

# Animal breeding as a mitigation tool for enteric methane emissions of dairy cattle

Yvette de Haas, Gerben de Jong, René van der Linde, Erwin Koenen



# Last talk of the conference ....



## Social Hangover

When interacting with people leaves you exhausted the next day.

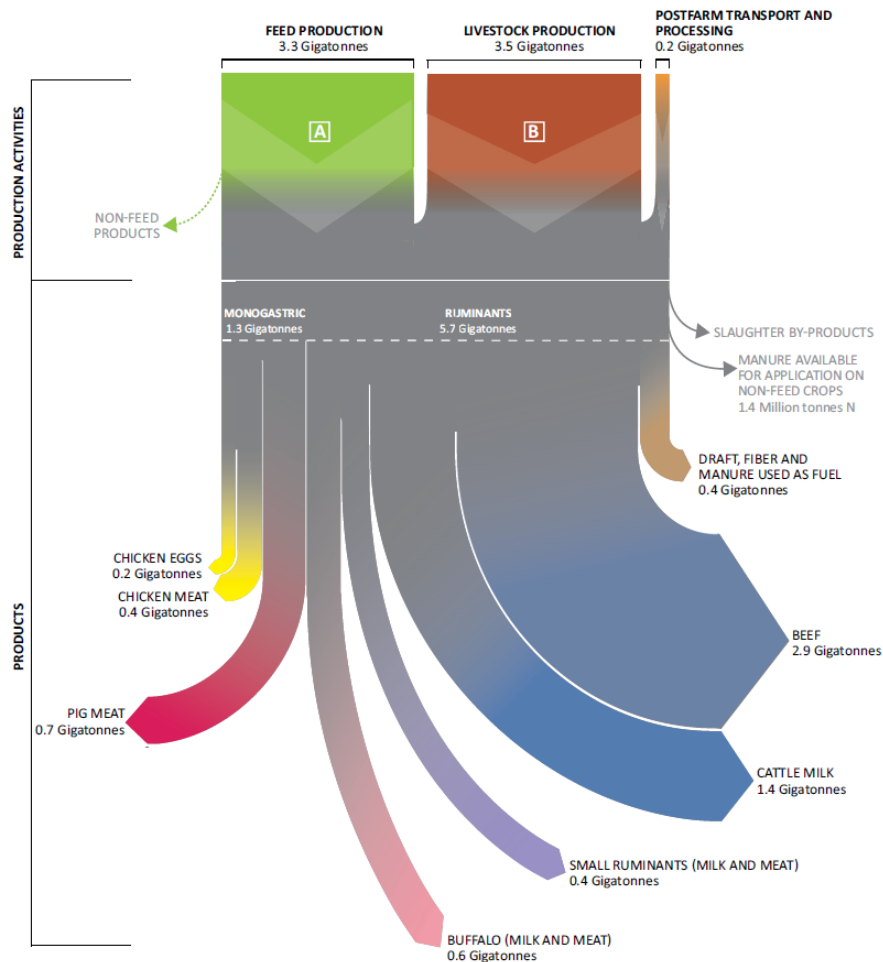




# Climate Change and Land

An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems

## Summary for Policymakers



GHG EMISSIONS FROM GLOBAL LIVESTOCK SUPPLY CHAINS, BY PRODUCTION ACTIVITIES AND PRODUCTS

# Reading the headlines in the news

Climate change | Agriculture

## The cows that could help fight climate change

A hefty slice of global greenhouse gas emissions come from the smelly bodily functions of livestock. Can tinkering with the microbes in their guts help to save the planet from climate change?

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## TRUMP CARD Breeding 'super-cows that fart less' is latest plot to stop climate apocalypse

Charlotte Edwards, Digital Technology and Science Reporter  
5 Jul 2019, 13:02 | Updated: 5 Jul 2019, 13:34

