GREEN
AMBITION
2050

60,000
HANDS

5 MILLION
HOOVES

The cooperative spirit gives us power to make meaningful change

2019

Arla®

A strong cooperative history

It all started with a few farmers coming together to form the first cooperative in 1881, almost 140 years ago.

A cooperative, like a herd, finds its power in working together, sharing resources, and helping each other in times of need. A cooperative **uses its collective strength to overcome challenges and hardship, creating synergies for greater achievements.** A cooperative is resilient.

Arla foods has grown to be one of the biggest cooperatives in the world, with 11,000 owners, 19,000 employees and over 1.3 million cows. This size means **Arla has an incredible amount of power to make a positive change in the world.**

Facing a real and growing challenge

Science has shown the planet has clear physical limits on how much environmental harm it can accommodate. Crossing these “planetary boundaries” can lead to irreversible consequences, seriously threatening our way of life. Some of these planetary boundaries have already been exceeded: climate, nitrogen and phosphorus cycles, and biodiversity.

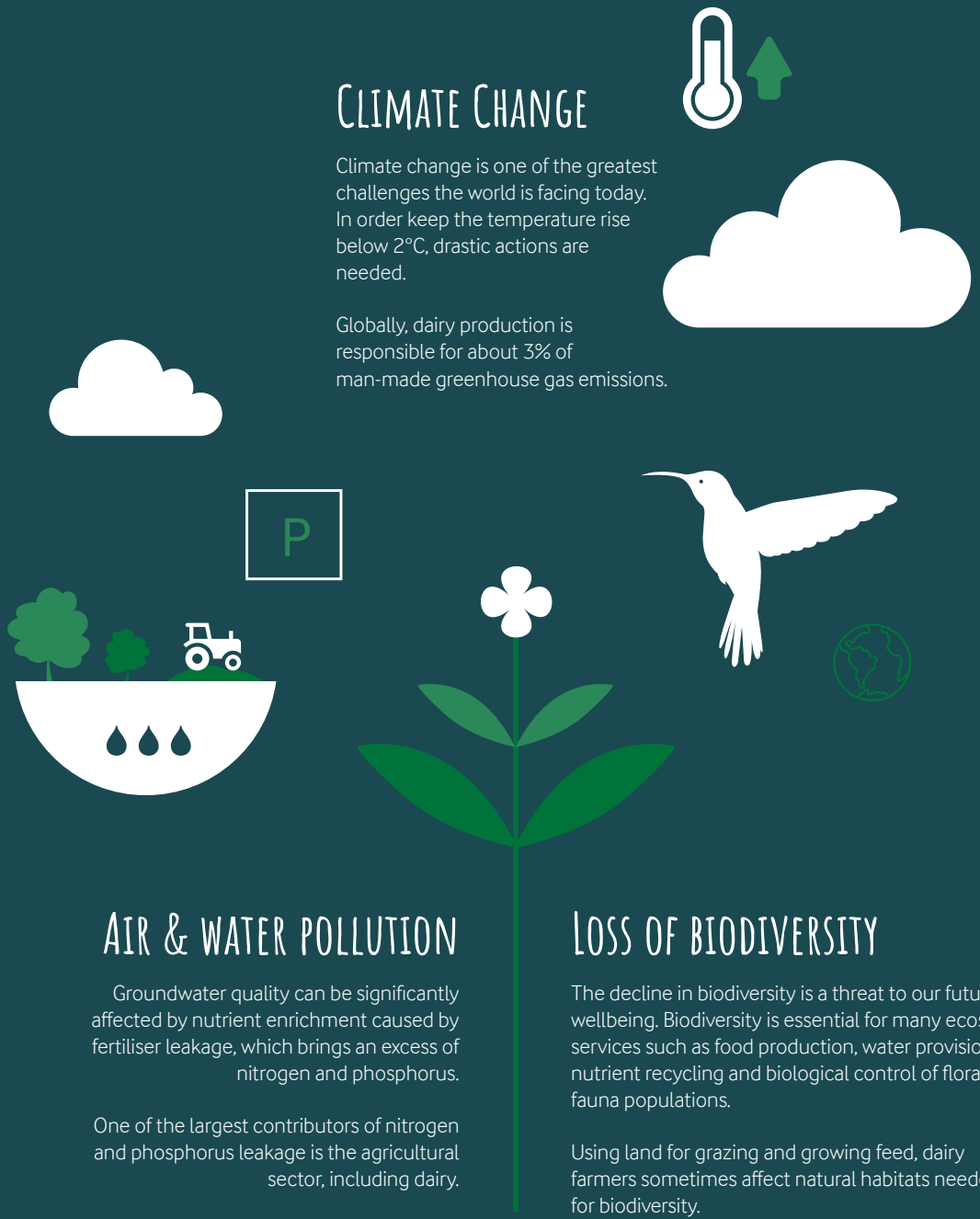
As one of the world’s largest dairy producers, we have a responsibility to do our part to reduce our impact on the environment.
By returning to our cooperative roots, we can unite our resources and use them as a force for good.

