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

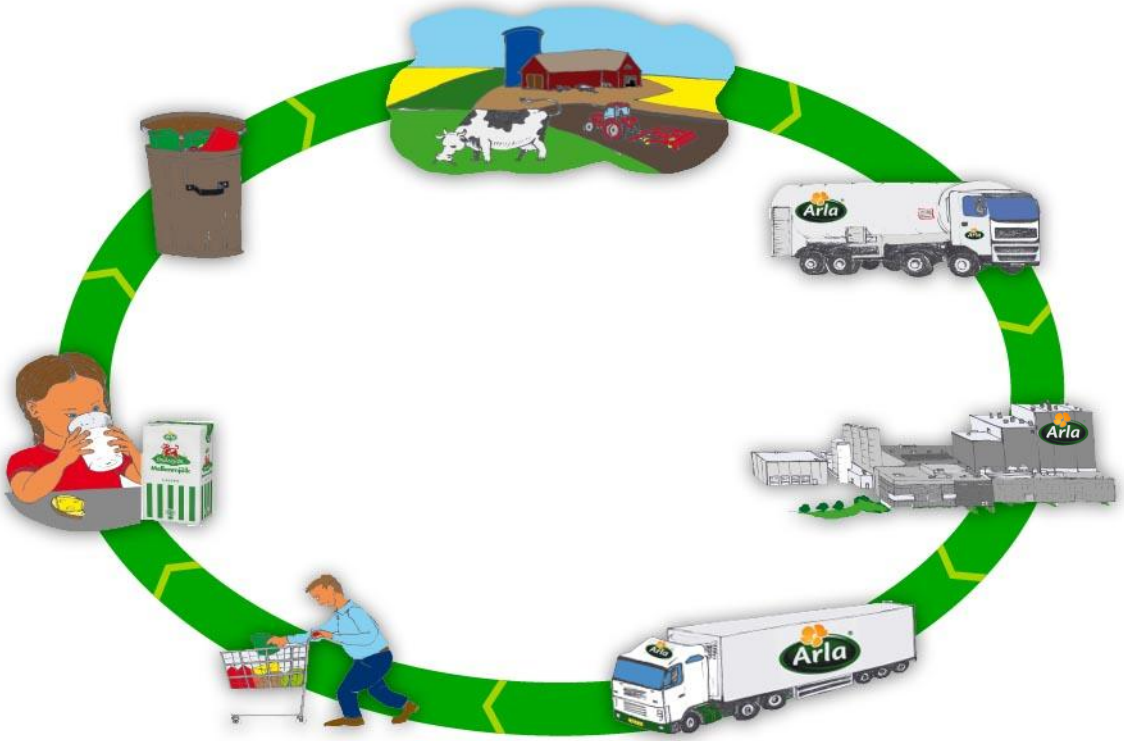
- The population is expected to reach 9 billion in 2050…
- The demand for dairy pr… are expected to double b…
- The industr… to reduce gr… emissions b…

The EU countries ha… emissions with 20% f…

NGO's expect actions …e dairy industry is acting!!

How to reach our goals

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



Environmental strategy 2020

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

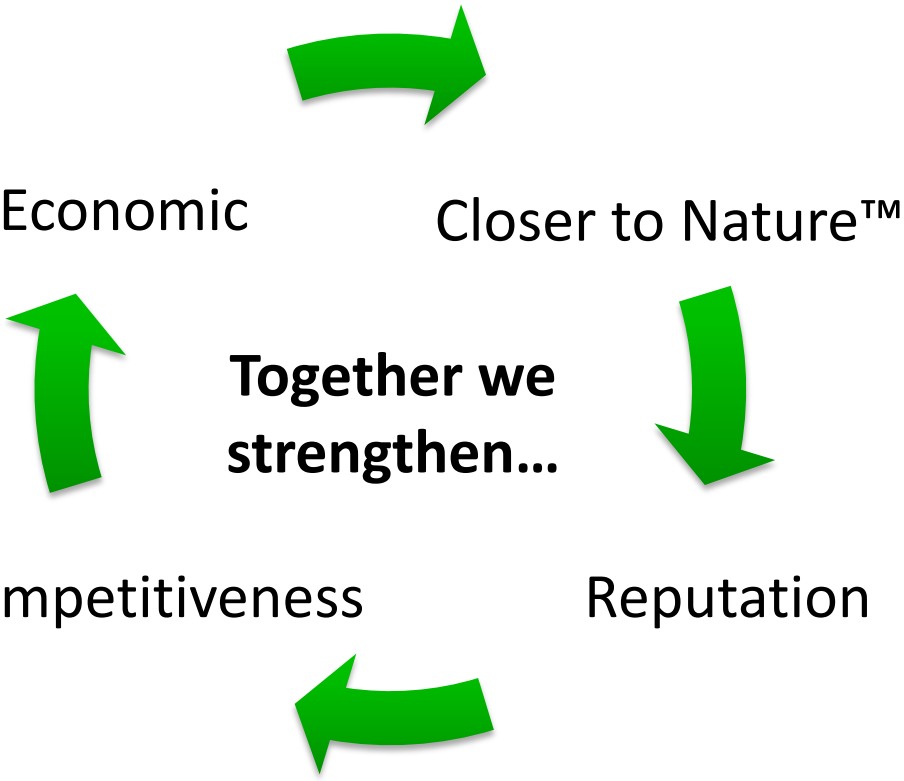
- Achieve 50% of the energy used at operation supplied from renewable sources
- Increase energy efficiency with 3% (production) and 1% (transport) annually
- Increase water use efficiency with 3% annually at operation