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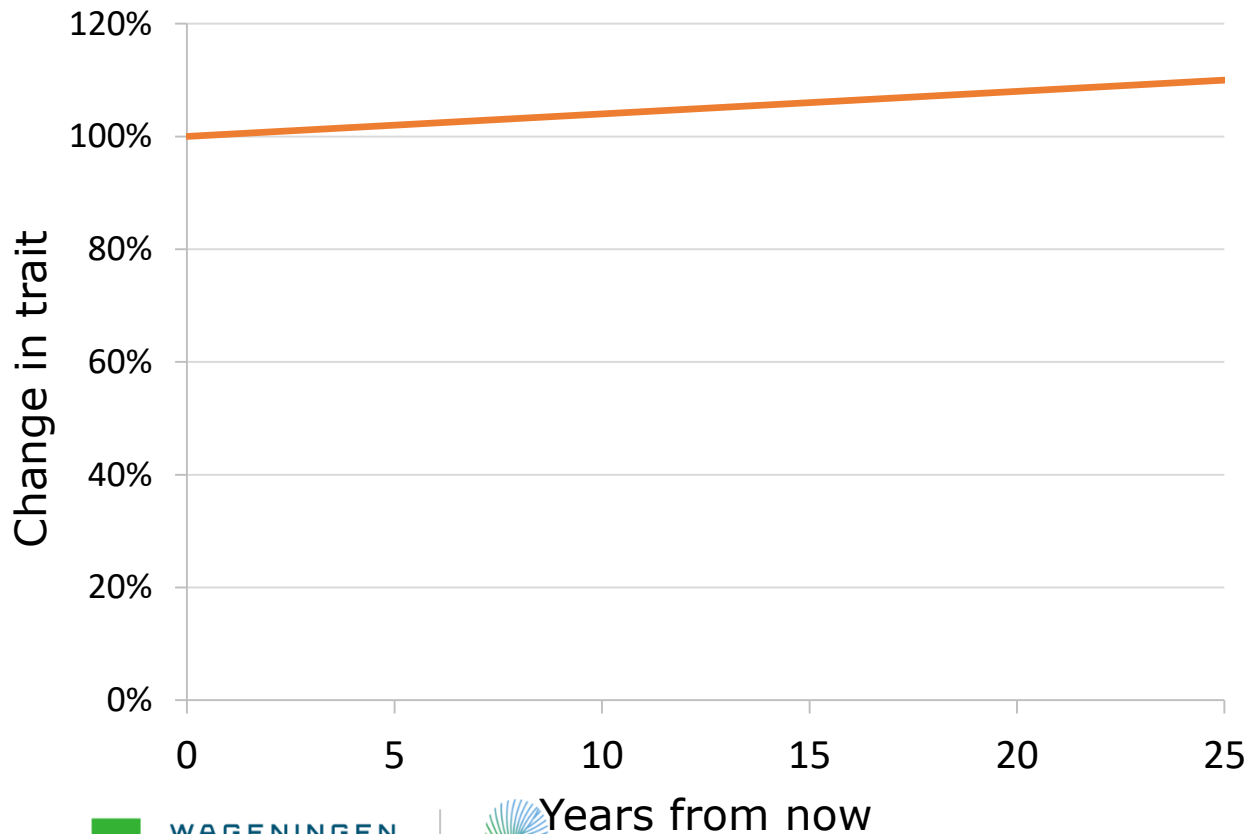
## We could breed climate-friendly cows that belch less methane