With our size comes strength and influence. Even by making small changes we have the power to make a significant global impact. We must continue to make **smart, sustainable choices to guarantee the future wellbeing of the herd**.

Climate Change

Climate change is one of the greatest challenges the world is facing today. In order keep the temperature rise below 2°C, drastic actions are needed.

Globally, dairy production is responsible for about 3% of man-made greenhouse gas emissions.



Air & water pollution

Groundwater quality can be significantly affected by nutrient enrichment caused by fertiliser leakage, which brings an excess of nitrogen and phosphorus.

One of the largest contributors of nitrogen and phosphorus leakage is the agricultural sector, including dairy.

Loss of biodiversity

The decline in biodiversity is a threat to our future wellbeing. Biodiversity is essential for many ecosystem services such as food production, water provision, nutrient recycling and biological control of flora/ fauna populations.

Using land for grazing and growing feed, dairy farmers sometimes affect natural habitats needed for biodiversity.

We have both the tools and leadership to tackle this challenge

Arla foods has a long history of sustainability and has developed a Corporate Social Responsibility report for the last 10 years.

< 1990
Legal compliance

We started the journey more than 30 years ago by ensuring our compliance with emerging laws and environmental standards.

2000
Continuous improvements

We have put in place management systems that ensure more efficient use of energy, water, and resources.

2010
Carbon footprint

We calculate our carbon footprint on the corporate level as well as on various product categories.

2011
Launch 2020 strategy

With our Environmental Strategy 2020, we set targets to greatly reduce our environmental impact and have already achieved significant improvements.

2014
Sustainable Dairy Farming Strategy

Until now, we have performed more than 4,500 carbon assessments and 650 workshops on our farms.

2020
Beyond Footprint

It is clear the environmental threat we face today requires us to do even more, setting bolder targets with a clear pathway for achieving them. We must go beyond simply reducing our negative impact (shrinking our footprint) and contribute with a positive impact — in other words, increase our *handprint*. Clearly 1.3 million cows leave a significant hoof-print, but 60,000 hands can make a visible positive impact on our planet.

	2005 **Baseline**	2017 **Check point**	2020 ***GOAL***
GHG Emissions	2M tonnes CO_2e 100%	1.6M tonnes CO_2e 82%	*1.5M tonnes CO_2e 75%*
Carbon Footprint per kg milk	1.26 kg CO_2e *	1.15 kg CO_2e	*1.04 kg CO_2e*
Renewable energy	10%	24%	*50%*
Recyclable packaging	70%	91%	*100%*
Waste to landfill	6000 tonnes	1014 tonnes	*0 tonnes*

* Note : Baseline 1990 at 1.48 kg CO_2e/kg milk

Now it´s time to step up our engagement, using our collective strength to reduce our footprint while increasing our handprint

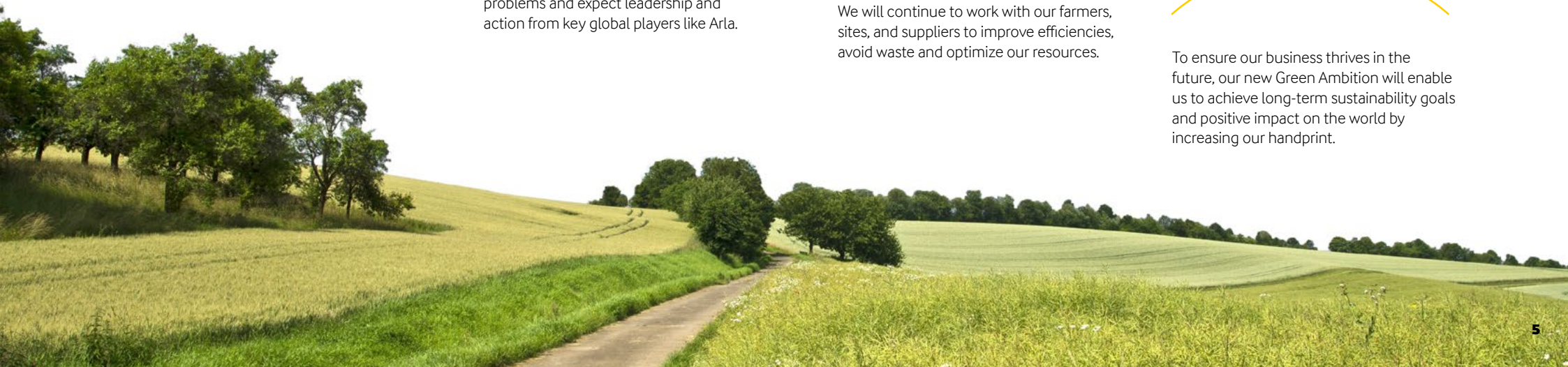
Our new Green Ambition for the future will guide us