Waste

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

Purpose

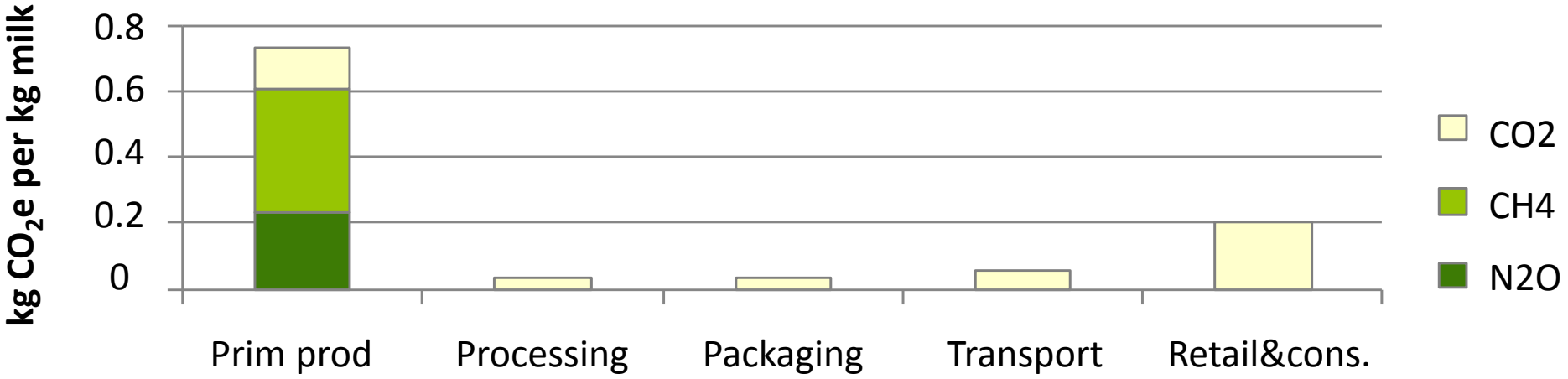
A sustainable dairy production



– now and for future generations!

