduction measures in supplier performance monitoring - Bring supplier CO <sub>2</sub> emissions & reduction progress in CDP - Monitor CO <sub>2</sub> emission of category quarterly in the Sustainability Council through reporting	

<sup>14</sup> The GHG Protocol, jointly convened in 1998 by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI), supplies the world's most widely used greenhouse gas accounting standards, <https://ghgprotocol.org>

<sup>15</sup> SBTi expect the criteria to be definitive in Q2 2022, target setting can be done from September 2022 onwards. See <https://sciencebasedtargets.org/resources/files/FLAG-Guidance-Public-Consultation.pdf>, p10 table 2

## Our strategy for a better climate

Our strategy for our priority 'better climate' is built on a robust standardised process with a category-specific approach. We are pursuing a category-specific approach to allow for different maturity levels in value-chain transparency. Figure 4 shows the 4 process steps of this category-specific approach.

In appendix B we explain the process of this standardised 4-step approach for all subcategories.

Figure 5 (data for 2015) shows the maturity level of the emission categories within our inventory and target setting. Over the past reporting years we reported on scope 1 and 2, and scope 3-member milk. As a consequence, reporting, data quality and systems for these scopes are very elaborate, with extensive data sets, supporting plans and implementation.

We have – following our SBTi commitments – recently (2021) expanded both our scoping and our reduction targets. As mentioned, plans have been developed for a large part of these targets. However, compared to the scoping we had been working

on for some time, this is not yet at the same level of rigour. We are developing this to the required level throughout our organisation and beyond to make the data sets as robust as possible to facilitate planning and implementation.

Over the past years we have spent much of our efforts on our direct emissions (scope 1 and 2) and on our largest scope 3 emission source which is milk from the member dairy farmers. We have a thorough emission reduction plan for our own production facilities and an intensive programme to support member dairy farmers in lowering their footprints. For the other scope 3 emissions, we have not yet structurally selected suppliers based on their low-carbon footprint, but we do actively collaborate with suppliers to lower emissions, e.g. with transport companies that collect the milk from member dairy farms. Also, we have agreements with large multinational customers to help lower their total scope emissions. See e.g. our collaboration with Danone.<sup>16</sup>

While extending the scope 3 categories we have in target, we follow category specific reduction strategies as outlined above and we will engage with our suppliers to achieve our goals.

Figure 5: Maturity level emission categories

Emission category	1. Impact assessment		2. Target definition	3. Strategy		4. Implementation
	Impact (Mton Co <sub>2</sub> eq. for 2015)	Data quality		Opportunity assessment	Reduction Plan	
Scope 1 & 2 (marked based) -63%	1.0	●	●	●	●	●
Scope 3-member farmers -33% Raw milk	13.8	●	●	●	●	●
Scope 3-other categories* -43%	~6.2	◐	●	◐	◐	○
Scope 3-not under target	~6.4	◐	○	○	○	○

\* purchased dairy products and basic dairy, packaging, selected raw materials and external production

<sup>16</sup> FrieslandCampina-Danone collaboration: 17 percent greenhouse gas emissions reduction (2022) Available at: <https://www.frieslandcampina.com/news/frieslandcampina-danone-collaboration-17-greenhouse-gas-emission-reduction/>



## Our categories, plans and actions

### Scope 1 and 2

Following the Greenhouse Gas Protocol, our scope 1 emissions are direct GHG emissions that occur from sources that are owned or controlled by our company. We use the operational control approach to consolidate our greenhouse gas emissions. This means subsidiaries or other operations in which we have the full authority to introduce and implement our operational policies are included. Scope 1 includes for example emissions from fuel combustion in our production facilities and processes and the use of Diesel for our member milk transport in the Netherlands, Belgium and Germany. Our scope 2 emissions are the emissions associated with purchased electricity, steam or heat from external sources used for our own use.

Our main processes where scope 1 and 2 emissions occur are:

- Processing of milk into: fresh milk products (including yoghurts etc.), cheese, whey and milk- and whey powder products (including infant food)<sup>17</sup>;
- Milk collection and transport between production facilities.

### Impact assessment and target

The emissions from our scope 1 and 2 originate from the energy requirement in processes described. These processes mainly require natural gas and electricity and to a lesser extent oils and biofuels. Furthermore, we use local sources such as pruning wood, biogas and rice husks in our plants and we were the first commercial company to use pyrolysis oil from renewable sources<sup>18</sup>. Part of our electricity is produced on site.

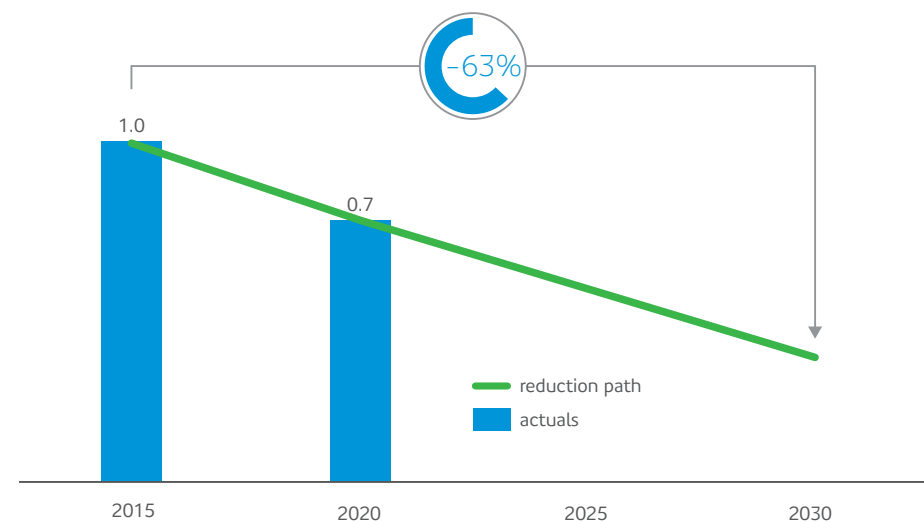
Conform the GHG protocol, emissions in scope 2 are accounted for location- and market based<sup>19</sup>. A location-based method reflects the average emissions intensity of grids on which energy consumption occurs (using mostly grid-average emission factor data). A market-based method reflects emissions from electricity that companies have purposefully chosen. We have a combined target for scope 1 and 2 emissions

where we use a market-based method for scope 2 emissions. Our target is to reduce these emissions by 63 percent in 2030 compared to 2015.

Figure 6 shows the developments in our combined scope 1 and 2 emissions from 2015 to 2020 and the target for 2030 from base year 2015.

Our greenhouse gas emissions have been reported in our CSR Report since 2009 and have been included in our integrated annual report since 2018. From 2015 onwards, our scope 1 and 2 emissions have limited assurance. Our greenhouse gas emissions are also reported to CDP where we received a score of B overall and score of A- for supplier engagement over our 2020 figures. The average score for the Food & Beverage processing industry was a B- according to CDP.

Figure 6: Total emissions scope 1 + 2 'market based' in Mton CO<sub>2</sub> equivalents



<sup>17</sup> FrieslandCampina the sustainable dairy chain (2018). Available at: <https://www.frieslandcampina.com/news/sustainable-dairy-chain/>

<sup>18</sup> FrieslandCampina (2015) Certification Pyrolysis Oil. Available at: <https://www.frieslandcampina.com/news/certification-pyrolysis-oil/>

<sup>19</sup> GHG Protocol Scope 2 guidance (2015)p.8 Available at: [https://ghgprotocol.org/sites/default/files/standards/Scope%20%20Guidance\\_Final\\_Sept26.pdf](https://ghgprotocol.org/sites/default/files/standards/Scope%20%20Guidance_Final_Sept26.pdf) | New Climate Institute (2022) Corporate Climate Responsibility Monitor 2022 p.17. Available at: <https://newclimate.org/wp-content/uploads/2022/02/CorporateClimateResponsibilityMonitor2022.pdf>

*Box 1: Activity data and emission factors used.***Activity data:**

- Energy use for (Milk) processing in plants under management of FrieslandCampina; milk transport related to delivery to FrieslandCampina from member dairy farms (member dairy farms are located in Belgium, the Netherlands and Germany) and between plants in this area;
- Conform GHG protocol activity data is recalculated in case of acquisitions or divestments. Acquisitions are included in the activity data per January 1st after a grace period of one full calendar year following the year of acquisition. Divestments are subtracted after the transfer of operational control for the entire historical timeline;
- Baseline recalculated for acquisition and selling of sites in the period 2015–2021 (China, Pakistan, Russia, Nigeria and the Netherlands) impact not calculated when sites are closed and milk is processed elsewhere in the FrieslandCampina Supply Chain.

