

A man in a black shirt, dark pants, and a white hard hat is walking away from the camera on a metal walkway with railings. The walkway is positioned on top of a large, dark grey, cylindrical industrial silo. The silo's surface has a grid of rivets. To the left of the silo, there is a steep, grassy embankment. In the background, there is a green field, a tall metal lattice tower, and several wind turbines under a clear sky. The overall scene suggests a renewable energy or waste-to-energy facility.

Turning Organic Waste into Renewable Energy

Jan D. Johannesen
Senior Sustainability Advisor, Arla Foods

we have a **sustainability strategy** that focuses on ‘**stronger planet**’ and ‘**stronger people**’

- Sustainability strategy

Taking actions to support a

STRONGER PLANET

by improving the environment for future generations



Helping and enabling

STRONGER PEOPLE

by increasing access to healthy dairy nutrition & inspiring good food habits

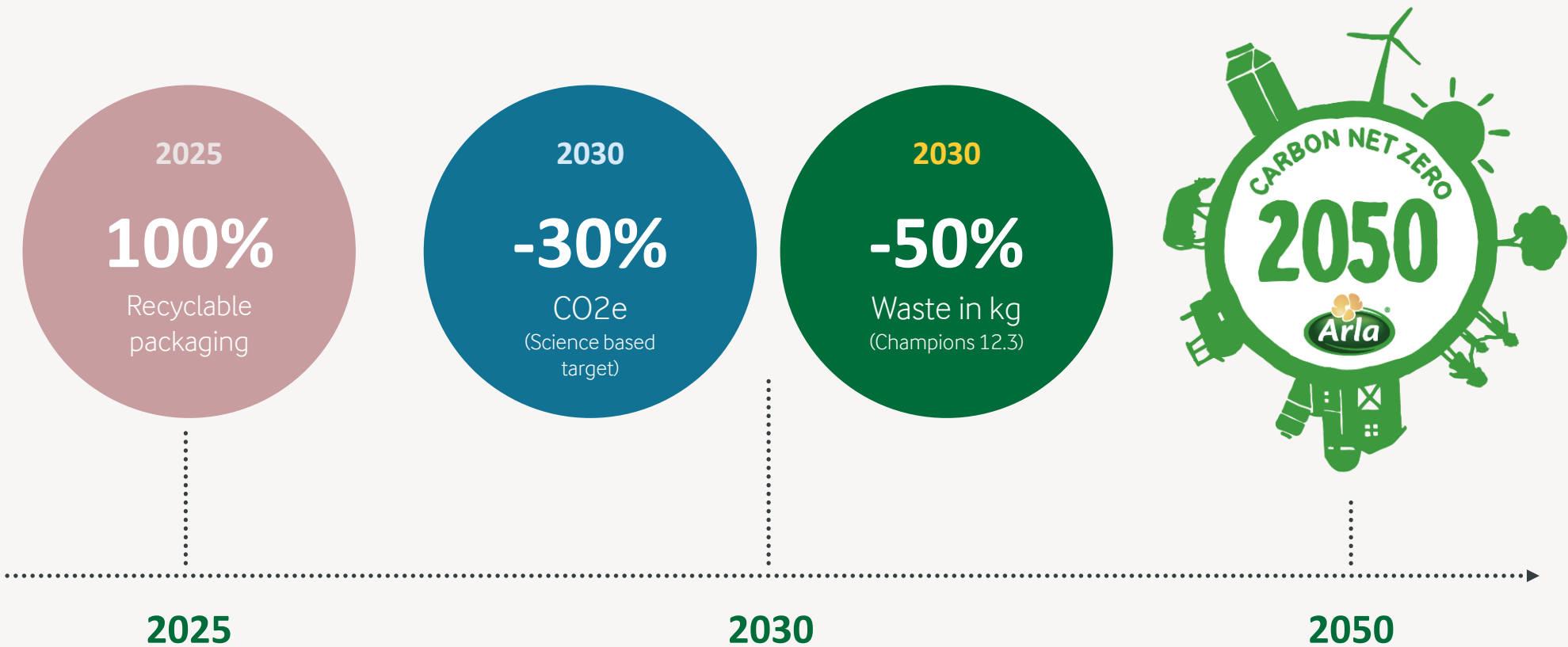


ARLA CODE OF CONDUCT

Our responsibility throughout the value chain



We have launched a number of **long-term commitments**, externally, most notably are our 2030 and 2050 CO₂e targets



In 2019, we launched our **Green Ambition** to address our environmental & climate impact, and resource management; it is supported by 3 guiding principles