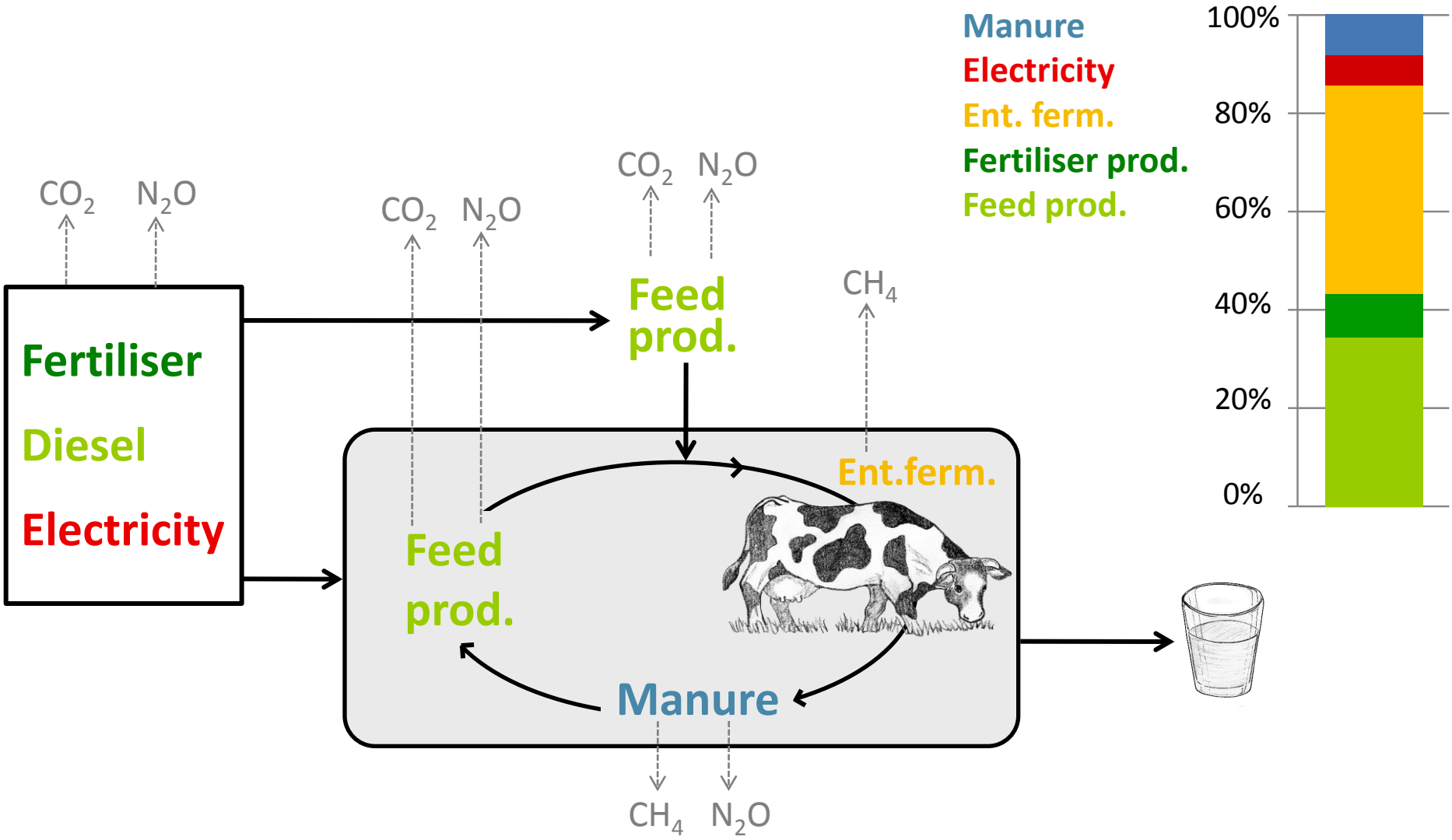
Calculating the carbon footprint of milk

Primary production	Processing	Packaging	Transport	Retail & consumer
CO_2e: CO_2 x 1, CH_4 x 25, N_2O x 298	CO_2 x 1	CO_2 x 1	CO_2 x 1	CO_2 x 1