**Emission factors scope 1:**

- Emission factors per fuel type, either based on generic figures, country figures or plant-specific figures.

**Emission factors scope 2:**

- Electricity: market-based electricity based on national grid emission factors per country unless renewable energy is used proven with Guarantees of Origin for which the target is to have 100 percent from member dairy farmers. Location-based based on country average grid emission factors;
- A program is in place to use GOO's to reduce the electricity related CO<sub>2</sub> since 2011. In 2021 100 percent of the electricity consumption is from a renewable source of which 50 percent is from FrieslandCampina member dairy farms;
- Heat/steam: specific heat factors per source of heat.
- **Limited assurance** since 2015 (financial year).

Box 1 shows the activity data and emission factors used. Data quality is high and limited assurance on our reporting for scope 1 and 2 has been given since 2015.

**Reduction strategy**

As our scope 1 and 2 emissions have been our focal point for quite some time, we have a solid reduction strategy. Our strategy consists of factory investments to reduce energy consumption and the use of renewable electricity from projects we initiate at the member dairy farms. Since 2015, our renewable electricity consumption has led to a reduction of 0.16 Mton CO<sub>2</sub> equivalents and our scope 1 emissions reduced 0.14 Mton CO<sub>2</sub> equivalents.

Our reduction strategy for the planning period up 2026 is based on a reduction of approximately 49 percent, reducing our emissions to approximately 0.5 Mton CO<sub>2</sub> equivalents. The investment plans for this period have been approved. It is also clear what can be done to reduce emissions even further to our target of 0.37 Mton CO<sub>2</sub> equivalents, in line with SBTi requirements to reduce emissions by 63 percent compared to 2015. The progress of our reduction strategy is affected by supply chain optimisation, which has an important impact on CO<sub>2</sub> emissions. Examples are the announcements we made on 15 March 2022 to merge the Dutch production and logistics for fresh-daily dairy in Rotterdam with the production for fresh-daily dairy in Maasdam and close two milk powder towers in Leeuwarden<sup>20</sup>.

For our renewable electricity strategy, we have a programme in place<sup>21</sup> since 2011. Since 2017 we have supported the member dairy farmers to invest in renewable energy production and by buying their Guarantees of Origin. This enables us to inset emission reductions rather than offsetting them. In 2021, 100 percent of our electricity use was renewable of which 50 percent was generated by the member dairy farmers<sup>22</sup>. It is our target to buy 100 percent of our Guarantees of Origin from member dairy farmers in 2025. With and without the support from our programme, over 3,000 member dairy farmers invested in solar panels, windmills and manure digesters in the period 2010–2021. Together they delivered over 500,000 MWh to

<sup>20</sup> <https://www.frieslandcampina.com/news/frieslandcampina-continuing-to-build-future-proof-and-more-sustainable-production-network/>

<sup>21</sup> FrieslandCampina pays its member directly for their sustainable energy (2020) Available at: <https://www.frieslandcampina.com/news/frieslandcampina-pays-its-member-directly-for-their-sustainable-energy/> | | Annual Report Royal FrieslandCampina N.V p.258

<sup>22</sup> FrieslandCampina completely produced using green electricity generated by farmers (2021) available at: <https://www.frieslandcampina.com/news/campina-completely-produced-using-green-electricity-generated-by-farmers/>

our supply chain in 2021. In addition, an even larger part of that energy is used for their own farms and households.

Figure 7 shows the expected and planned reduction.

### Execution, monitoring and evaluation

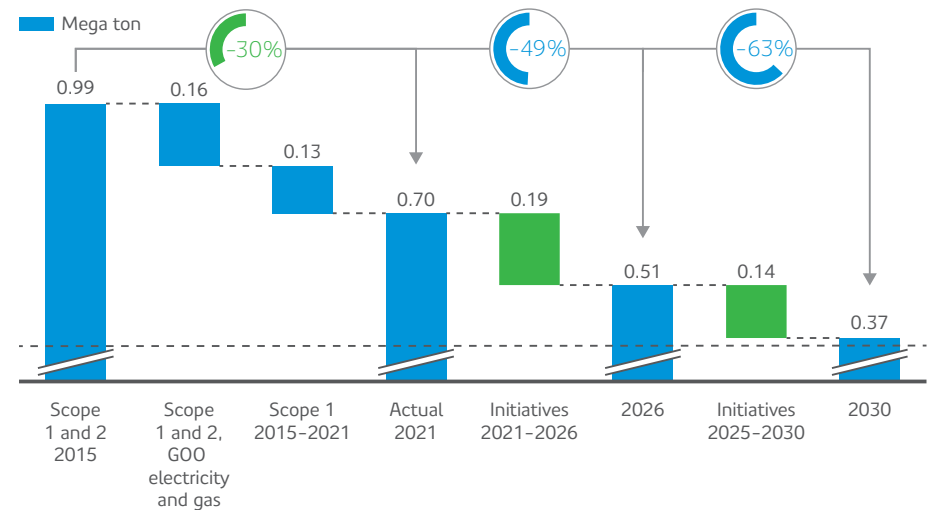
The execution of our 2022–2025 reduction plan is well under way and embedded in business group strategies. The monitoring is done as part of the regular management cycles and via the Sustainability Council. Evaluation and adjustment where necessary is part of the governance process as described in Appendix B.

*Box 2: Elaborates on the reduction options.*

**Reduction plan** in place for 2020–2030, aimed at reducing emissions through:

- Reducing energy consumption by improving energy efficiency through the use of energy management systems, improvements in insulating, lighting, cooling and replacing outdated production processes with more efficient technology;
- Electrification of outdated fuel consuming processes by new technologies like filtration, mechanical vapour recompression and absorption processes;
- Supply chain footprint optimisation worldwide;
- Fossil energy substitution with renewable energy like biogas, pruning wood, rice husks;
- Renewable electricity consumption from electricity produced on FrieslandCampina sites and member dairy farm premises;
- Subsidy schemes for greenhouse gas reductions in the Netherlands and Belgium.

Figure 7: Reduction path scope 1 and 2 in Mton CO<sub>2</sub> equivalents



### Scope 3

The emissions from milk production at member dairy farms form the largest part of our scope 3 emissions. These have been reported in our annual and CSR reports since 2014. Another major contributor are the emissions associated with the procured dairy products (not originating from member dairy farms). These two categories account for approximately two thirds of our scope 3 emissions. These emissions are in our current greenhouse gas inventory and the emissions of milk from member-dairy farms are published in our annual report.

All other scope 3 emissions have been estimated for our SBTi target validation submission in 2021, which requires a 'scope 3 screening'. This estimation was done by using the Greenhouse Gas Protocol tool 'Scope 3 evaluator'<sup>23</sup>. A distinction is made between upstream emissions (all emissions originating from processes from primary production through processing until our 'factory gate') and downstream emissions (all emissions after the products have left our production facilities). Figure 8 shows the emissions for scope 3 for 2020, based on our current inventory and screening.