ENVIRONMENT 3 July 2019

# What can animal breeding do?

# Trend with current breeding goal



• Methane, g/d

*Current pop. means:*

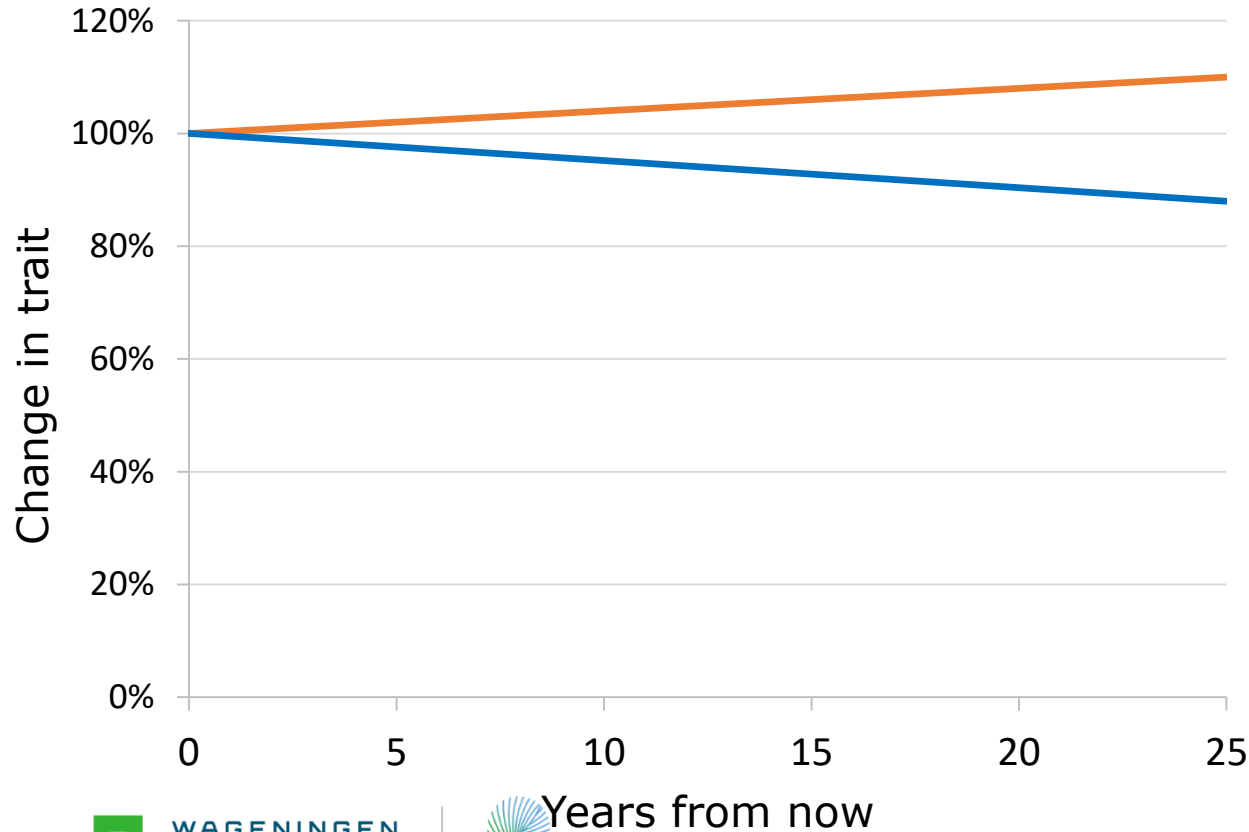
CH<sub>4</sub>: 392 g/d

Milk: 9000 kg (305 d)

Intensity:

16g CH<sub>4</sub>/kg milk

# Trend with current breeding goal



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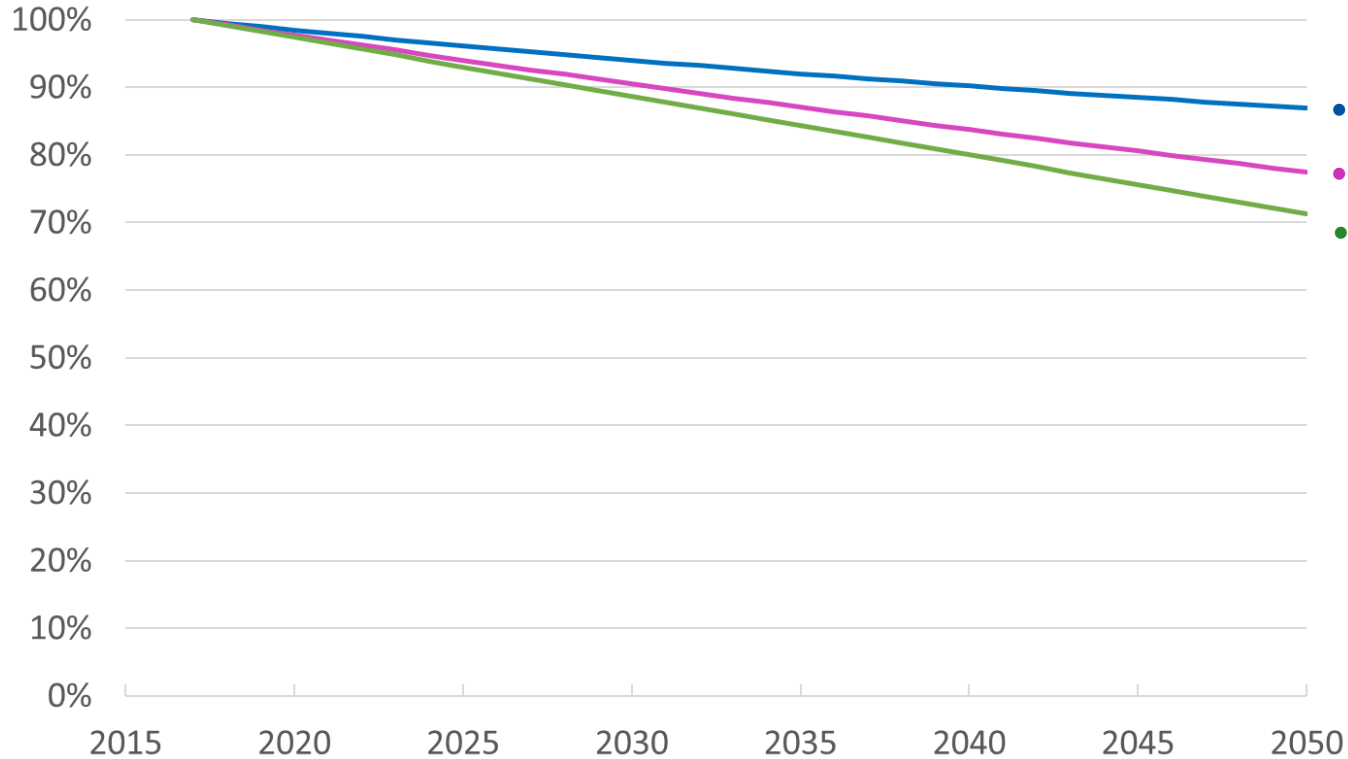
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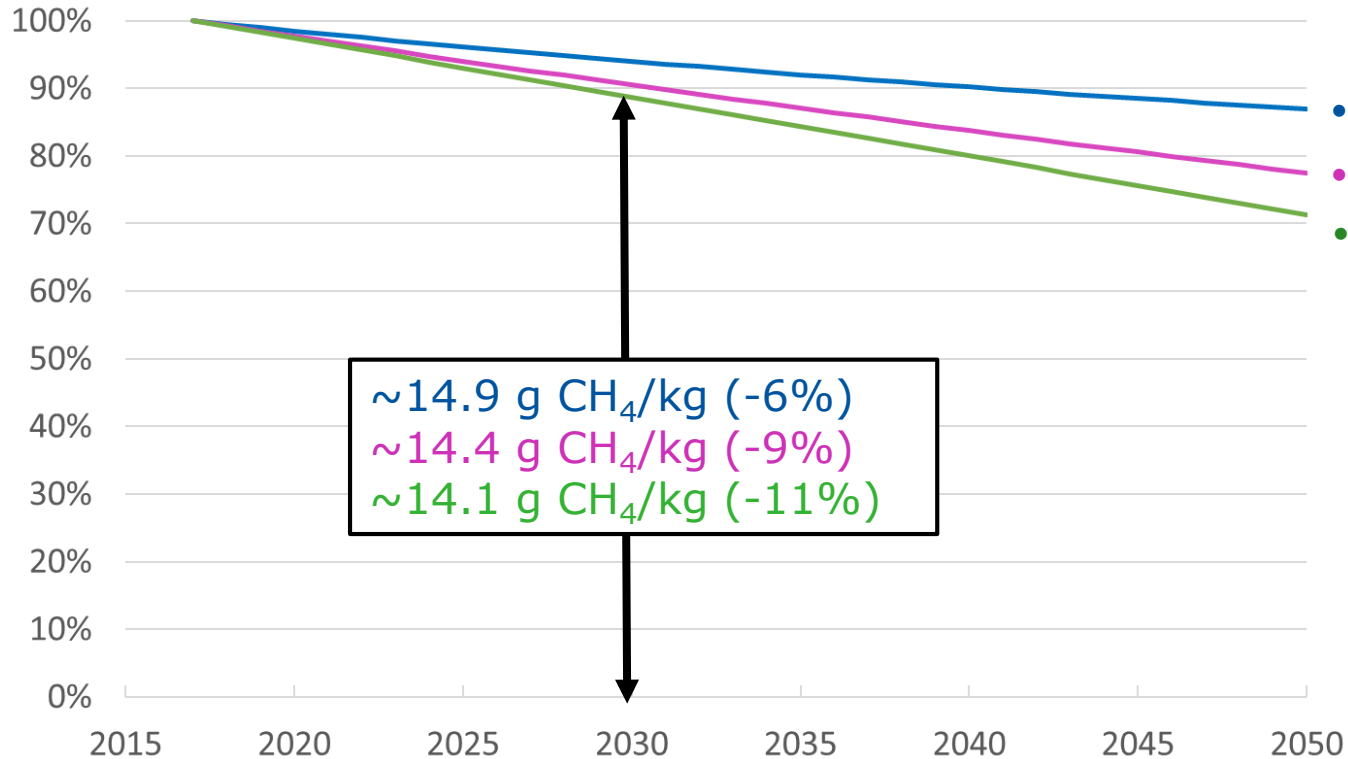