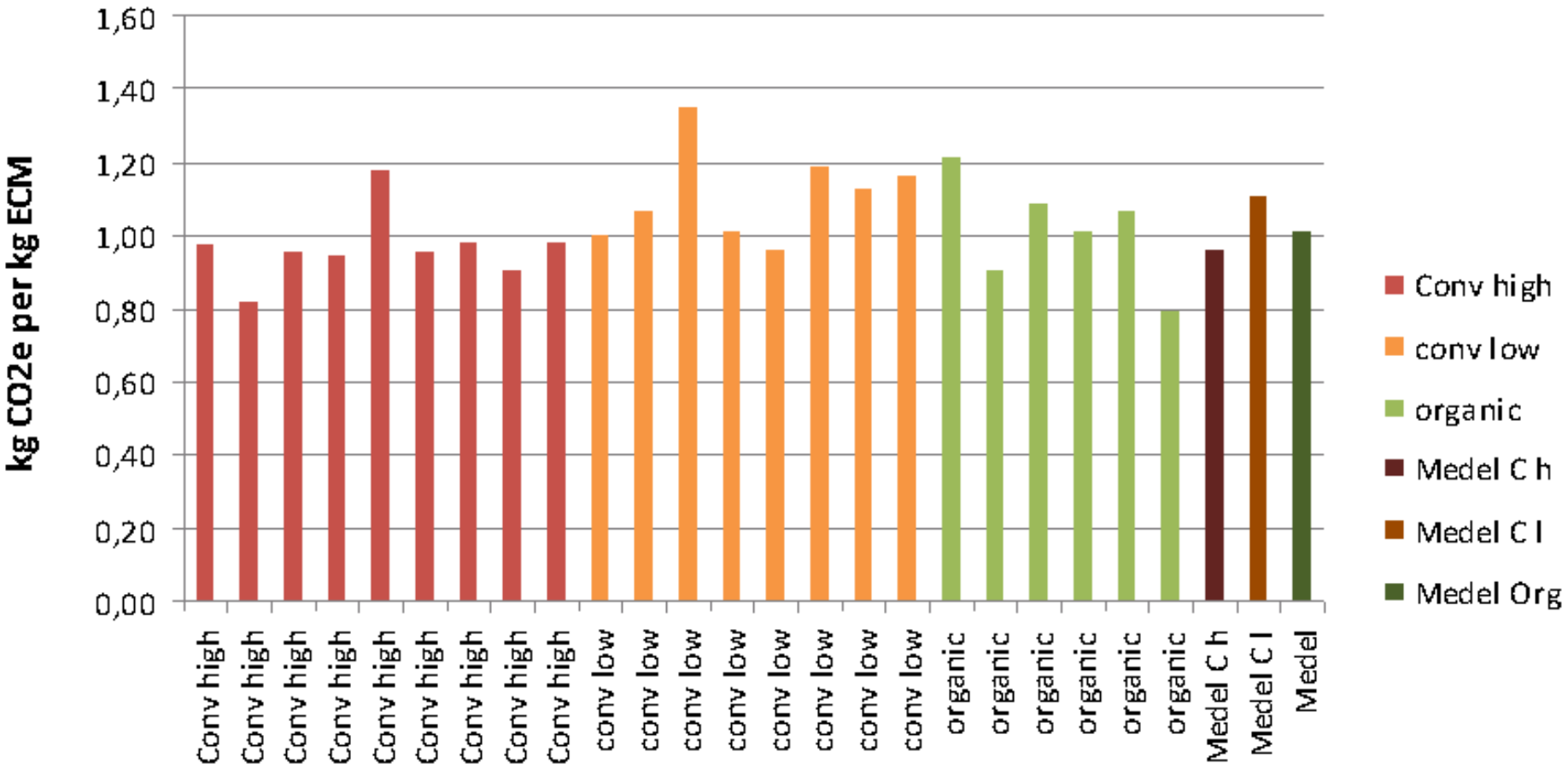


Maten och miljön Livscykelanalys av sju livsmedel, LRF, 2002; IPCC, 2007

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

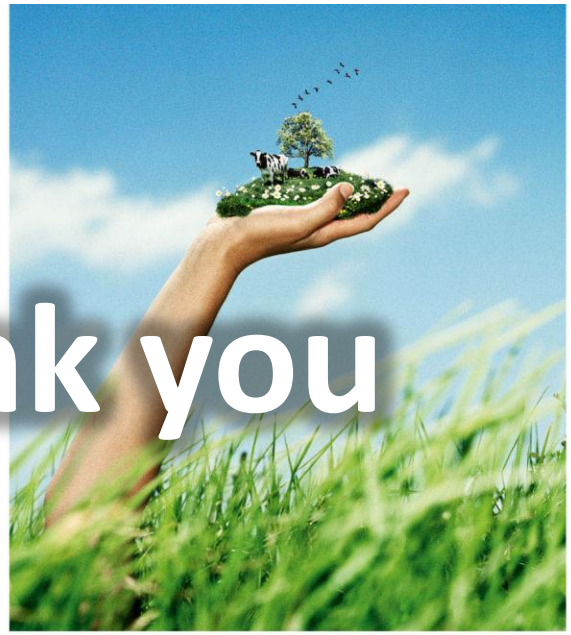
'Green' purchasing
- Feed with low CF
- Fertiliser (BAT)
- Renewable electricity