<sup>23</sup> Scope 3 Evaluator | Greenhouse Gas Protocol (<https://ghgprotocol.org/scope-3-evaluator>)

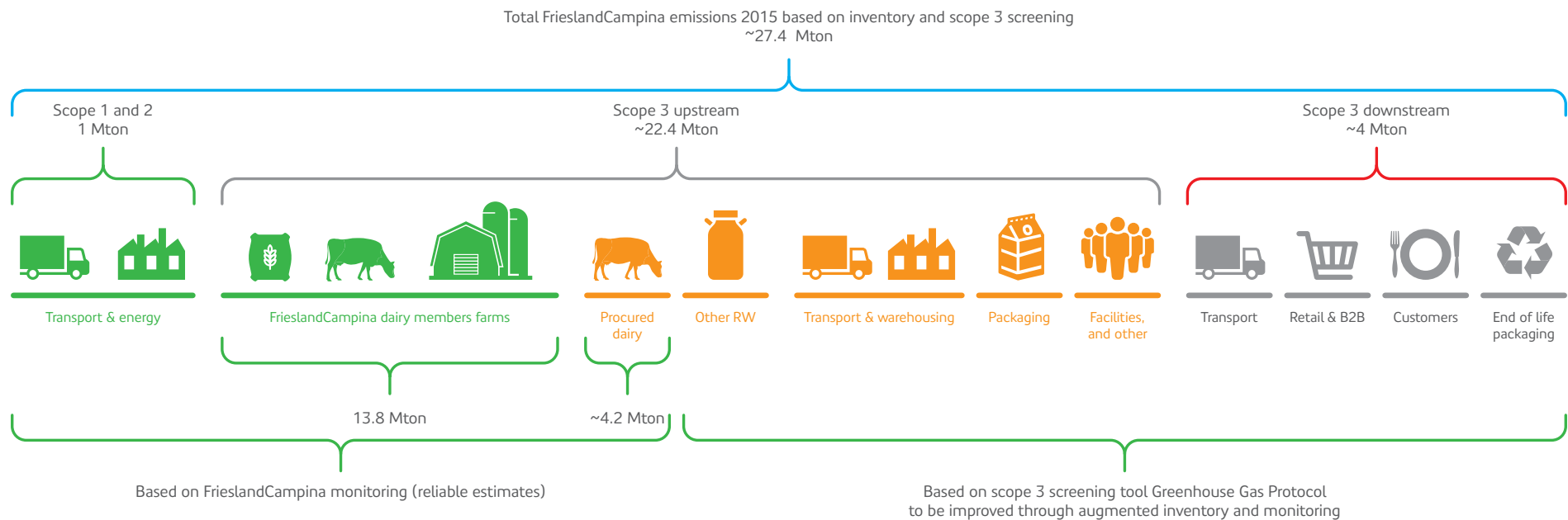
The quality of this inventory is much higher than that of the initial screening. So the emissions reported here for the categories where screening was used will have a high(er) margin of error than the emissions that are already in our inventory. Therefore, an important step is to improve the data quality of the categories.

### Raw milk member dairy farms

We continuously stimulate and support member dairy farmers to lower their emissions in all aspects of their farm. Since 2011 we have supported the member

dairy farmers who want to invest in the production of renewable energy through solar panels, windmills and manure digesters<sup>24</sup>. In 2017 we made a carbon footprint calculation model available to all member dairy farmers. This enables them to see what greenhouse gases are emitted for the production of a kilogramme of milk, from cradle to farm gate. Using this model was made mandatory for member dairy farmers in the 2018 financial year, and in the 2019 financial year we started rewarding farmers for results achieved. This carbon footprint model is consistent with the IDF protocol<sup>25</sup> and for the carbon footprint calculation follows the EU PEF Dairy Category Rules<sup>26,27</sup>. See Appendix A: Accountability for elaboration on carbon footprint calculations.

Figure 8: Greenhouse gas emissions (2015) throughtout the FrieslandCampina value chain



<sup>24</sup> <https://www.frieslandcampina.com/news/frieslandcampina-dairy-farmers-generate-a-record-amount-of-sustainable-energy/>

<sup>25</sup> IDF (2015) A common carbon footprint approach for the dairy sector - The IDF guide to standard life cycle assessment methodology. Available at : <https://shop.fil-idf.org/products/a-common-carbon-footprint-approach-for-the-dairy-sector-the-idf-guide-to-standard-life-cycle-assessment-methodology>

<sup>26</sup> [https://ec.europa.eu/environment/eussd/smgp/pdf/PEFCR-DairyProducts\\_2018-04-25\\_V1.pdf](https://ec.europa.eu/environment/eussd/smgp/pdf/PEFCR-DairyProducts_2018-04-25_V1.pdf)

<sup>27</sup> CO<sub>2</sub> Emissions from peat oxidation are not yet available at individual farm level and are for now excluded in the model for our farmers. Will be made available when the Dutch National Inventory Authority is able to provide this data on a parcel level. Expected in 2024

Furthermore, we have provided member dairy farmers with tools to get better insight in how the footprint is built up and what mitigation options are available.

We also provided them with decision support models that show the expected impact of available mitigation options<sup>28</sup>, see also box 4. With pilot groups of member dairy farmers<sup>29</sup> we have been exploring mitigation options since 2016, and shared the knowledge with all other member dairy farmers and other farmers in the Netherlands<sup>30</sup>.

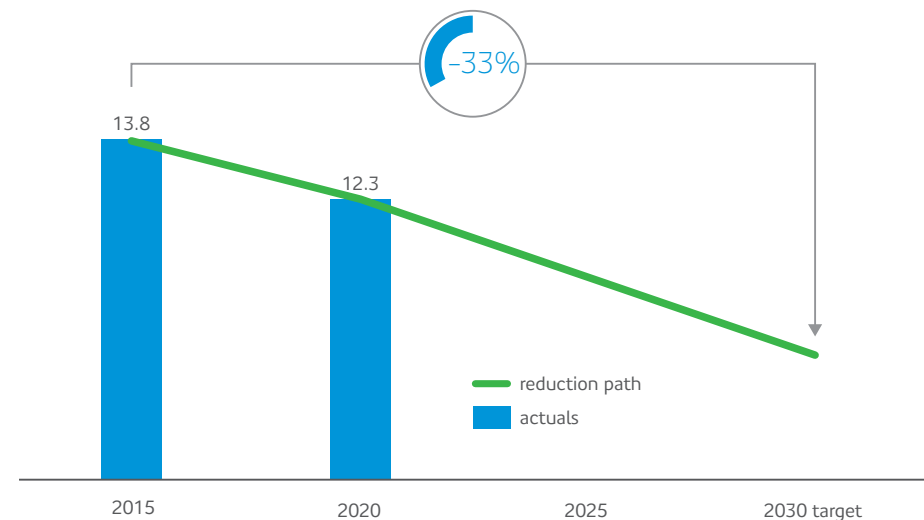
We are not doing this on our own. For example, in 2019 we started a workshop programme where external advisors help member dairy farmers choose a reduction path that would suit their farms best. Approximately 4,000 member dairy farmers have been involved in these workshops, meetings and webinars. Our R&D department is involved in these pilots and has a team fully dedicated to sustainability. They provide the necessary tools (carbon footprint module, decision support tools) and identify potential mitigation options, and they also assist in the concept testing and market introductions for them. And finally, we partner with other chain actors (both suppliers, e.g. feed companies, and customers) in setting up pilots and programmes.

### Impact assessment and target

The vast majority of emissions that occur in dairy production are from a biogenic origin: emissions from fermentation of grass and other feed in the rumen/digestive system of the cow (CH<sub>4</sub>), emissions from manure storages (CH<sub>4</sub> and N<sub>2</sub>O), emissions from the soil (N<sub>2</sub>O) and emissions from soil processes (oxidation, but also removals of CO<sub>2</sub>). Emissions from soil and soil processes are related to cultivating crops for feed, like grass and others. Approximately 4 percent of the total emissions per kg milk are CO<sub>2</sub> emissions from energy use on farm, including diesel for traction (derived from Doornewaard et al 2021<sup>31</sup>). Another 4–20 percent is associated with the production of feed and other production materials, including land-use change emissions for feed production.

Figure 9 shows the development in emissions since 2015 (in Mton CO<sub>2</sub> eq.) The reduction target for milk from the member dairy farms is 33 percent in 2030 compared to 2015.

Figure 9: Total emissions scope 3-member milk in Mton CO<sub>2</sub> equivalents



The emissions from the production of milk at member dairy farms are scope 3. They have been featured in CSR reports since 2014 and in our integrated Annual Report since 2018, and they are also reported to CDP. Box 3 shows the activity data and emission factors used. Data quality is high and limited assurance on our reporting has been given since 2015.