- **Green ambition**



BETTER CLIMATE

Carbon Net Zero by 2050



CLEAN AIR & WATER

Phosphorous & nitrogen cycles in balance



MORE NATURE

More biodiversity & access to nature

TO REACH THE GOALS AND TARGETS, ARLA APPLIES **3 GUIDING PRINCIPLES**

1. Fossil to renewable
2. Circular economy
3. Cooperation in the value chain



Biogas: Dairies and Logistic

STRONGER PLANET

Operations & Logistics



TO DATE:



35%
**RENEWABLE
ENERGY AT SITES**

100%

**FOSSIL FREE
TRANSPORTATION
IN ARLA SWEDEN**



25%

**Reduction in CO₂e from
production, packaging, and
transport since 2005**

GOING FORWARD:



**Committed to Science Based
Targets**



Efficiency and optimization



**New technologies and
alternative fuels & trucks**



**Partnerships and
collaboration**



Biogas and our Operations

Organic waste products to biogas plants:

Product related waste:

275,000 tonnes per year

Sludge etc: 80,000 tonnes per year

Use of biogas at our dairies:

Direct pipe from biogas plant:

400,000 MWh per year

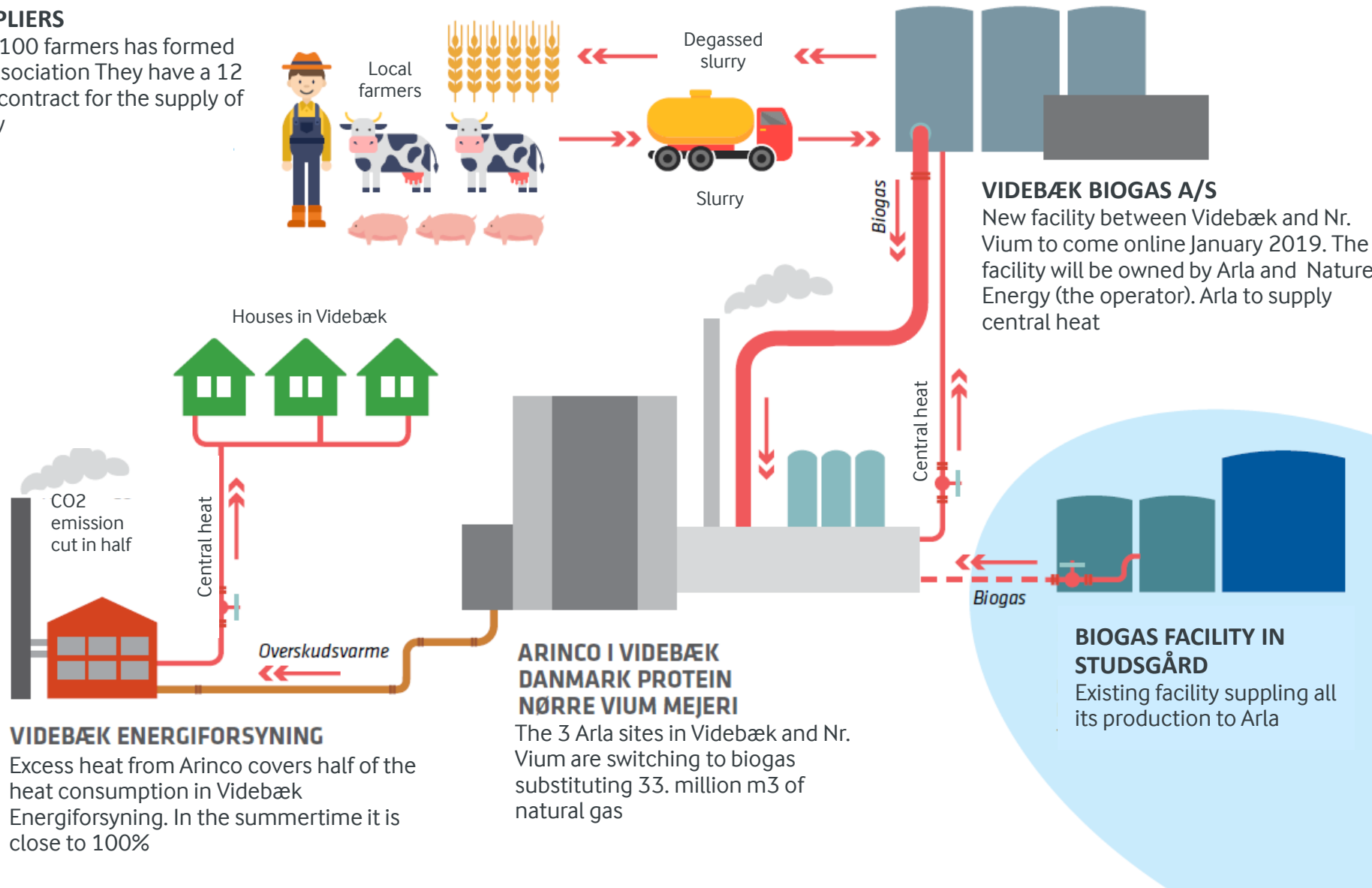
From the gas-grid via certificates:

40,000 MWh per year

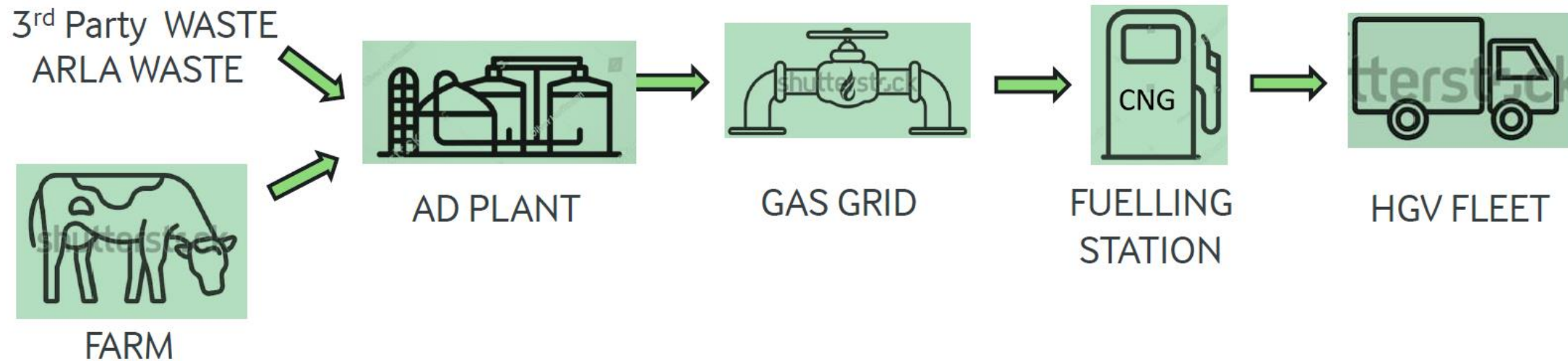
Arla farmers and sites are closely attached to future energy

SUPPLIERS

App. 100 farmers has formed an association. They have a 12 year contract for the supply of slurry.




Biofuel value chain




Example from Arla UK






1 bucket of poo could power a family home for a week & a dairy cow produces **1,800** buckets a year!

NOT TO BE SNIFFED AT!




Turning poo from 500 cows into 27,000kg of biofuel



2050

Committed to net zero carbon footprint by 2050



Poo will fuel two milk tankers for 90,000km reducing CO2 emissions by 80 tonnes!



