

# Nitrous oxide emission measurements in the Danish field trials

Cecilie Skov Nielsen

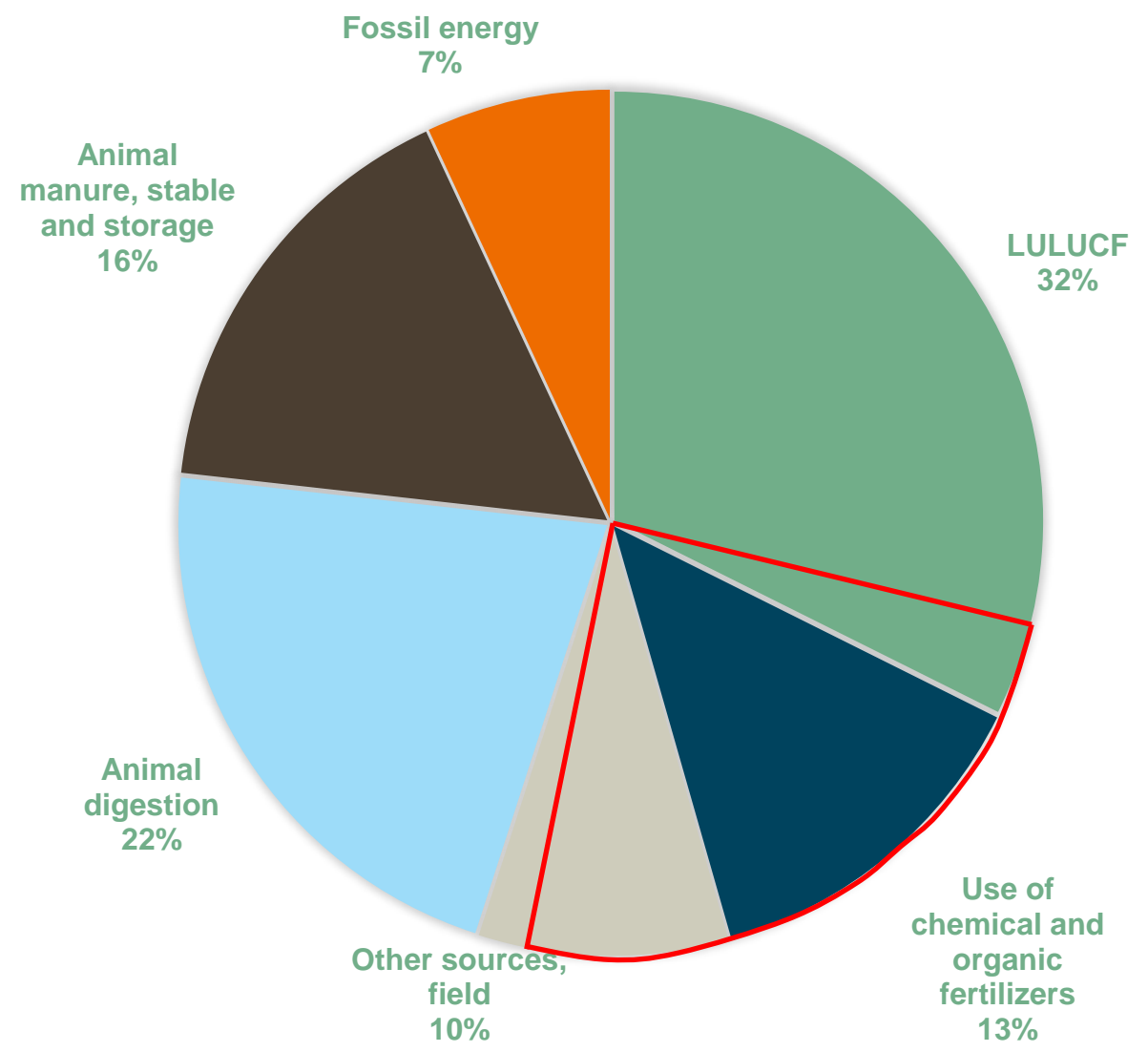
8 February 2023

STØTTET AF  
Promilleafgiftsfonden for landbrug

**SEGES**  
INNOVATION

# GHG emissions from Danish agriculture

17,5 MT CO<sub>2</sub>eq/year



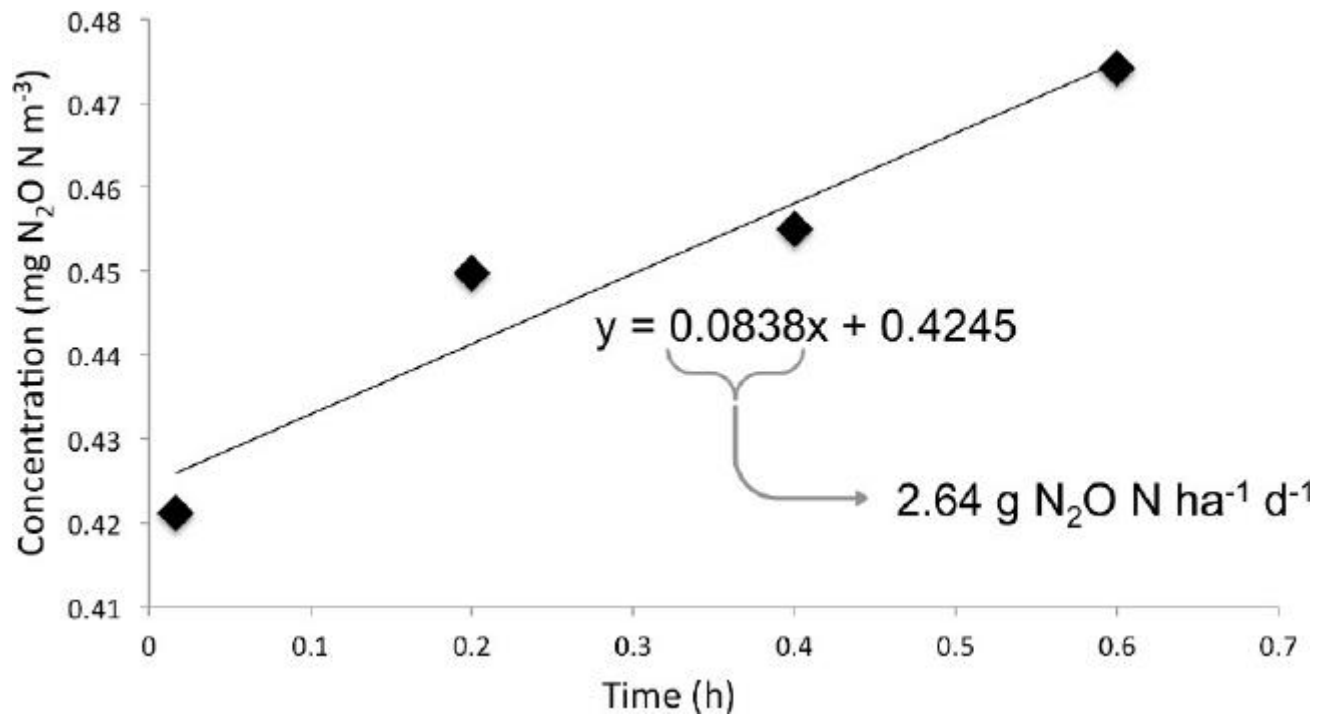
**N<sub>2</sub>O ≈ 28%**

## Purpose of the field trials

- Contribute data to support the development of disaggregated national emission factors for N<sub>2</sub>O
- Develop climate friendly fertilization and management strategies

# Methodology





# What did we measure N<sub>2</sub>O in in 2022?

- Spring barley, Winter wheat, potatoes, maize, grass, clovergrass, catch crops
- Nitrification inhibitors, slurry types and application techniques, liquid ammonia, termination strategies for clovergrass

## In total:

- 15 trials
- On average 20 measurement campaigns per trial  
~ 300 campaigns in total
- ~ 24.000 N<sub>2</sub>O gas samples



# Thank you

- Danish Technological Institute
- Local research units
- Colleagues at SEGES
- Promilleafgiftsfonden
  
- Thank you for listening!