<sup>28</sup> FrieslandCampina introduceert als eerste in de wereld maatwerk duurzaamheidstool voor leden-melkveehouders (2020) Available at: [Launch of first tailor-made sustainability tool | FrieslandCampina](#)

<sup>29</sup> FrieslandCampina joins forces to reduce emissions from Dutch cows (2020). Available at: <https://www.frieslandcampina.com/news/frieslandcampina-joining-forces-reduce-emission-dutch-cows/>  
<https://vruchtbarekringloopachterhoek.nl/opzet-project/melk-klimaat/>

<sup>30</sup> <https://www.zuivelnl.org/uploads/images/Duurzaamheid/Kennisdocument-DZK-broeikasgassen.pdf>

<sup>31</sup> <https://www.zuivelnl.org/uploads/images/Sectorrapportage-Duurzame-Zuivelketen-2019.pdf> p 67 table 2.4

### Box 3: Activity data and emission factors used

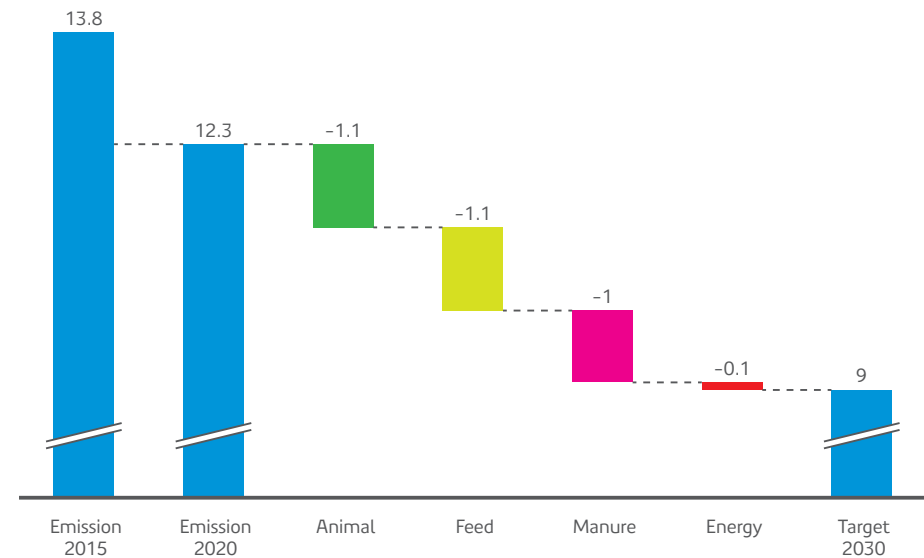
- **Activity data:** milk delivery to FrieslandCampina from member dairy farms (member dairy farms are only located in Belgium, Netherlands and Germany);
- **Emission factor:**
  - Emission per kg 'Fat and Protein Corrected Milk';
  - Cradle to farm gate in accordance with IDF and PEF CR protocol. calculated by WEcR for Dutch Dairy sector\* and FrieslandCampina R&D.
- **Limited assurance** since 2015 (financial year).
- **Improvements:** we plan to shift emission monitoring of scope 3 member dairy farms from WEcR based calculation to more detailed Central Database KringloopWijzer based calculation per financial year 2022, if limited assurance is feasible.

\* see <https://www.zuivelnl.org/uploads/images/Sectorrapportage-Duurzame-Zuivelketen-2019.pdf>

### Reduction strategy

As the emissions for milk production at member dairy farms have been monitored for quite some time, we have been able to set a reduction path that is clear and ambitious. Mitigation options are available, and it is possible to assess the impact that these will have. We have an incentive system in place (Foqus planet<sup>32</sup>) and are partnering to further incentivise members to take action. The potential for reduction is shown in figure 10.

Figure 10: Reduction path options scope 3-member milk in Mton CO<sub>2</sub> equivalents



<sup>32</sup> FrieslandCampina Foqus planet : FrieslandCampina's quality and sustainability programme for all member dairy farmers. Available at: <https://www.frieslandcampina.com/our-farmers/foqus-planet/>

Box 4 elaborates on the reduction path with reduction options.

Where investments on farms are concerned, several mitigation options need additional funding to create a decent business model for farmers. We will make use of the existing Foqus planet system to reimburse farmers who implement mitigation options. The reimbursement in part will have to come from market valorisation through the sales of low carbon products. Furthermore, we anticipate that governmental support through subsidies (fiscal, exploration, investment or divestments) could speed up the implementation process.

#### Execution, monitoring and evaluation

Execution of the reduction plan is under way. Monitoring of KPIs is part of the current management cycles. Evaluation and adjustment where necessary are part of the governance process as described in Appendix B.

#### Box 4: Elaborates on the reduction options

- **Feed:** Feed: land-use-conversion-free feed, less dependency on compound feed for protein, better digestibility of feed, lower emissions in cultivation;
- **Animal:** breeding programmes (not all cows on the same feed ration emit the same amount of methane, the trait is hereditary) & feed supplements (inhibiting methane production in the rumen);
- **Housing systems and manure management:** anaerobic digestion, methanogen inhibition, methane oxidation;
- **Energy use:** renewable energy production on farm, use of surplus renewable energy in FrieslandCampina supply chain;
- **Incentives:** Foqus planet quality system, sustainability fund to help farmers invest in reduction is being created.

### Scope 3 'Other': scope 3 categories with a target for reduction in 2030 compared to 2015

A large part of our scope 3 upstream emissions, from milk production on the member dairy farms, is fully mapped and monitored, and reduction plans are already implemented and active. Next to these emissions there are other scope 3 emissions in our value chain. FrieslandCampina has set targets for the categories with the highest upstream emissions.

We will focus our efforts on the following categories:

- Procured dairy and -dairy products;
- Packaging materials;
- External manufacturing;
- Selected raw materials.

Greenhouse gas emissions in these categories are:

- For procured dairy products: similar to emissions from production of milk at member dairy farms and processing of dairy products (produced dairy products);
- For packaging: the emissions from packaging production, calculated 'cradle to gate'. This includes extraction (ore, oil, bio-source etc.), refinery, transport and processing;
- For external manufacturing: the emissions of dairy production (cradle to farm gate) for non-member milk and emissions from processing and transport;
- For raw materials sugar: emissions from cultivation and land use (cradle to farm gate) and processing.

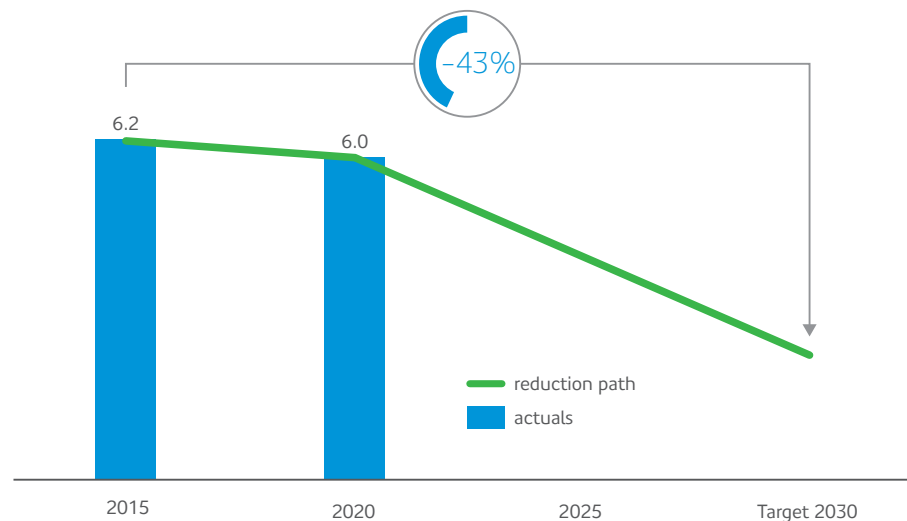
#### Impact assessment

The emissions in this category amounted to approximately 6 Mton in 2020 and were slightly higher in 2015. Actual emission data differs per subcategory. For procured dairy and dairy products (total emission was approx. 4.2 Mton in 2015) data quality is reasonable. For the other subcategories the scope 3 evaluator was used to assess greenhouse gas emissions based on economic intensity and expenditure data.

## Target

The target for the categories in scope as defined above is to reduce emissions by 43 percent in 2030 compared to 2015.

