



Arlas klimatpolitik från bonde till butik

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Today's presentation

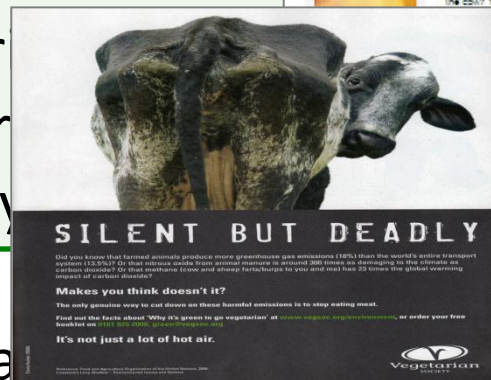
- Future challenges
- Arla's environmental strategy
- Carbon Footprint of milk
- Focus areas and reduction potentials

Background and future challenges

- The population is expected to reach 9 billion in 2050...

- The demand for dairy products are expected to double by 2050

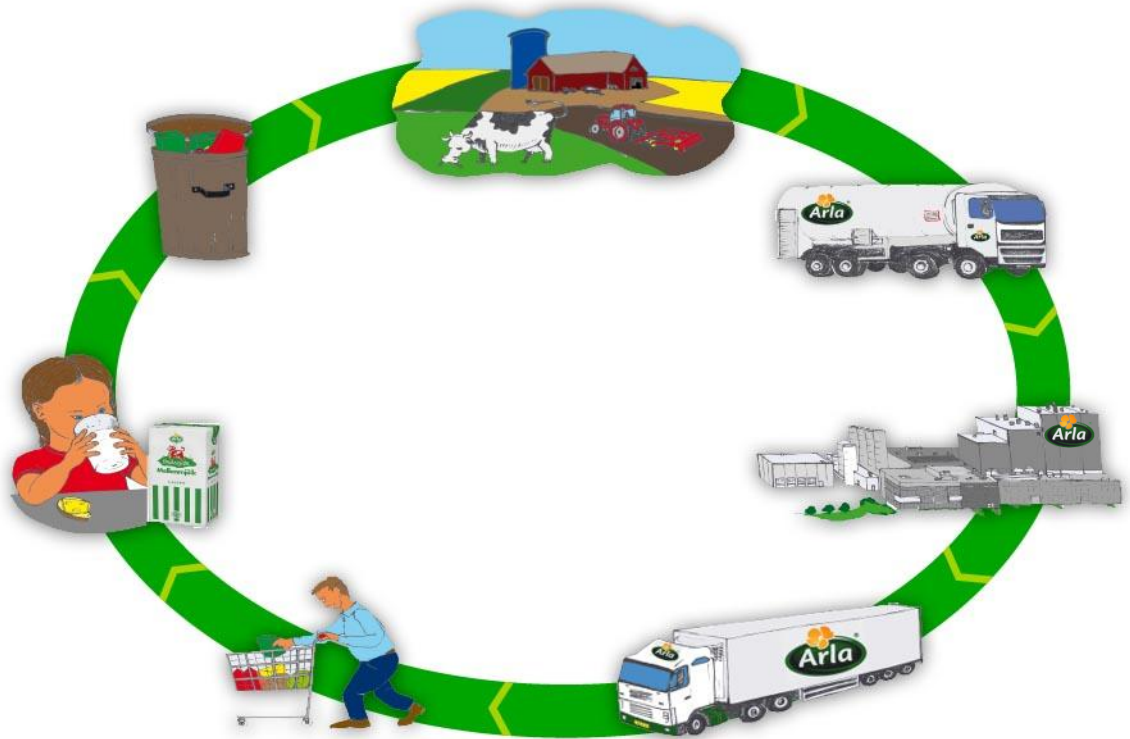
- The industry is expected to reduce greenhouse gas emissions by 20% by 2020



The dairy industry is acting!!