Example from Arla Denmark



Biogas: At the farms

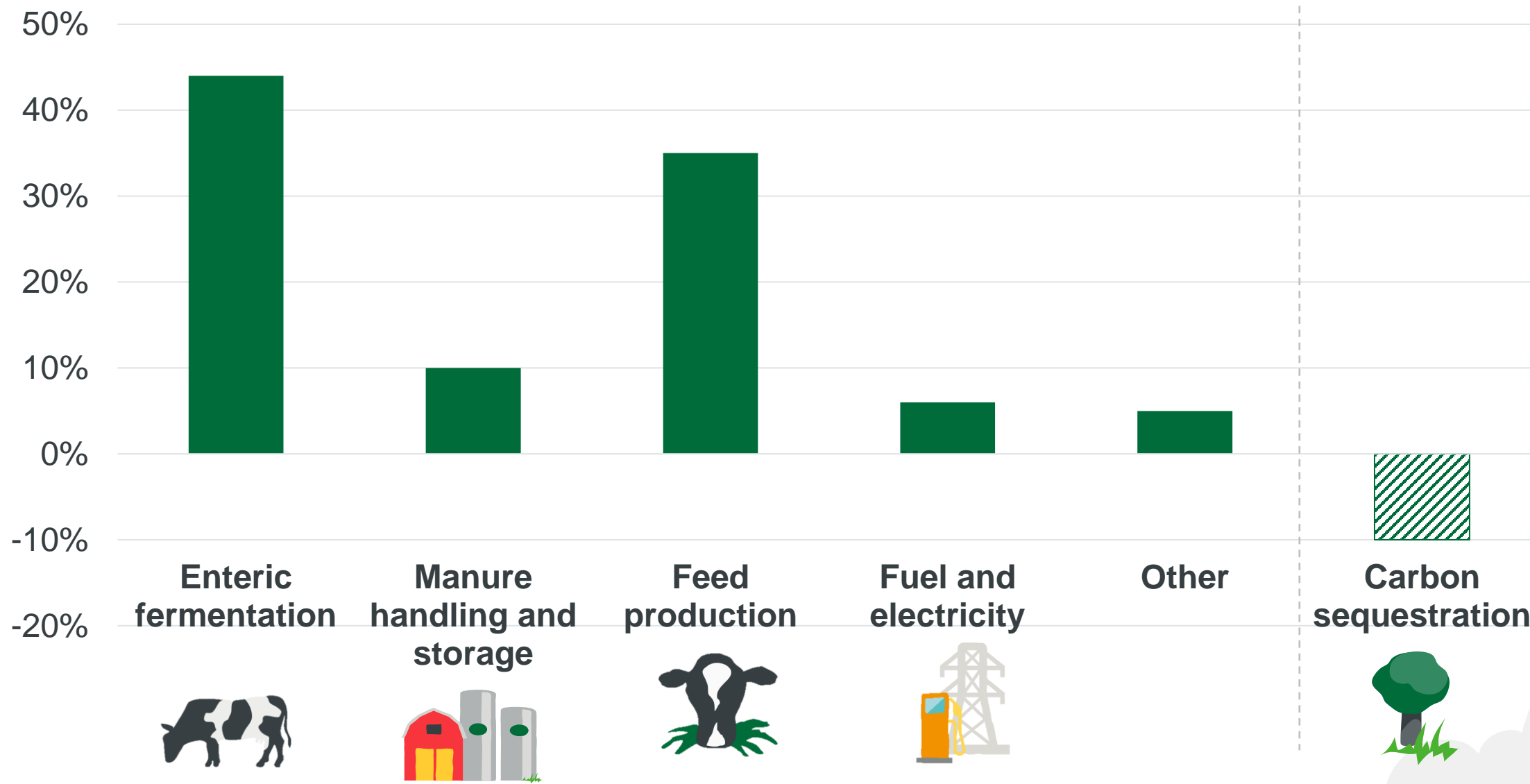
FARM

WE AIM FOR MORE EFFICIENT AND PRECISE FARMING



Different activities contribution to the Carbon Footprint

Greenhouse gas emissions at farm level (incl. input to farm)





11%

of Arla farmers
produce **biogas**

24%

of Arla farmers produce
**green electricity from
wind and solar**

Externally, we need to show our targets and progress to demonstrate our commitment

○ Critical milestones to deliver on 1.5°C

Commitment

Arla is committed to leading the sustainability transformation for the global dairy industry

- Help **limit global warming to 1.5 degrees**
- **Science-based reduction targets** across our entire value chain
- Farm emissions to be reduced by **+30%** vs 2015 baseline
- Operations by **55%**
- Logistics by **55%** on internal fleet, and **+30%** on 3PLs
- Packaging by **9%** - main actions is to care for our earth's resources by targeting **0% virgin plastic** and **100% recyclability**

25% absolute CO2e reduction by 2026 and 33% by 2030 in line with the Paris accord

Farming




Key milestones to reach the 1.5 degree commitment

- | | | |
|---|--|--|
|  Full roll-out of Climate Checks |  30% of manure processed into biogas |  50% of manure processed into biogas |
|  Launch of new advisory set-up to support farmers |  100% renewable electricity on farms |  100% green fertilizer and fuel on farm |
|  Launch of breeding program and pilot of feed additives |  100% certified sustainable feed |  100% European feed |
|  Arla starts buying solar/wind certificates from own farms |  10,000 ha of peat soils restored |  25,000 ha of peat soils restored |
| |  30% of Arla electricity produced on farm | |




Operations

- | | |
|---|---|
|  Optimizing energy usage across +50% of sites by 2025 |  100% of European electricity green by 2025 |
|---|---|

Logistics

- | | | |
|---|---|--|
|  100% of European internal fleet converted to alternatives by 2025 |  100% of international fleet converted to cleanest standards by 2027 |  All contracted 3PLs committed to sustainability target |
|---|---|--|

Packaging

- | | | |
|--|---|---|
|  100% recyclable and renewable milk and yoghurt cartons |  100% recyclable packaging and 50% non-virgin fossil plastic content across brands |  0% use of virgin fossil plastic across brands by 2030 |
|--|---|---|



2021

2025

2030

A photograph of a man and a young child standing on a gravel path in front of a two-story white building with a corrugated metal roof. The man, wearing a dark jacket and cap, stands with his hands on his hips. The child, wearing a colorful jacket and hat, stands next to him. The scene is framed by bare trees, and the ground is covered in dry grass and gravel. The text "Thank you !" is overlaid in white on the left side of the image.

Thank you !

To make sure coming generations can meet their needs in the future...