To address key global environmental issues, we need a clear, science-based plan to ensure we focus our efforts on the right areas in the best way.

Our customers and consumers are increasingly aware of environmental problems and expect leadership and action from key global players like Arla.

We will continue to work with our farmers, sites, and suppliers to improve efficiencies, avoid waste and optimize our resources.

To ensure our business thrives in the future, our new Green Ambition will enable us to achieve long-term sustainability goals and positive impact on the world by increasing our handprint.



Our green ambition for the future focuses on 3 key topics

BETTER CLIMATE

Reduce global Greenhouse Gas emissions by increasing circulation of resources.

Our Goal

Carbon net zero

CLEAN AIR & WATER

Protect regional water sources and reduce emissions across the whole value chain.

Our Goal

Nitrogen and phosphorus cycles in balance

MORE NATURE

Build a more diverse, robust and accessible local agricultural landscape.

Our Goal

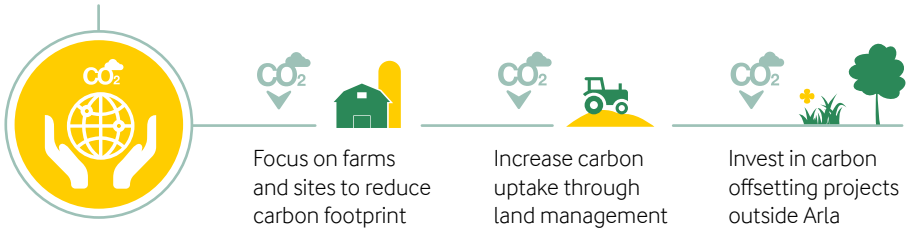
Increase biodiversity and access to nature

BETTER CLIMATE

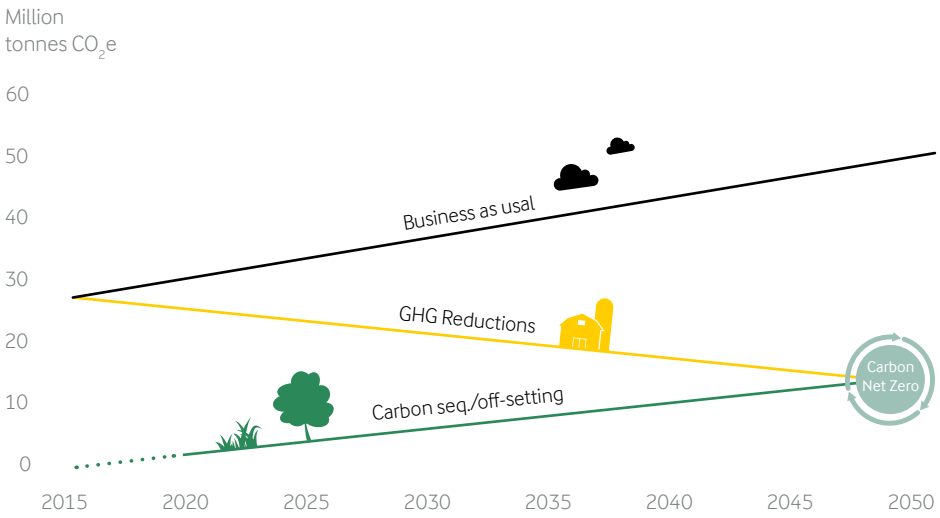
Reduce global Greenhouse Gas (GHG) emissions by increasing circulation of resources. About 85% of Arla´s emissions come from farm level, making it a key focus area for improvement.