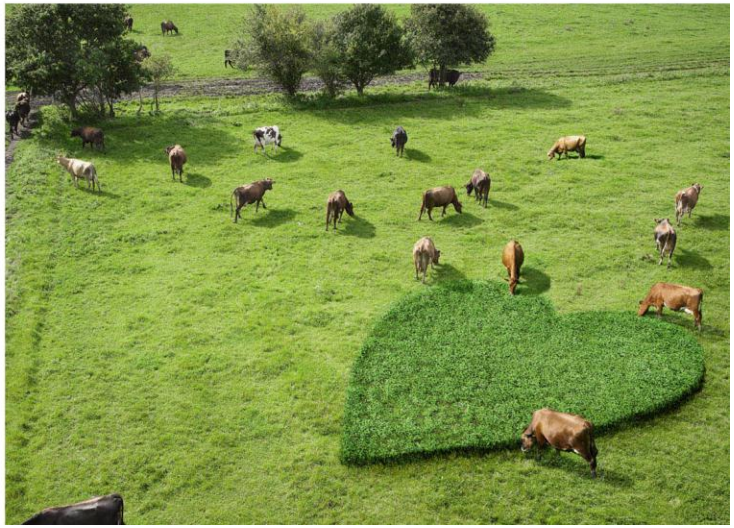
Other
- Feed additives (reduce CH_4)
- Carbon sequestration

Focus areas in Arla Foods sustainable dairy farming program

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

Thank you





Arla®

EXTRA SLIDES

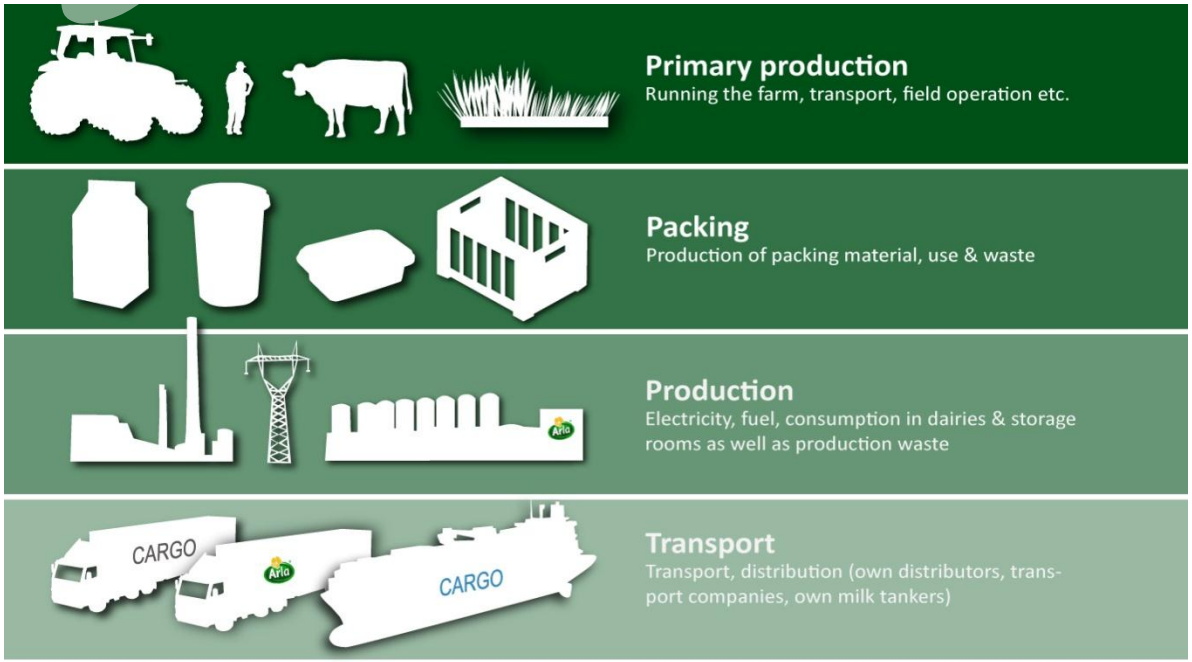
Dairy sector initiative

(see: *dairy-sustainability-initiative.org)*

How much greenhouse gas emissions do we emit?

Greenhouse gas emissions expressed as CO_2e

(Calculation of CO_2e: 1 kg CO_2 = 1 kg CO_2e 1 kg N_2O = 298 kg CO_2e 1 kg CH_4 = 25 kg CO_2e)



Climatic load tonne CO_2e		
Year:	2005	2008
	(farm not included in target)	
Primary production	380.000	351.000
Packing	748.000	712.000
Production	271.000	257.000
Transport		
Total climatic load:	**1.399.000**	**1.320.000**