# Trends with adjusted breeding goal



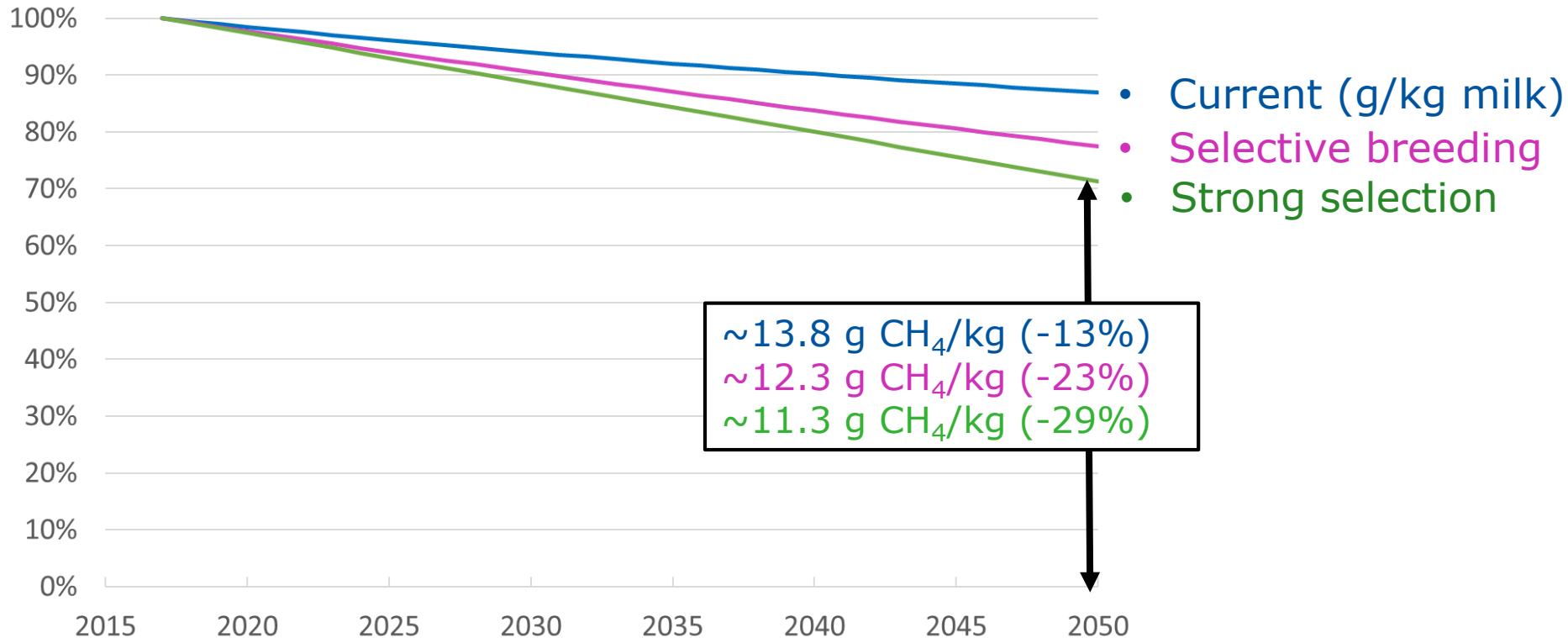
- Current (g/kg milk)
- Selective breeding
- Strong selection