How to reach our goals

- Life cycle approach
- Focus on farm
- Increase efficiency
- Transparency
- Stakeholder involvement





Sustainable agriculture

- Raw milk solely from sustainable farming
- Improve biodiversity on farm



Greenhouse gas emissions

- Reduce by 25% 2005 to 2020 (production, transport, packaging)
- Reduce by xx% from dairy farm operations (target to be developed 2013)



Water and energy

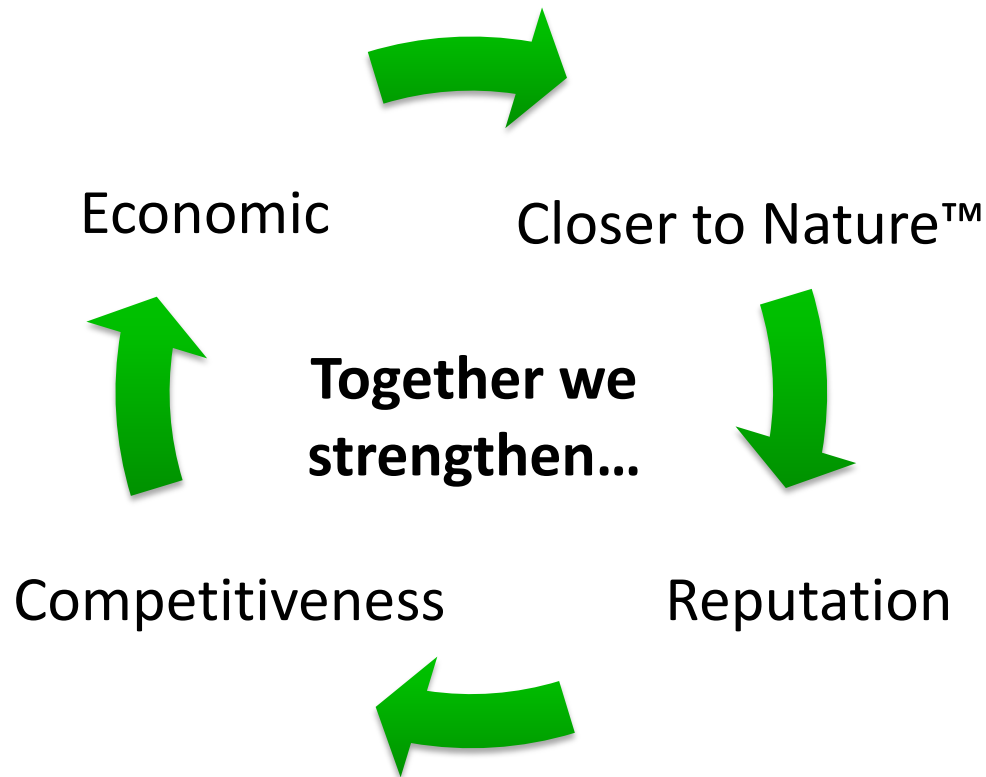
- Achieve 50% of the energy used at operation supplied from renewable sources
- Increase energy efficiency with 3% (production) and 1% (transport) annually
- Increase water use efficiency with 3% annually at operation



Waste

- Achieve 100% recyclable packaging materials
- Eliminate waste to landfill from production
- Reduce food waste with 50% along the value chain

A sustainable dairy production



– now and for future generations!