Our goal

CARBON NET ZERO



Our Better Climate plan combines reductions with sequestration projects to reach Carbon Net Zero :



Business as usual represents the increase in milk production with today's carbon footprint.

Science Based Targets guide our Better Climate ambition

To effectively address pressing environmental challenges, we rely on science to help us set appropriate goals for the necessary emissions reductions. The Science Based Targets initiative is a programme designed to help companies set emissions reduction targets in line with planetary boundaries, with the goal of limiting global warming in accordance to the Paris agreement.

Arla commits to the Science Based Target of **- 30%**

2015 → **2030**

Scope 1 & 2 GHG emissions:
30% absolute reduction in our own emissions (on sites and in transport).

Scope 3 GHG emissions:
30% reduction in emissions intensity from milk production, packaging, and other upstream/downstream activities, which is also aligned with EU carbon reduction targets.

POWERED BY Quantis

CLEAN AIR & WATER

Protect regional water sources and reduce emissions across the whole value chain.

Our goal

NITROGEN AND PHOSPHORUS CYCLES IN BALANCE

Identify regions with problems; actions depend on classification

Ensure all farms have a nutrient account

EXAMPLES OF HOW WE WORK FOR MORE CLEAN AIR AND WATER

Some Arla dairies are using new technology to reuse the "milky water" from cheese production, with the aim of creating a closed-loop system that eliminates the need for external water use in the future.

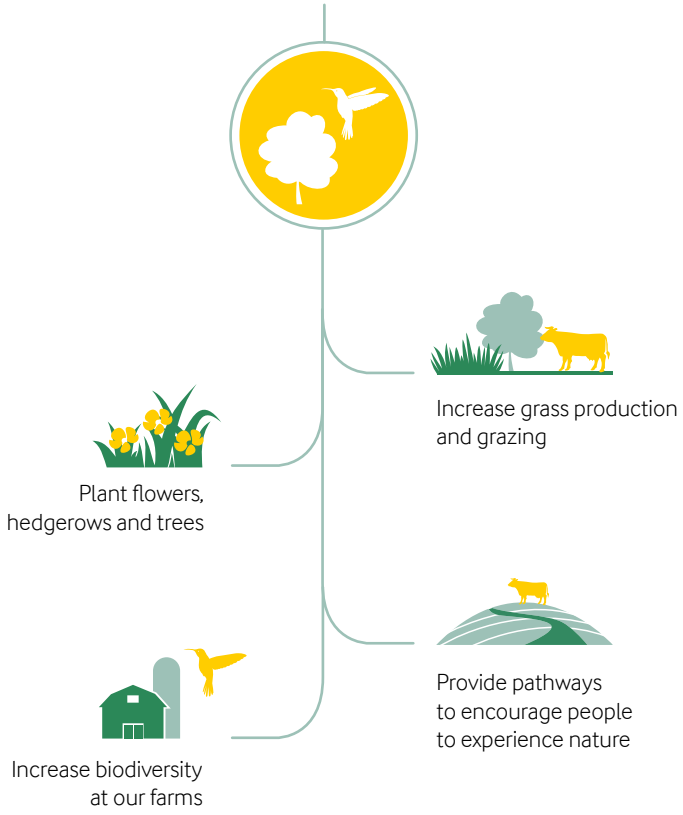
Because particle pollution is a problem in larger cities, Arla has replaced traditional diesel with Gas To Liquid (GTL) fuel for 60 vehicles in the Copenhagen area to reduce particles emitted from dairy deliveries.

MORE NATURE

Build a more diverse, robust and accessible local agricultural landscape.

OUR GOAL

INCREASE BIODIVERSITY
AND ACCESS TO NATURE



3 Guiding Principles will enable us to meet our goals and targets

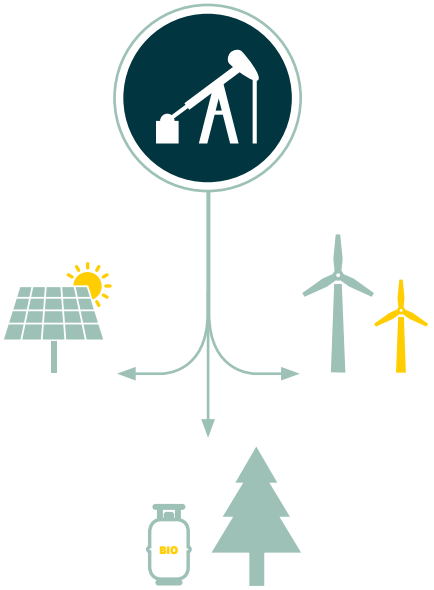
FOSSIL TO RENEWABLE

CIRCULAR ECONOMY

COOPERATION IN THE VALUE CHAIN

GUIDING PRINCIPLE 1

FOSSIL TO RENEWABLE



In order to achieve our goal of Carbon Net Zero, Arla aims to be fossil free in the future. This requires a shift away from fossil coal, oil and gas to renewable energy sources such as wind, solar, biogas and other biofuels. This is relevant for electricity and heat at farms and sites, fuels for transportation and materials for packaging.