Figure 11: Total emissions scope 3–other in Mton CO<sub>2</sub> equivalents



## Reduction strategy

The reduction strategy for this category is currently being developed, and we are still improving our benchmarks to assess which suppliers to engage with first in order to be most effective in reducing emissions. This goes for all subcategories. We have identified our largest suppliers, who have also committed to SBTi, such as several packaging companies.

In addition, we are developing multi-year programme with Dairy Development to support dairy farms abroad in their development towards more sustainable dairy farming (like training on sustainable farmer practices, building local value chains). This gives us the confidence that we have set an achievable goal for this category.

## Improve local dairy value chains

In the **procured dairy and dairy products** category, opportunities lie with ensuring that non-member suppliers of raw milk in Belgium, Germany and the Netherlands follow the same reduction path as we expect from the member dairy farmers. For processed dairy products we expect to be able to select best-in-class suppliers. Part of the procured dairy is the local sourcing of dairy in eight countries. In these countries, FrieslandCampina sources dairy from local suppliers, these often are smallholder farmers. The global Dairy Development activities started in 2014. The global and local teams work together to structurally provide knowledge to and improve the livelihoods of local dairy farmers, building on programmes that started already back in the 1980s. Just as with the member dairy farmers we look to provide local dairy farmers with the knowledge and tools required for good farming practices (including environmentally sustainable farming), as well as a good income so that they are able to produce good-quality nutrition while protecting the balance of the planet.

The dairy development activities can be subdivided into five main building blocks:

- Training (60,000–70,000 farmers per year) on topics that cover milk quality, animal health, farm management, feeding, breeding, finance and environmental sustainability, and more;
- Day-to-day support for farmers with advice on farm management, milk quality and milk production. And with that increase their income;
- Providing farmers with access to markets by building and managing milk collection infrastructures from farm to factory;
- Building partnerships with knowledge institutes (local and international), governments and (local) industry to accelerate progress on set targets and furthering the joint purpose of developing the local dairy sector;
- Increase local milk intake at local factories and process milk into healthy and nutritious products for the local consumers. Specific projects are executed to for instance build (model) farms, reduce heat stress in cows, improve milk quality, invent new ways of training, develop ways of data collection, build microfinancing constructions, reduce environmental impact, etc.



Through this programme we are able to help farmers reduce greenhouse gas emissions. The local teams will develop country specific reduction plans, as farm structure, local circumstances and the opportunities to reduce can differ per country and/or area.

### Circular and fossil free packaging

Next to procured dairy, **packaging material** is a relevant source of greenhouse gas emissions.

We believe packaging should be circular, in order to reducing the amount of waste and emissions. Our entire packaging portfolio must be reusable or recyclable by 2025. Our goal is to have our packaging circular and free of fossil fuel emissions by 2050.

Currently our products are packed in a range of different packaging formats such as beverage cartons, bags, cans (tin, aluminium), plastic bottles, pouches (plastic and aluminium foils) and glass. In weight percentage, most volume is in the first three packaging types. To improve the sustainability of our packaging we are focusing on improving recyclability, sourcing sustainably (e.g. lowering the use of virgin plastics) and limiting waste and pollution.

To track our progress on recyclability and emissions, FrieslandCampina developed a tool called RESPACKT<sup>33</sup> which measures the packaging sustainability performance and facilitates target setting. In 2021, 90 percent of our entire packaging portfolio was recyclable and/or designed for recycling.

We collaborate with different stakeholders along the value chain to be able to drive the needed change. We are part of several consortia (e.g. Filigrade CurvCode<sup>34</sup>) and have signed commitments to organisations such as the Ellen MacArthur Foundation and the associated Plastic Pact NL and European Plastic Pact. With our brand Alaska, we set up a recycling infrastructure in the Philippines together with partners to collect and recycle flexible plastics into construction materials<sup>35</sup>.

For the other categories with a reduction target, we see that suppliers involved have their own strategies to reduce emissions. Both our external manufacturers and in the case of procured dairy products, most suppliers are involved in the transition towards renewable energy and electrification. The reduction options for these suppliers are similar to that of FrieslandCampina for scope 1 and 2 emissions, although the speed of reduction can be different.

For packaging and external manufacturing our main suppliers also either already have net-zero commitments and ambitious reductions plans validated by SBTi for a net-zero or 1.5 degree scenario or are in the process thereof. Especially in our packaging category, about a third of our expenditure goes to suppliers with SBTi commitments. Following this commitment we can expect that their scope 1 and 2 reductions will be in line with our 1 and 2 reductions, and additional reduction can be expected from their scope 3.

### Investments

Realisation of FrieslandCampina's climate plan will over the current decade and beyond require substantial additional investment in terms of time, money and resources. FrieslandCampina is committed to achieving the goals of this climate plan and is expecting an additional investment of approximately 1.5 billion euros until 2030. The company will seek to finance a proportion of this through pricing for sustainably produced dairy, and through general means such as current government subsidies and financial support from government funds.

### Offsetting

In our reduction plans we do not include offsetting at this point.

<sup>33</sup> See for more info <https://www.youtube.com/watch?v=CnYlNKtX4Gc>

<sup>34</sup> [Coalitie Food2Food 2.0 | FiliGrade, a watermark solutions company](#)

<sup>35</sup> <https://www.alaskamilk.com/purpose/newsroom/alaska-milk-and-dg-pacific-team-up-to-establish-multi-layered-plastic-upcycling-facility-in-the-philippines/>

# Appendices

## Appendix A

### Accountability

In this appendix we elaborate on technicalities, protocols and standards that are relevant for monitoring, reporting and acting on reducing greenhouse gases.

We will address:

- A) How we report as FrieslandCampina
- B) How Greenhouse Gas Protocol and SBTi work and why we use that protocol and are committed to Science Based Targets
- C) Life Cycle Assessment and Carbon Footprint
- D) Biogenic emissions and Global Warming Potential
- E) Scope 3 emissions: complexity

#### A. FrieslandCampina annually reports the sustainability performance in an integrated report

FrieslandCampina produces an integrated annual report in which it reports on strategy, policy, objectives and performance relating to sustainability. Transparency about efforts and progress relating to sustainability is currently voluntary.

#### GRI

For the preparation of the sustainability information we use the Sustainability Reporting Standards of the Global Reporting Initiative (GRI), as they are widely used by companies both within and outside the dairy sector.

##### On GRI:

*"GRI (Global Reporting Initiative) is the independent, international organisation that helps businesses and other organisations take responsibility for their impact, by providing them with the global common language to communicate that impact. We provide the world's most widely used standards for sustainability reporting – the GRI Standards.*

*The GRI Secretariat is headquartered in Amsterdam, the Netherlands, and we have a network of seven regional offices ensuring we can support organisations and stakeholders worldwide*

*We work with businesses, investors, policymakers, civil society, labour organisations and other experts to develop the GRI Standards and promote their use by organisations around the world.*

*With thousands of reporters in more than 100 countries, the Standards are advancing the practice of sustainability reporting, and enabling organisations and their stakeholders to take action and make better decisions that create economic, environmental and social benefits for everyone."*

Source: GRI – About GRI ([globalreporting.org](https://www.globalreporting.org)) accessed 31 March 2022

See for the standards available <https://www.globalreporting.org/how-to-use-the-gri-standards/resource-center/>

For the GRI standards used by FrieslandCampina in our annual report see, p249-256) <https://www.frieslandcampina.com/uploads/2022/03/FrieslandCampina-Annual-Report-2021.pdf>

#### CSRD

Although CSRD will only become mandatory as of the 2023 reporting year, FrieslandCampina is already improving its annual reporting on environment, society and management. For example, over the course of 2021, several structural changes were introduced in terms of policy, implementation and managing sustainability goals. Furthermore, a new Director of Sustainability has been appointed. With this organisation structure FrieslandCampina has created the necessary conditions for expeditiously addressing policy and implementation, and responsibilities are more firmly embedded within the company. See appendix B for more information on the sustainability governance within FrieslandCampina.