# Trends with adjusted breeding goal

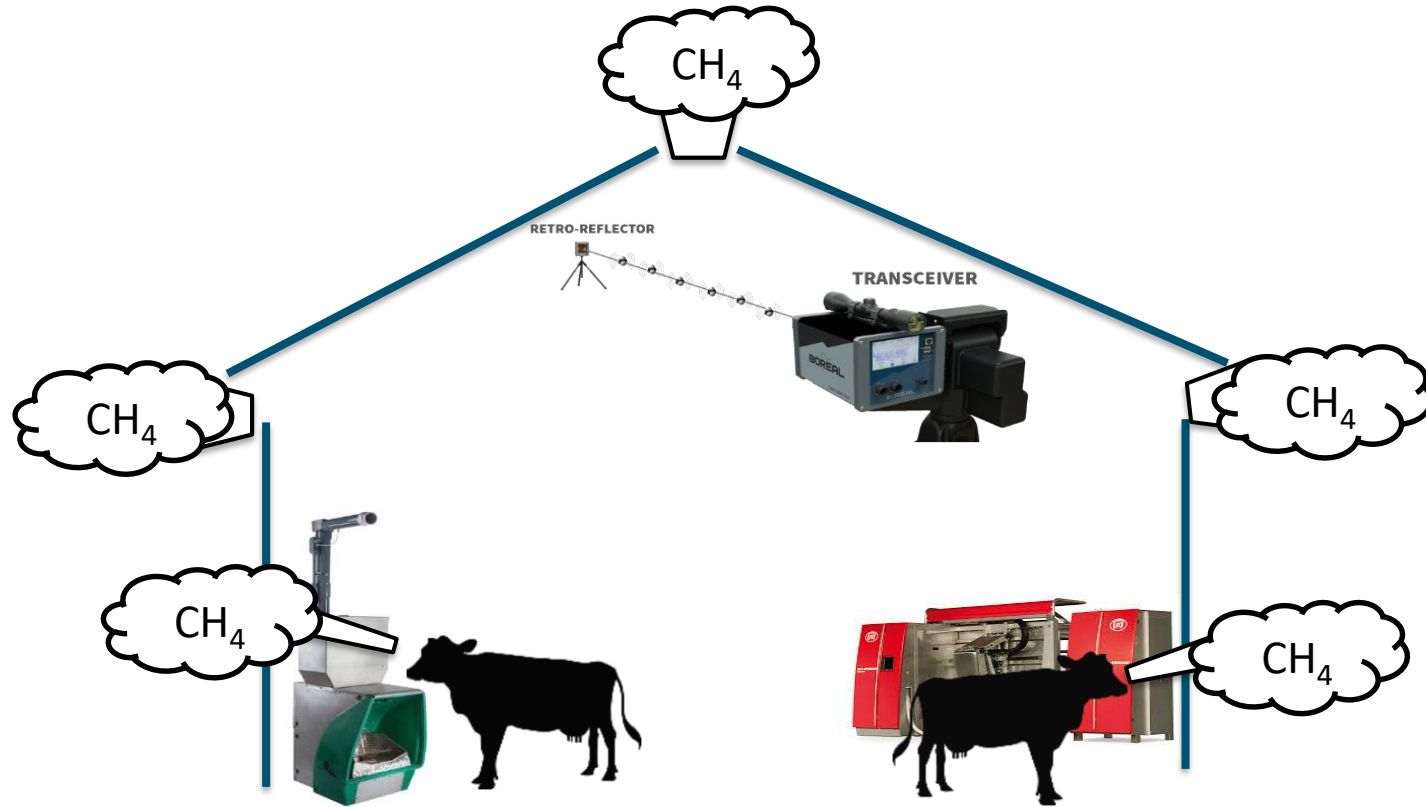


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