ENERGY USE AT SITES

Today, over 24% of Arla's site-related energy use is based on renewable sources. As Arla is owned by the dairy farmers, there is a great potential to be self-sufficient on energy in the value chain.

PACKAGING MATERIALS

In regards to packaging, 55% of our materials currently come from renewable sources, such as paper fibres and bioplastics. Today, 3% of all our plastics are bio-based.

TRANSPORTATION

Transport is likely to be the area where it will be most difficult to reach 100% renewables. However, Arla uses a variety of renewable fuels for transportation such as RME, HVO, ED95.

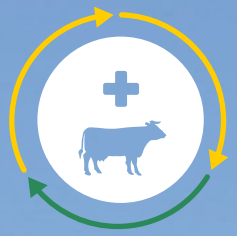
FARM ENERGY

Today, many Arla farmers are already energy suppliers, e.g. by sending manure to biogas, straw to district heating, or having a windmill on the farm.

GUIDING PRINCIPLE 2

CIRCULAR ECONOMY

Circular economy principles shift our way of thinking and operating from a linear model to a cyclical model, focusing on reusing and recycling while reducing waste and unnecessary resource use. This applies to milk as well as our packaging, water use, and the carbon, nitrogen and phosphorus cycles.

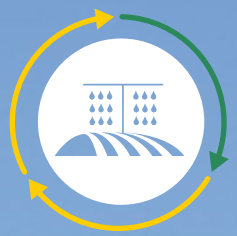


Milk

We can reduce milk loss along the value chain by improving animal health on the farm, extending the shelf life of our products, and providing consumer information on food planning.

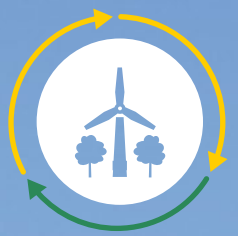
Packaging

Packaging should be made with environmentally sound and recyclable materials, fit with consumer portion/size needs, and be easy to empty.



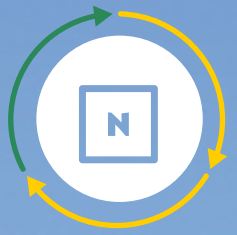
Water

To save water, we should focus even more on reusing water in our processes by implementing new cleaning technologies.



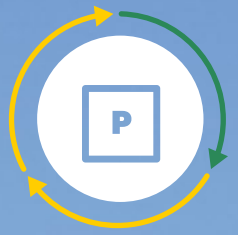
Carbon

Closing the carbon cycle requires replacing fossil fuels with renewable fuels.
In addition, carbon sinks need to be enhanced by planting trees and hedges as well as improving soil management.



Nitrogen

The largest share of nitrogen emissions occurs at farm level. To increase nitrogen efficiency, fertilisers should be used sparingly and emissions should be reduced through catch crops and spreading techniques.



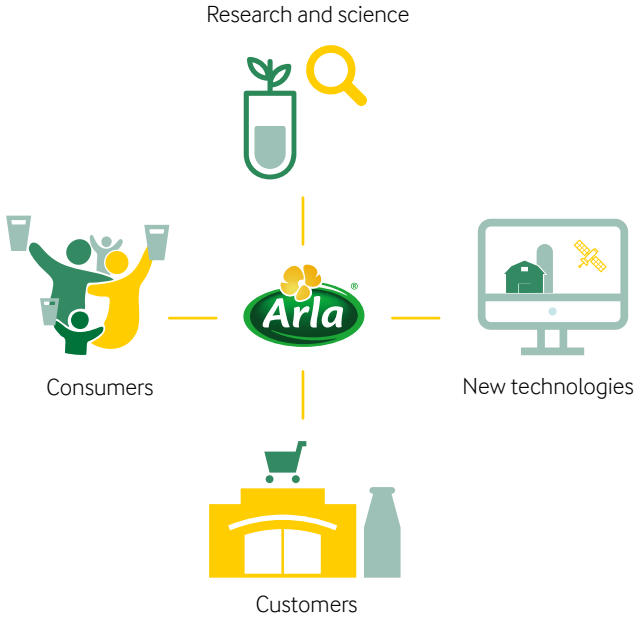
Phosphorus

Phosphorus is a finite resource and used as a fertiliser in feed cultivation. To increase phosphorus efficiency, we should reduce import and use, improve recirculation and minimise leakage with buffer zones along water areas.