#### Corporate governance

Royal FrieslandCampina N.V. applies the principles of the Dutch Corporate Governance Code on a voluntary basis. See for more information [The Dutch Corporate Governance Code | Monitoring Commissie Corporate Governance \(mccg.nl\)](#)

## IFRS

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards as endorsed by the European Union (EU-IFRS). Where applicable, these also comply with the financial reporting requirements included in Part 9 of Book 2 of the Dutch Civil Code.

## B. Greenhouse Gas Protocol, SBTi and CDP

FrieslandCampina aims to be transparent about what we do well as well as what we should do better. And we understand that we should substantiate what we say. Therefore we have asked our accountant to review our progress and audit where possible. For monitoring greenhouse gas emissions we use greenhouse gas protocol.

### GHG Protocol:

*"GHG Protocol establishes comprehensive global standardised frameworks to measure and manage greenhouse gas (GHG) emissions from private and public sector operations, value chains and mitigation actions.*

*Building on a 20-year partnership between World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), GHG Protocol works with governments, industry associations, NGOs, businesses and other organisations*

### History

*GHG Protocol arose when WRI and WBCSD recognised the need for an international standard for corporate GHG accounting and reporting in the late 1990s. Together with large corporate partners such as BP and General Motors, in 1998 WRI published a report called, "Safe Climate, Sound Business". It identified an action agenda to address climate change that included the need for standardised measurement of GHG emissions.*

*Similar initiatives were being discussed at WBCSD. In late 1997, WRI senior managers met with WBCSD officials and an agreement was reached to launch an NGO-business partnership to address standardised methods for GHG accounting. WRI and WBCSD convened a core steering group comprised of members from environmental groups (such as WWF, Pew Center on Global Climate Change, The Energy Research Institute) and industry (such as Norsk Hydro, Tokyo Electric, Shell) to guide the multi-stakeholder standard development process.*

*The first edition of the Corporate Standard, published in 2001, has been updated with additional guidance that clarifies how companies can measure emissions from electricity and other energy purchases, and account for emissions from throughout their value chains. GHG Protocol also developed a suite of calculation tools to assist companies in calculating their greenhouse gas emissions and measure the benefits of climate change mitigation projects.*

*The Paris Agreement, adopted within the United Nations Framework Convention on Climate Change (UNFCCC) in December 2015, commits all participating countries to limit global temperature rise, adapt to changes already occurring, and regularly increase efforts over time. GHG Protocol is developing standards, tools and online training that helps countries and cities track progress towards their climate goals.*

### GHG Standards

*The standards below are designed to provide a framework for businesses, governments, and other entities to measure and report their greenhouse gas emissions in ways that support their missions and goals.*

*In 2016, 92 percent of Fortune 500 companies responding to the CDP used GHG Protocol directly or indirectly through a programme based on GHG Protocol. It provides the accounting platform for virtually every corporate GHG reporting programme in the world".*

*Source: About Us | Greenhouse Gas Protocol ([ghgprotocol.org](https://ghgprotocol.org)) accessed 31 March 2022*

**SBTi**

Given the stakes at hand, it is also clear that we have our climate targets being evaluated and verified by an independent third party. We chose to commit to the Science Based Target initiative. SBTi assess whether companies' climate target of companies meet the requirements to limit global warming.

**Science Based Targets initiative**

*the text in this box is quoted from: SBTi (2019): Foundations of Science-based Target Setting Version 1.0 April 2019, p6-8 <https://sciencebasedtargets.org/resources/files/foundations-of-SBT-setting.pdf>*

*"The Science Based Targets initiative (SBTi) drives ambitious climate action in the private sector by enabling companies to set greenhouse gas emissions reduction targets aligned with what climate science shows is required to prevent catastrophic climate change. Founded in 2015, the SBTi is a partnership between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). The SBTi call to action is one of the We Mean Business Coalition commitments. By guiding companies' target setting, the initiative enables businesses to tackle global warming while seizing the benefits and boosting their competitiveness in the transition to a net-zero economy. In addition to providing clear criteria and a step-by-step process for all businesses, the SBTi provides tailored guidance for specific sectors such as power generation and finance.*

*Central to the Science Based Targets initiative's (SBTi) mission is ensuring that companies have the tools they need to set targets in line with climate science, recognizing that the science itself is nuanced and dynamic. Due to the complexity of the science, the SBTi plays an important role by conducting in-depth research and analysis, as well as consulting with scientists and sustainability professionals, in order to develop science-based target (SBT) setting methods that are transparent, robust, and actionable.*

**Target Setting approaches**

*Methods endorsed by the SBTi are instructive frameworks that may be used by companies to set emissions reduction targets consistent with the best available climate science. These methods are constructed from three main elements: a greenhouse gas (GHG) budget, a set of emission scenarios, and an allocation approach. The SBTi's procedure for developing a method begins with determining a representative set of emissions scenarios that are considered plausible, responsible, objective, and consistent and that are aligned with a specific temperature goals (1.5°C or WB-2°C of global warming). In general, SBTi scenarios must not exceed the GHG budget associated with the temperature goal prior to reaching global net-zero emissions, in addition to meeting other criteria. An allocation approach is used to translate the resulting global or sector-specific emissions pathway into practical requirements that align company emissions with the pathway.*

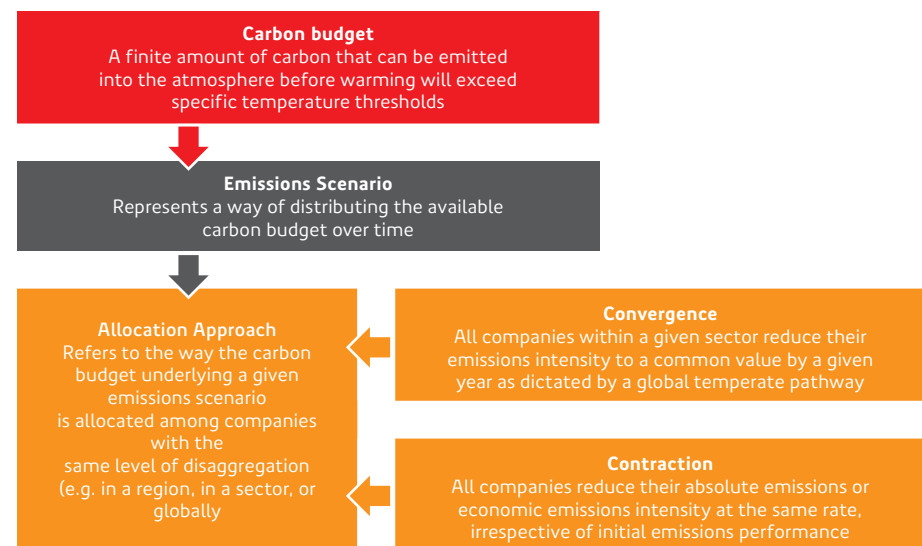


Figure 12: Schematic of target-setting elements (please note that the SBTi uses GHG budgets, instead of carbon budgets, where applicable)

### GHG budgets

A GHG budget is an estimate of the cumulative CO<sub>2</sub>, methane, and other Kyoto gases that can be emitted over a period of time, while limiting temperature rise to a specific amount. Budget calculations are highly sensitive to assumptions regarding climate sensitivity and likelihood of temperature outcome, despite the apparent simplicity. For target-setting purposes, the chosen GHG budget is secondary to emissions scenarios themselves, which provide more relevant information such as reduction rates over time. However, the two elements are closely related, as most emissions scenarios rely either directly or indirectly on a GHG budget. The SBTi incorporates the concept of a GHG budget into its assessment criteria for different emissions scenarios and allocation approaches.

### Emissions scenarios

Although it is not possible to predict when and to what extent GHGs will be emitted in the future, scenarios provide us with insight into how emissions reductions could be achieved under a variety of socioeconomic and political conditions, while conserving a net GHG budget. In some scenarios, cumulative emissions surpass the budget and must then be reduced by a greater amount to meet the desired temperature goal by 2100 (emissions and/or temperature overshoot).