Calculating the carbon footprint of milk



Primary production

Processing

Packaging

Transport

Retail & consumer

CO₂e {
CO₂ x 1
CH₄ x 25
N₂O x 298

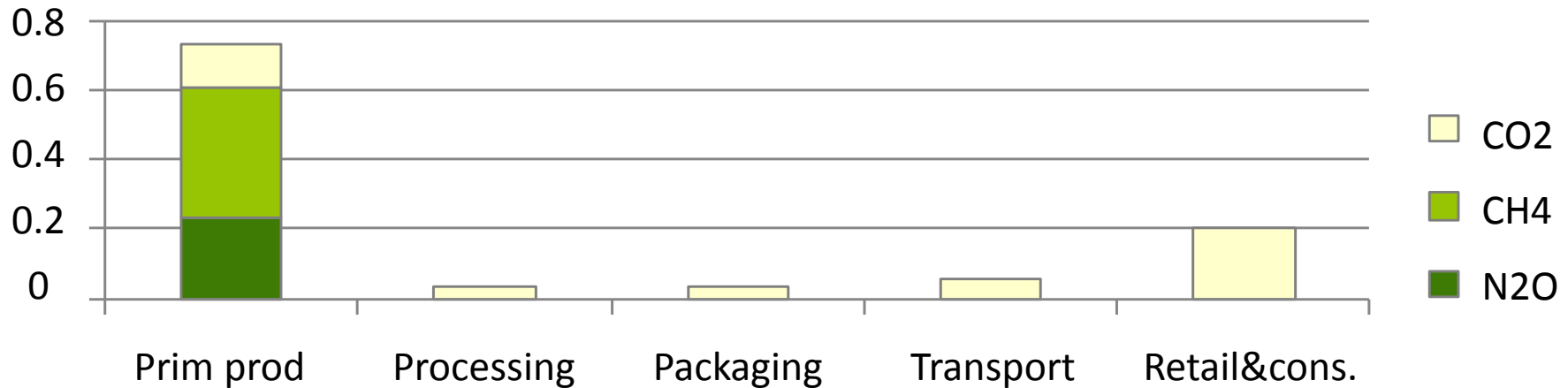
CO₂ x 1

CO₂ x 1

CO₂ x 1

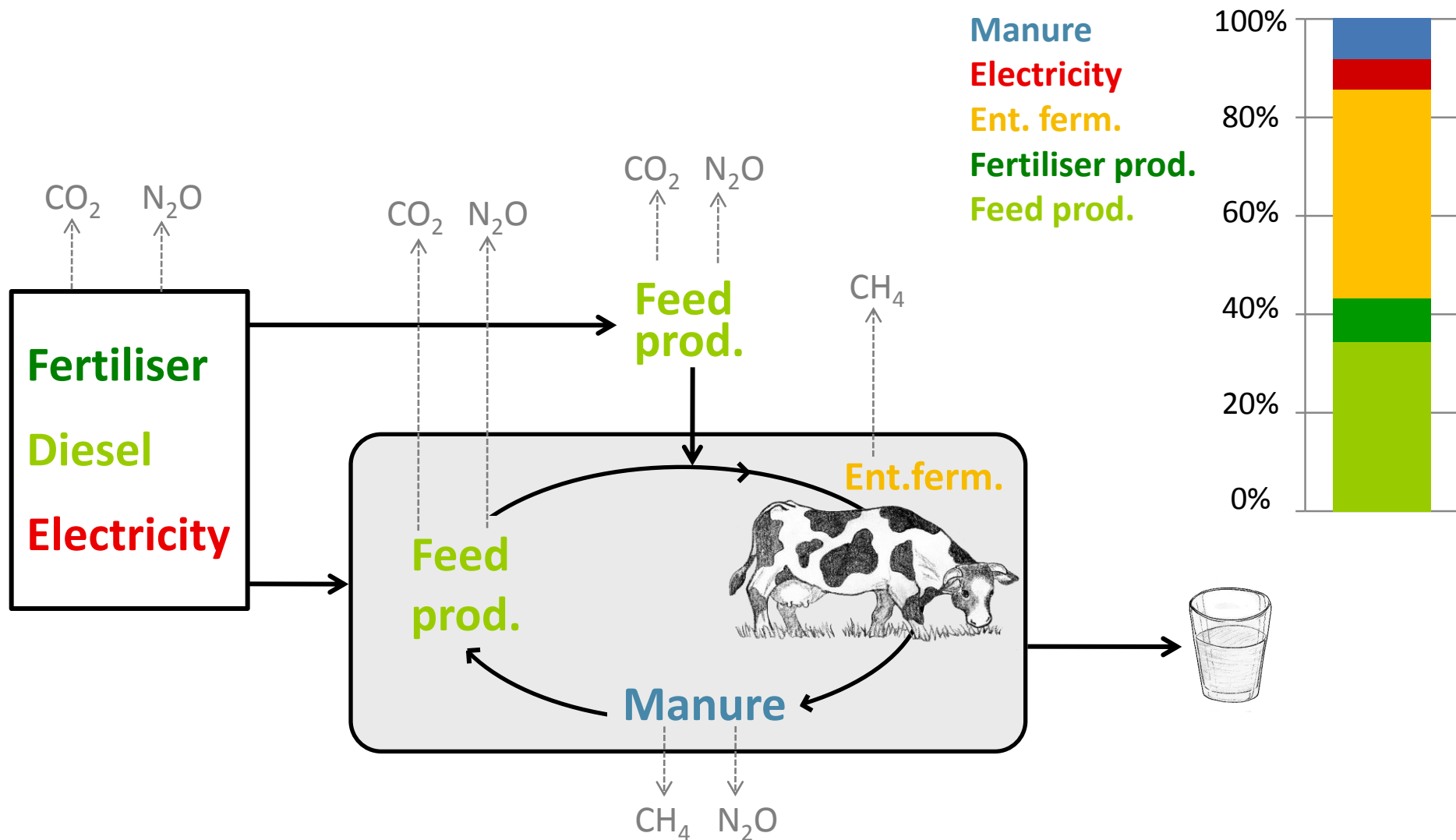
CO₂ x 1

kg CO₂e per kg milk

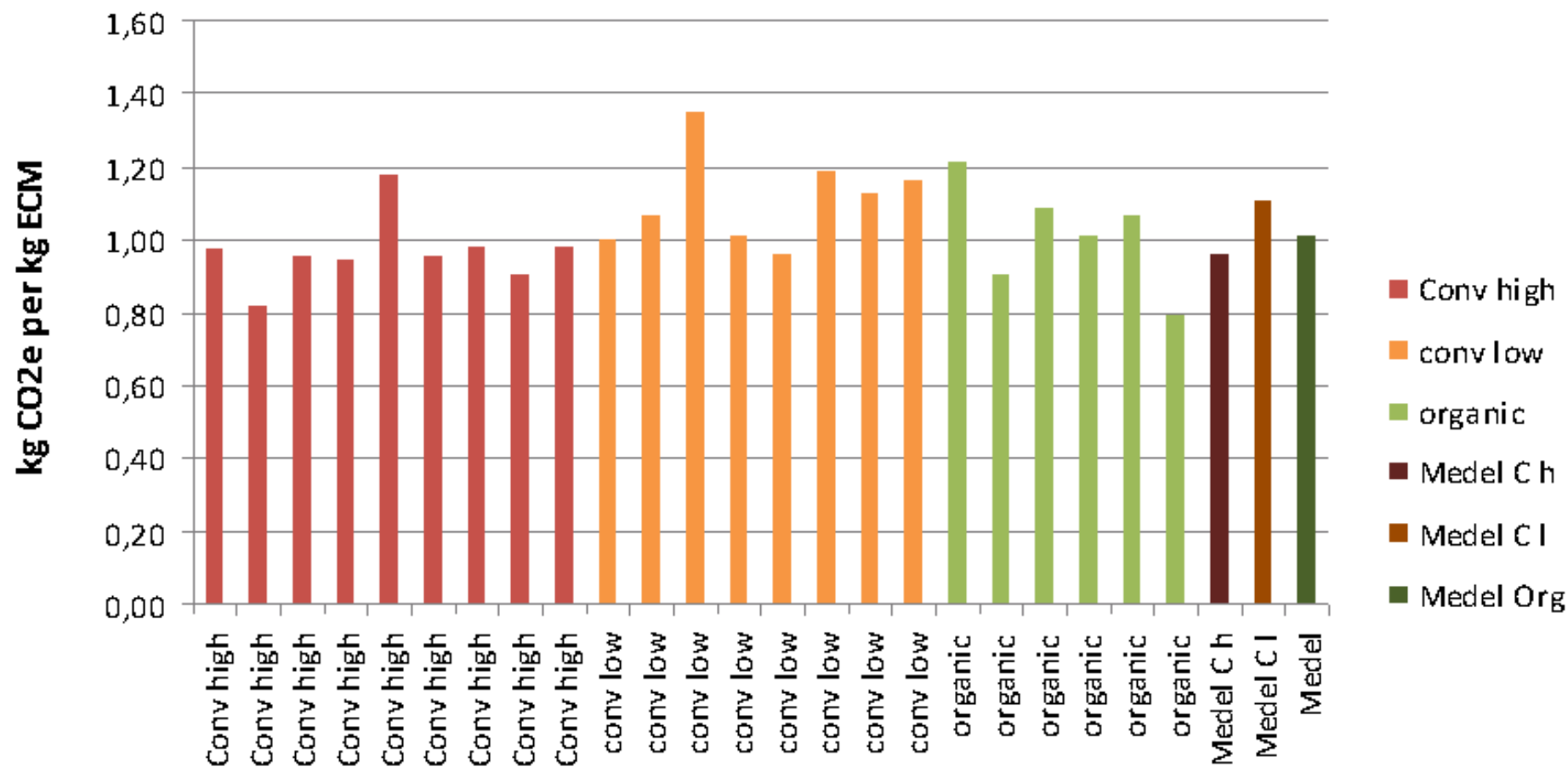


Maten och miljön Livscykelanalys av sju livsmedel, LRF, 2002; IPCC, 2007

Emissions from dairy production at farm level



Variation in carbon footprint between dairy farms in Sweden



Cederberg and Flysjö, 2004

Production cost and carbon footprint

Financiell effect	25% lowest	Average	25% best
Production cost per litre milk (pence per litre)	28,9	28,7	25,4