GUIDING PRINCIPLE 3

COOPERATION IN THE VALUE CHAIN

To achieve our goals and targets, it is critical to form strong cooperation throughout the entire value chain as well as across value chains. Arla cannot achieve our Green Ambition alone. We need to rely on the cooperative spirit — working together with researchers and scientists, as well as suppliers and customers to find new technologies and solutions to lead the future of sustainable dairy.



Arla is already engaged in several research projects (e.g. sustainable diets, circular bio-economy, nitrogen efficiency) and international organisations (e.g. International Dairy Federation, Sustainable Agricultural Initiative), focusing on more sustainable dairy production.

Recommendations from stakeholder dialogues

An external advisory expert group and internal management teams have already and will continue to provide feedback and advice to ensure we have the strongest possible strategy, objectives and plan in place to make sustainable change happen. A summary of the discussion points from the dialogues are presented below.

THE NEXT GENERATION

- Need to find new ways to attract millennials to farming/ convince them to stay farmers (by helping enhance their reputation).
- Farmers are stewards of the land.

CARBON SEQUESTRATION AND OFF-SETTING

- Arla should focus on bioenergy, wind and solar on farm level rather than on off-setting at later stages of the value chain.
- The carbon sequestration potential at farm level should be calculated.

CLOSED LOOP SYSTEMS

- Close the loop and introduce own feed production system.
- Engage in biorefinery and biogas production.

PACKAGING

- Close the loop and introduce a refund system for packaging.
- Plastic in the ocean is a big problem.

FEEDING

- Replacing soy with more local feed like horse beans and clover have the potential to positively impact crop rotation.
- Animals should not be eating human food crops, and we should make use of their ability to digest inedible resources and use marginal lands.

Our Green Ambition is more than just meeting reduction targets

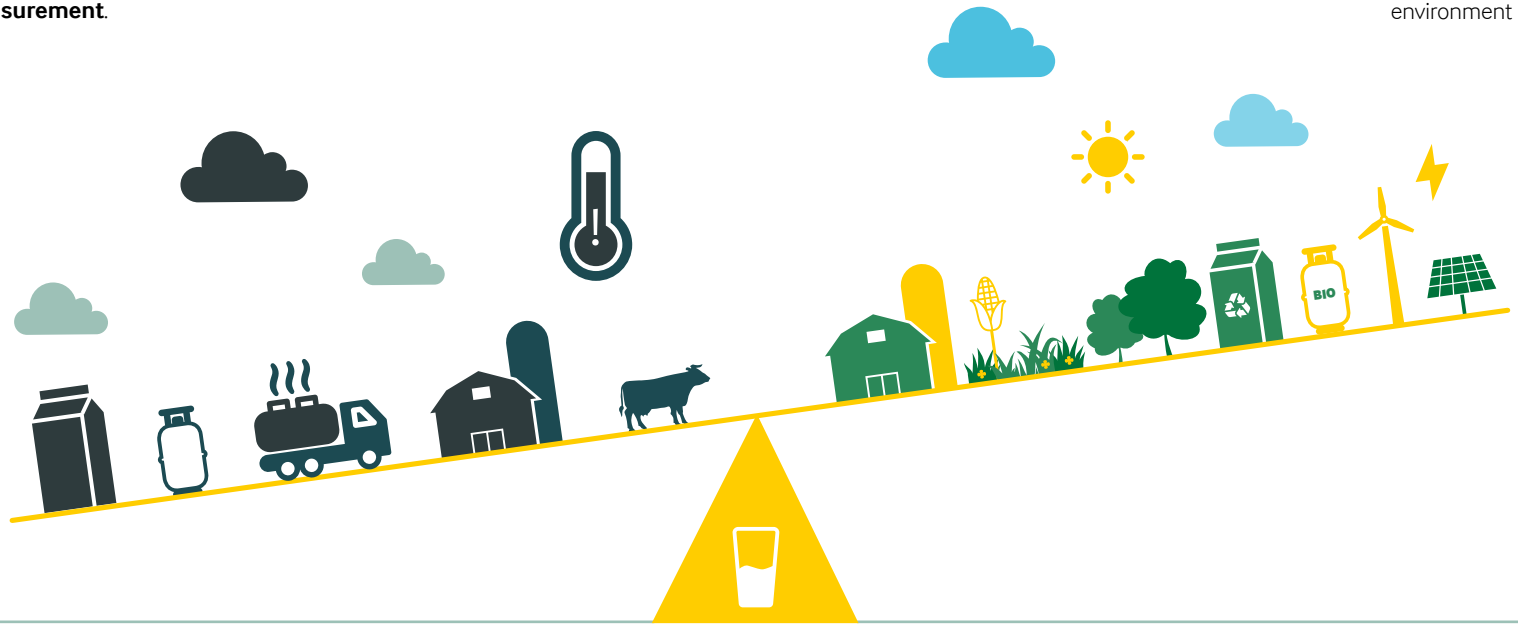
At Arla we want to measure not only our footprint, but also the positive impact our farms and business have on society and the environment. We call this our **handprint**.