SBTi scenarios are drawn primarily from the Integrated Assessment Modelling Consortium (IAMC) and the International Energy Agency (IEA). The IAMC hosts an ensemble of more than 400 peer-reviewed emissions pathways, which have been compiled and assessed by the authors of the Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5°C (SR15); and the IEA publishes its own scenarios regularly, which provide a greater amount of sectoral granularity. These scenarios vary depending on assumptions made about population, policy trajectories, and economic growth; technological advances and their cost-effectiveness; and, of course, temperature outcomes. Many newer scenarios have been developed to reflect five different Shared Socioeconomic Pathways (SSPs), which represent diverse assumptions related to the achievement of sustainable development goals (SDGs), the extent of future

fossil fuel reliance, and the degree of global coordination. A more detailed discussion of scenarios can be found in the following sections.

### Allocation approach

An allocation approach refers to the way the carbon budget underlying a given emissions scenario is allocated among companies with the same level of disaggregation (e.g., in a region, in a sector, or globally). The SBT-setting methods referenced in this manual use two main approaches to allocate emissions at a company level:

1. *Convergence*, where all companies within a given sector reduce their emissions intensity to a common value by some future year as dictated by a global emissions pathway (e.g., the emissions intensity of all electric power companies converges to a maximum of 29 g CO<sub>2</sub>e per kWh of electricity in 2050). The reduction responsibilities allocated to a company vary depending on its initial carbon intensity and growth rate relative to those of the sector, as well as the sector-wide emissions intensity compatible with the global emissions pathway. The convergence approach can only be used with sector-specific emissions scenarios and physical intensity metrics (e.g., tonnes GHG per tonne product or MWh generated).
2. *Contraction*, where all companies reduce their absolute emissions or economic emissions intensity (e.g., tonnes GHG per unit value-added) at the same rate, irrespective of initial emissions performance, and do not have to converge upon a common emissions value. The contraction approach can be used with sector-specific or global emissions scenarios.

The SBTi endorses the Sectoral Decarbonization Approach (SDA), which employs the IEA ETP sector budgets, for physical intensity targets and the absolute contraction approach for absolute targets.

*In theory, the contraction approach can also be used to determine economic intensity targets. The greenhouse gas emissions per unit of value added (GEVA) method equates a carbon budget to total GDP and a company's share of emissions is determined by its gross profit, since the sum of all companies' gross profits worldwide equate to global GDP. However, applicability of this method is currently restricted to modelling of scope 3 targets, as it may not constrain global emissions to a specified budget in its current formulation."*

Source: <https://sciencebasedtargets.org/resources/files/foundations-of-SBT-setting.pdf>, p6-8

## CDP

FrieslandCampina has reported its greenhouse gas emissions to CDP annually since 2013. CDP uses standardised formats for reporting, making it possible for members of CDP to follow the progress on reduction. FrieslandCampina customers request FrieslandCampina to report to CDP and can view the reports. As part of our commitment to SBTi we will make the reports to CDP public per 2022.

From <https://www.cdp.net/en/info/about-us>

*CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts. The world's economy looks to CDP as the gold standard of environmental reporting with the richest and most comprehensive dataset on corporate and city action.*

*In Europe, CDP Worldwide (Europe) GmbH is a charitable limited liability company headquartered in Berlin, Germany, registered on the EU Transparency Register since 2012. It is a wholly owned subsidiary of CDP Europe AISBL, a charity based in Brussels, Belgium (together: "CDP Europe").*

## C. Life Cycle Assessment and Carbon Footprinting

Life Cycle Assessment (LCA) is a methodology for the evaluation and quantification of the environmental impact of a product or service. LCA evaluates the whole supply chain from cradle-to-grave on multiple environmental impact categories. One of these categories is the impact on global warming or the carbon footprint. When performing an LCA or carbon footprint study there are several international standards to adhere to, which become more stringent as they become more specific:

- ISO 14040/14044      --> General guidelines on how to perform an LCA
- ISO/TS 14067        --> Standard on how to perform a product carbon footprint
- IDF 479/2015<sup>36</sup>     --> Guideline on carbon footprinting for dairy products
- PEFCR dairy<sup>37</sup>      --> Standard on how to perform LCA for dairy protein a PEF context

FrieslandCampina performs LCA and carbon footprint studies for many of its products and conforms to the standards listed above, when applicable within the goal and scope of the study.

## D. Biogenic emissions and Global Warming Potential

### Biogenic emissions

Most of the emissions in our value chain come from the production of feed or food through biological processes, in the soil (soil processes, cultivation, uptake of fertilisation; both emissions and removals of greenhouse gases), in the cows or other animals (digestion of feed) and in manure management (fermentation or rotting processes in storage). These emissions can be lowered but not fully stopped. Therefore, the long term aim will not be to get to zero emissions in these sources, but to a balance between emission and removal.

<sup>36</sup> IDF (2015) A common carbon footprint approach for the dairy sector - The IDF guide to standard life cycle assessment methodology. Available at: <https://shop.fil-idf.org/products/a-common-carbon-footprint-approach-for-the-dairy-sector-the-idf-guide-to-standard-life-cycle-assessment-methodology>

<sup>37</sup> See [https://ec.europa.eu/environment/eussd/smgp/pdf/PEFCR-DairyProducts\\_2018-04-25\\_V1.pdf](https://ec.europa.eu/environment/eussd/smgp/pdf/PEFCR-DairyProducts_2018-04-25_V1.pdf)

## Global Warming Potential

In the monitoring of the Climate Treaty the contribution of greenhouse gases to global warming is expressed in Global Warming Potential of a greenhouse gas, and for a 100 year timeframe ('GWP100'). The LCA standards we use state that the GWP has to be based on the latest scientific insights. For the analysis of scope 3 emissions from member dairy farms and procured dairy in this report, the 5th Assessment Report by IPCC GWPs were followed by EU PEFCR Dairy. Resulting in the GWPs of 34 (including carbon feedback) for CH<sub>4</sub> and 298 for N<sub>2</sub>O.

In the 6th Assessment Report by IPCC the GWPs are lowered to 27.2 for biogenic CH<sub>4</sub> and 273 for N<sub>2</sub>O. These new GWPs will be implemented in the standards and by FrieslandCampina.

In the 6th Assessment Report by IPCC, alternative metrics are discussed that are relevant to our scope 3 emissions. GWP\*<sup>38</sup> takes into account the shorter lifespan of methane compared to other greenhouse gases such as CO<sub>2</sub> and N<sub>2</sub>O. Reduction of biogenic CH<sub>4</sub> emissions would result in a much lower contribution to global warming. If the 'GWP\*' would be implemented in the UNFCCC, reaching net-zero emissions, we will re-calibrate this impact. Until then, we will follow the IPCC/UNFCCC GWP100s.

## E. Scope 3 emissions: complexity

We are committed to reducing scope 3 emissions across a broader range of categories but at the same time we need to recognise that influencing all emission sources in scope 3 is difficult. The challenges with setting realistic emission reduction targets in this area relate to the inherent control and ownership structures that make it difficult to reduce these emissions. Food is produced and consumed in systems and can generally be labelled as complex supply chains, in which a wide range of different actors are involved (Brunori et al., 2017)<sup>39</sup>. These actors and their activities interact at the individual as well as the system level. Therefore, performing a solid, extensive, and concrete root-cause analysis on direct emissions, and linking these to specific actors or activities can be a challenge (Zurek, et al. 2018; Rutten, et al. 2018)<sup>40</sup>. Collaboration and closeness are important factors for the development of sustainable supply chains. When joining collective global action initiatives there will be better insights in tracking and tracing systems for the whole value chain (Wognum, 2011)<sup>41</sup>. That's why FrieslandCampina works with stakeholders, peers and customers on the development of lifecycle assessment systems to measure carbon footprints across our dairy value chain and make this footprint more comparable, thus enabling a level playing field<sup>42</sup>.

<sup>38</sup> <https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/>

<sup>39</sup> Forster, P., et al 2021, The Earth's Energy Budget, Climate Feedbacks, and Climate Sensitivity. p 7-123. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change <https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/>

<sup>40</sup> Brunori, G. et al. Creating Resilient Food Systems for Enhancing Food and Nutrition Security; TRANSMANGO: EU KBBE.2013.2.5-01 Grant Agreement No. 613532; TRANSMANGO: Leuven, Belgium, 2017

<sup>41</sup> Rutten, M. et al. Metrics, models and foresight for European sustainable food and nutrition security: The vision of the SUSFANS project. *Agric. Syst.* 2018, 163, 45-57. [CrossRef]  
Zurek, Monika, et al. "Assessing sustainable food and nutrition security of the EU food system—an integrated approach." *Sustainability* 10.11 (2018): 4271.