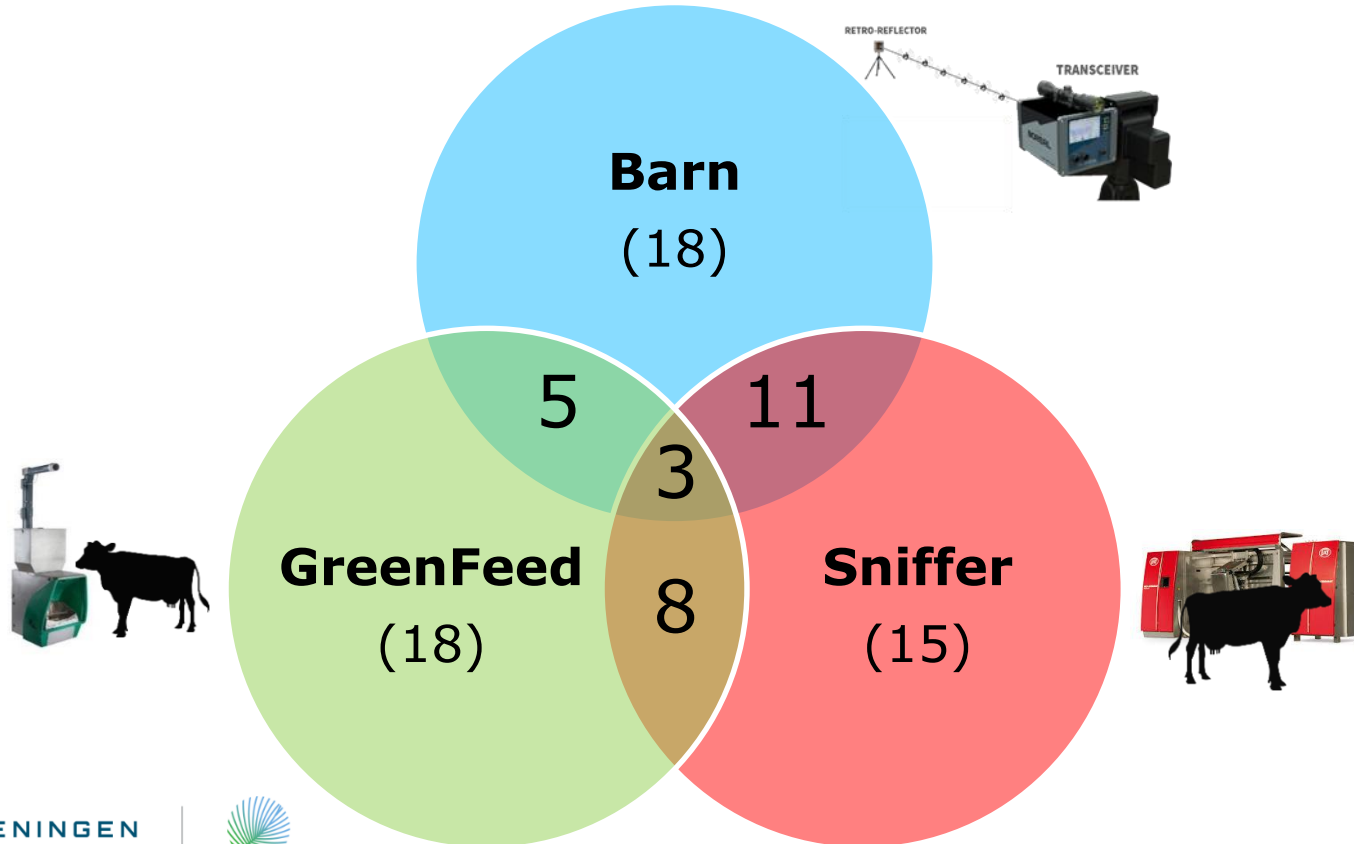
# Trends with adjusted breeding goal