The footprint

is a well-known concept that measures the environmental impact of a product or company, which is inherently a **negative measurement**.

The handprint

is a new concept that measures the **positive impact of actions** taken to proactively contribute to society and environment in a helpful way.



Handprinting will be an important part of our Green Ambition

« Our aim is to lead the way to sustainable dairy with the handprint concept to engage, inspire, and drive positive change. »

Benefits of handprinting

Enables us to account for all the good activities we are already doing

Expands the scope of our positive impact, reaching the full potential of our efforts

Creates a powerful, positive language around our sustainability strategy

Meets growing societal expectations of the role of large companies today

Confirms our business is dedicated to finding solutions and creating more sustainable food

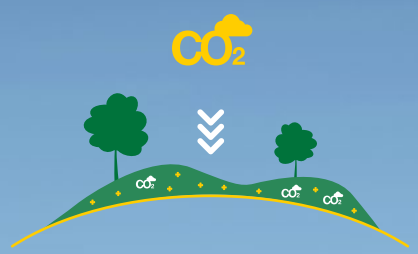
Enables us to advance down our path to become Net Positive*

* A company can become Net Positive if the total positive impact on the world is bigger than the negative. Net positive can only be achieved within each impact category (i.e. swopping across impact categories is not possible).

We are already building handprints on our farms, and we can do more

The largest share of Arla's environmental burden takes place at farm level. It is also on the farm where we can leave the biggest handprint through our actions. By proactively increasing our handprint on the farm, we can clearly show society the positive impact dairy has on the world.