Carbon footprint (kg CO2e per litre)	1,25	1,02	0,85
Carbon footprint (% of average)	122	100	80

Source: ASDA, UK

Mitigation measures at farm level

Efficiency

- Feed
- Nitrogen
- Energy
- Yield

'Green' investments

- Biogas
- Microbial fuel cells

Environmental potential
Technical feasible
Economical viable

'Green' purchasing

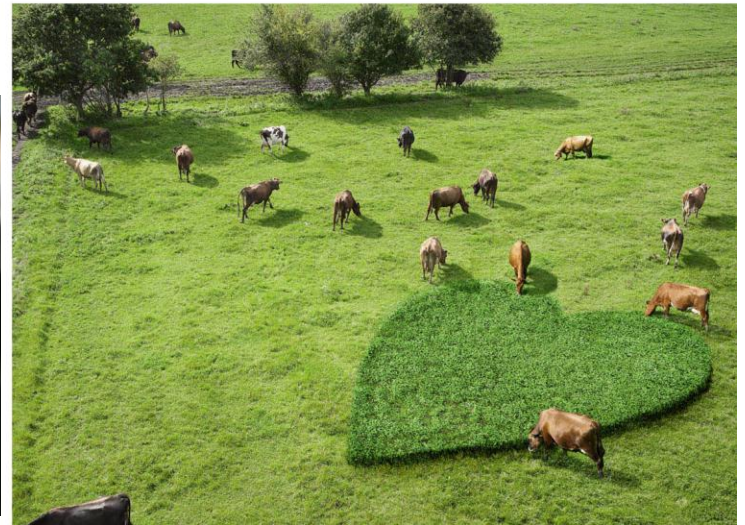
- Feed with low CF
- Fertiliser (BAT)
- Renewable electricity

Other

- Feed additives (reduce CH₄)
- Carbon sequestration

- 🌻 **FEED** – Sustainable feed supply
- 🌻 **FERTILISER & NUTRIENTS** – Efficient handling and use
- 🌻 **ENERGY** – Efficiency and renewables
- 🌻 **'ANIMAL & NATURE'** – Animal welfare and care for nature

Thank you



EXTRA SLIDES

The banner features a background image of a dairy processing plant with large silver silos and a green field with several cows in the foreground. The text is overlaid on this image.

Welcome to the Dairy Sustainability Website

The Global Dairy Agenda for Action is the industry's commitment to making a positive contribution to the global action in addressing climate change. The Agenda for Action brings together the global dairy industry and its partners, who are committed to working together to improve the environmental performance of the dairy sector for a more sustainable future.