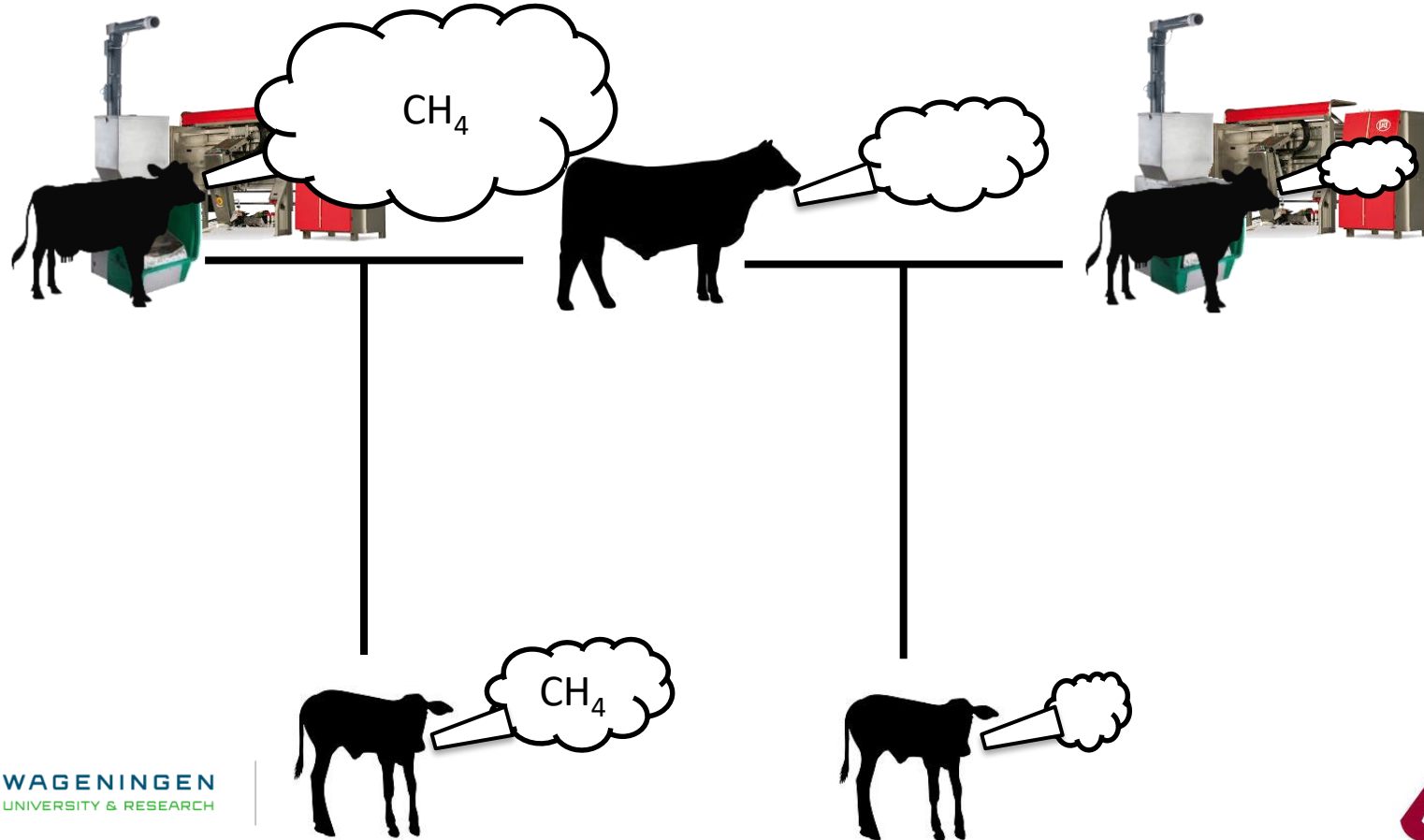
# That is why we are collecting data on farms



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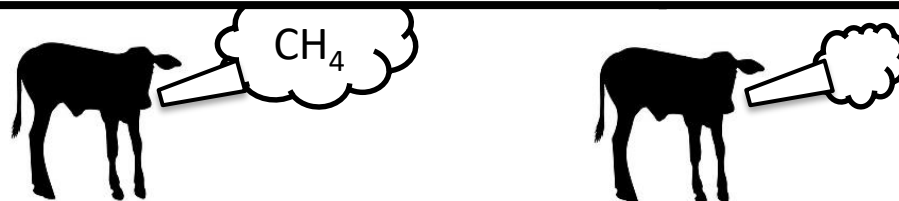
# Towards a breeding value for methane emissions



# Towards a breeding value for methane emissions



Our ambition is to  
record data on **100**  
commercial farms





World Congress on  
Genetics Applied  
to Livestock Production

Rotterdam | The Netherlands  
3 - 8 July 2022



## IMPORTANT DATES

12 January 2022: Deadline abstract submission

1 March 2022: Deadline early bird registration

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