<sup>42</sup> Wognum, P. N., Bremmers, H., Trienekens, J. H., Van Der Vorst, J. G., & Bloemhof, J. M. (2011). Systems for sustainability and transparency of food supply chains—Current status and challenges. *Advanced engineering informatics*, 25(1), 65-76.

<sup>43</sup> <https://dairysustainabilityframework.org/newsroom/new-lca-based-methodology-for-calculating-carbon-sequestration-released/>

## Appendix B

### Governance and disclosure procedure

Sustainability is part of our company's purpose. As such FrieslandCampina's Executive Board, supervised by the Supervisory Board, has final responsibility for FrieslandCampina's sustainability policy. The Supervisory Board is supported by the Supervisory Board Sustainability Committee. This committee supports the Supervisory Board in fulfilling its oversight responsibilities in relation to sustainability. The development and coordination of the policy and the execution of the program are the responsibility of the Corporate Sustainability department.



Furthermore, there are the Sustainability Review meeting, which consists of representatives from corporate departments and the business groups, and the Sustainability Council, which consists of members of the Executive Board, Executive Leadership Team and functional representatives. The Sustainability Review Meeting meets once every 4 weeks, the Council meets once every 6 weeks. The deliverables of the Sustainability Council consist of reviewing and guiding strategy, approval of major plans of action, risk management policies, annual budgets and business plans. Furthermore, the Council is tasked with proposing performance objectives, which are signed off by the Executive Board and approved by the Supervisory Board.

## Appendix C

### Our strategy for a better climate

Our strategy for our priority 'better climate' is built on a robust standardised process with a commodity specific approach. We are pursuing a category-specific approach to allow for different maturity levels in value-chain transparency and current action. Figure below shows the 4 process steps of this category-specific approach. The first step of the process consists of an impact assessment for the specific source

Figure 13: 4-step approach

Category CO <sub>2</sub> reduction approach	CO <sub>2</sub> Impact assessment		- Refine emission estimate in order to set target and draft reduction plan (kton CO <sub>2</sub> eq.)
	Target definition		- Set reduction target for the category
	Strategy	GAP analysis	- Assess to what extent existing supplier action already meets the RFC pathway
		Opportunity assessment	Develop CO <sub>2</sub> reduction options based on: <ul style="list-style-type: none"> <li>- Available CO<sub>2</sub> reducing options</li> <li>- Industry leaders in CO<sub>2</sub> reduction initiatives</li> <li>- RFC negotiation position versus supplier and willingness to invest</li> <li>- Willingness of suppliers to commit to a 1.5° pathway and engage in CO<sub>2</sub> reduction initiatives</li> </ul>
		CO <sub>2</sub> reduction strategy	- Develop & agree on category CO <sub>2</sub> reduction strategy
	Implementation	Data	- Develop robust quarterly reporting of activity data & CO <sub>2</sub> emission factors - Bring reporting within scope of limited assurance and include in annual report
		Measures	- Include measures in strategic plans and plan, roll out, evaluate, adjust
		Governance	- Embed CO <sub>2</sub> reduction measures in supplier performance monitoring - Bring supplier CO <sub>2</sub> emissions & reduction progress in CDP - Monitor CO <sub>2</sub> emission of category quarterly in the Sustainability Council through reporting



of greenhouse gas emissions. For scope 1, 2 and our scope 3 emissions from member milk, the impact assessment is detailed and the data is in a controlled process and assured. Other categories in scope 3 are in earlier stages of developing the greenhouse gas emission reduction strategy. The initial impact assessment of these categories of scope 3 is done through the SBTi recommended 'scope 3 evaluator'. We will continue to improve data and data-availability through suppliers and/or customers. This is an iterative approach leading to a steady increase in data quality of our impact assessment per commodity. The final goal is to come to data and a method of impact assessment that is robust and allows us deliver auditable figures for external verification. We show the results of our current impact assessment per commodity as well as an indication of the data quality. Subsequently, a target is set that fits the pathway we pursue<sup>43</sup>.

The second step is to set reduction targets for the specific category based on our commitment and the SBTi criteria: what reduction should be achieved, our commitment to the Paris Climate Treaty and our '*Nourishing a better planet*' programme.

The third step is to define the strategy to achieve the reduction per category. Part of the process is to analyse how suppliers throughout the value chain perform on greenhouse gas emissions. It is well known that many factors influence these emissions. Therefore, suppliers will have different carbon footprints. Also, we examine what suppliers' intended reduction pathways look like in order to assess the gap with ours. We develop opportunities and draft a strategy that is approved by the Sustainability Council.

The last step is to bring the strategy into action. This means that the relevant department (e.g. procurement, supply chain, cooperative affairs etc.) will implement what has been agreed upon by the FrieslandCampina Sustainability Council. For monitoring purposes, it also means that we require our suppliers to report on the greenhouse gas emissions of their processes, e.g. through reporting to CDP. For our Annual Report we strive for limited assurance through auditing. Therefore, we aim to bring the reporting on emissions per category to the required level of precision. As we have done for our scope 1 and 2 emissions and the emissions from member dairy farms (part of our scope 3 emissions).

<sup>43</sup> i.e.: for scope 3 emissions -37,5 percent pending validation by SBTi

## Appendix D

### Reporting

- Our annual reports, including CSR reports: [Financial and sustainability reports – FrieslandCampina](#)
  - Greenhouse gas reduction related
  - FrieslandCampina uses AR5 Global Warming Potentials with carbon feedback (conform EU PEF CR Dairy). GWP methane =34, N<sub>2</sub>O=298
  - Reporting, a.o.:
    - SBTi: [Companies taking action – Science Based Targets](#)
    - CDP: [CDP](#)
    - [Ecovadis](#)
  - Commitments, a.o.:
    - [NEN-ISO 26000:2010](#)
    - [Dairy Sustainable Framework](#)
    - [Pathways to dairy net zero](#)
    - [Methane Pledge](#)
    - [Our Commitment – SAI Platform](#) including the SAI B2B model for sustainable dairy
    - [New Plastics Economy](#)
    - [European Plastic Pact](#)
    - Fit for 55 [EU plans](#) (via DSGC)
  - News (2021–2022, see more here):
    - Feed additives: [FrieslandCampina and DSM take major step to reduce greenhouse gas emissions from dairy cattle | FrieslandCampina](#)
    - Customer action: [FrieslandCampina–Danone collaboration: 17 percent greenhouse gas emission reduction | FrieslandCampina](#)
    - Segregated soy stream – deforestation: [FrieslandCampina and Agrifirm: United in the pursuit of guaranteed deforestation-free soy in livestock feed | FrieslandCampina](#)
    - Renewable energy: [FrieslandCampina starts solar panel project for smaller solar roofs | FrieslandCampina](#)
    - Making carbon sequestration measurable: [Solution for calculating carbon sequestration released | FrieslandCampina](#)
    - Green hydrogen milk truck [FrieslandCampina puts first hydrogen-powered milk truck into use | FrieslandCampina](#)
    - Breeding programme with 1 percent y-o-y reduction potential [Genetics of enteric methane emissions of Dutch dairy cows – WUR](#)
    - Sustainable loan [FrieslandCampina announces EUR 300 million sustainability-linked loan | FrieslandCampina](#)
    - Climate neutral growth [FrieslandCampina reaches target climate neutral growth 2010–2020 | FrieslandCampina](#)
  - Recent stories about extra steps to reduce our greenhouse gas emissions:
    - [Better climate | Nourishing a better planet – YouTube](#)
    - [Barry Callebaut | FrieslandCampina](#)
    - [FrieslandCampina chain-wide cooperation Barry Callebaut – YouTube](#)
    - [Tess Niesing | FrieslandCampina](#)
    - [Tailor-made sustainability tool](#) for its over 10,000 Dutch member dairy farmers. The on-line tool is a simulation programme supporting them in further improving their sustainable business operations management at their own farms.
- Sustainability programme 'Nourishing a better planet': [FrieslandCampina | A sustainable future for everyone](#)