Visit the website

Dairy Agenda for Action	GREEN PAPER	FIL-IDF LCA Guide
The dairy industry's commitment to address climate change.	Collection of initiatives to create a sustainable dairy industry.	IDF Guide to Standard Lifecycle Assessment Methodology for the Dairy Sector.
read more	read more	visit

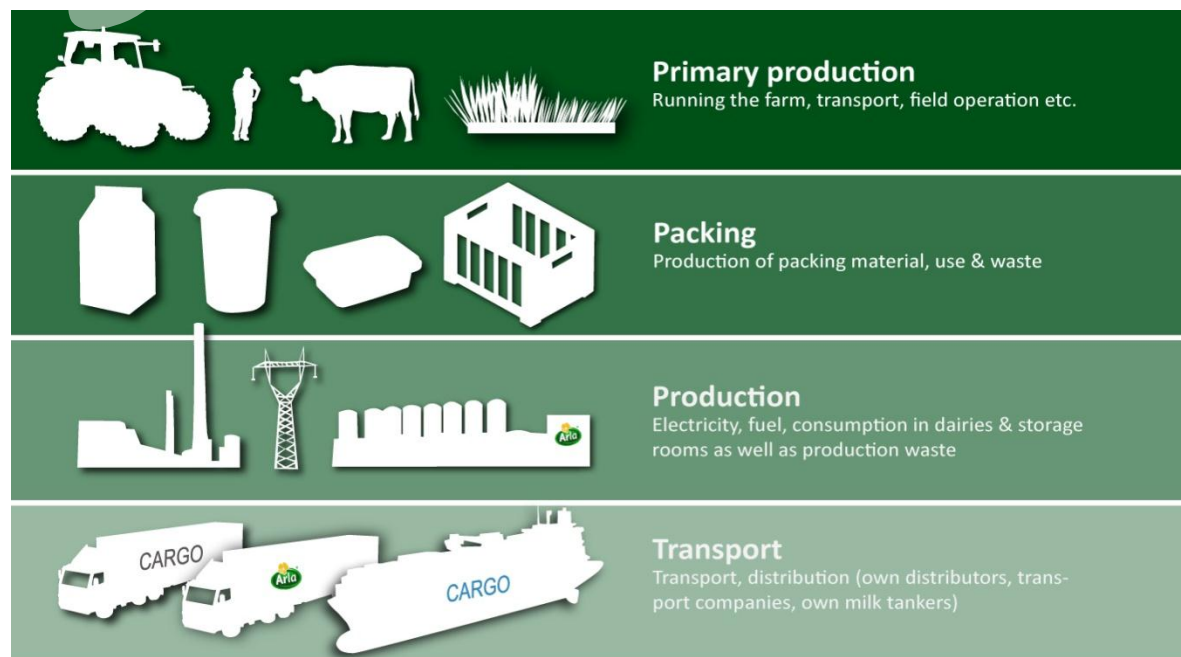
Logos on the left:
FIL IDF (Fédération Internationale de Lait / International Dairy Federation)
FEPALC (Federation of Milk Producers of Latin America)
SAI PLATFORM (Sustainable Agriculture Initiative)
GLOBAL DAIRY PLATFORM (KNOWLEDGE · INSIGHT · GUIDANCE)
eda (European Dairy Association)
ESADA (European Southern African Dairy Association)

Footer:
Last update: 8 May 2012 | [Sitemap](#) | [Updates](#)

How much greenhouse gas emissions do we emit?

Greenhouse gas emissions expressed as CO₂e

(Calculation of CO₂e: 1 kg CO₂ = 1 kg CO₂e 1 kg N₂O = 298 kg CO₂e 1 kg CH₄ = 25 kg CO₂e)



Climatic load tonne CO₂e

Year: 2005	2008
(farm not included in target)	
380.000	351.000
748.000	712.000
271.000	257.000
Total climatic load:	1.320.000

1.399.000