PRODUCE RENEWABLE ENERGY FOR THE LOCAL COMMUNITY



STORE MORE CARBON IN THE SOIL

PROMOTE BIODIVERSITY ON FARMS

Handprinting can extend beyond the farm to all areas of our business

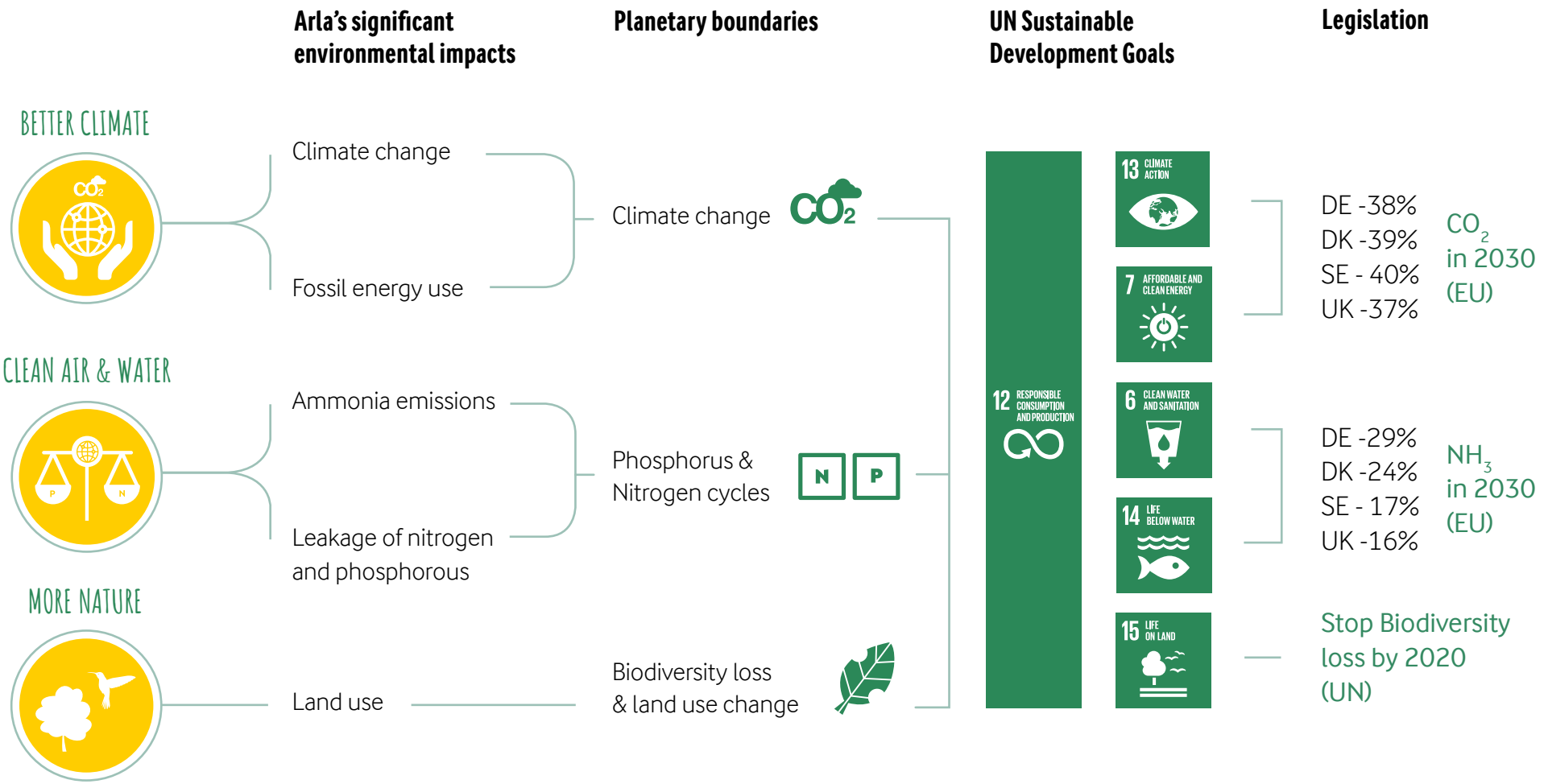
By setting, measuring and communicating on our handprint targets, Arla can show how the dairy industry is a sustainable and important member of society. Handprinting is key to help Arla drive the sustainability agenda with positive energy.

BUSINESS AREAS	Farm level	Responsible sourcing	Packaging	Sites	Transportation	Customer & consumer
POTENTIAL HANDPRINT TARGETS	Share of farms with biodiversity plan Share of farms that are net suppliers of energy	100% sustainable palm oil (RSPO certified) 100% sustainable cocoa (UTZ/Rainforest Alliance certified)	Share of recyclable packaging Projects dedicated to eliminating littering (outside Europe)	Share of carbon net zero sites Share of low water use sites	Share of drivers trained in Ecodriving Share of trucks using renewable fuels	Projects on food waste reduction Number of people visiting our farms to access nature

« At Arla we don't just want to check the box on sustainability. ***We have the size and influence to truly make a change for the better.*** *Handprinting is our way of showing the world the good we can achieve when the cooperative spirit aligns. »*

Our Green Ambition, goals and targets are based on science

To set our goals, we rely on the latest scientific methodology and understanding of our ecosystem to ensure the goals are robust, actionable and in line with the planet´s needs. Specifically, our goals are connected with Science Based Targets, the UN Sustainable Development Goals and emerging laws in the European countries where we operate. We also conducted an Environmental Profit and Loss study, analysing Arla's total environmental impacts from cow to consumer, which highlighted specific key areas to focus on to drive meaningful change.



A comprehensive governance strategy and advisory group will ensure success

Making effective change requires involvement from the whole cooperative. A clear governance structure will help clarify the roles and guarantee all of us do our part. The Executive Management Team owns the long-term ambition while the Heads of Business Functions are responsible for 5 year milestones and 1 year targets. An advisory group will be established with representatives from each function.

Key business functions and their responsibilities

MEMBER RELATIONS
Farm level

PROCUREMENT
Responsible Sourcing

MARKETING AND INNOVATION
Packaging

SUPPLY CHAIN PRODUCTION
Sites

LOGISTICS
Transportation

COUNTRY HEADS
Customer and Consumer activity

WANT TO GET INVOLVED?

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