

Danish GHG Mitigation Measures in the Agricultural Sector



Adam Lentz, Adviser
Climate and Energy Economics

Key messages

- Agricultural and “nature” measures can be cost-effective climate mitigation measures
- Optimize co-benefits from policies by simultaneous policy design
- EU framework should address the special nature of agricultural emissions

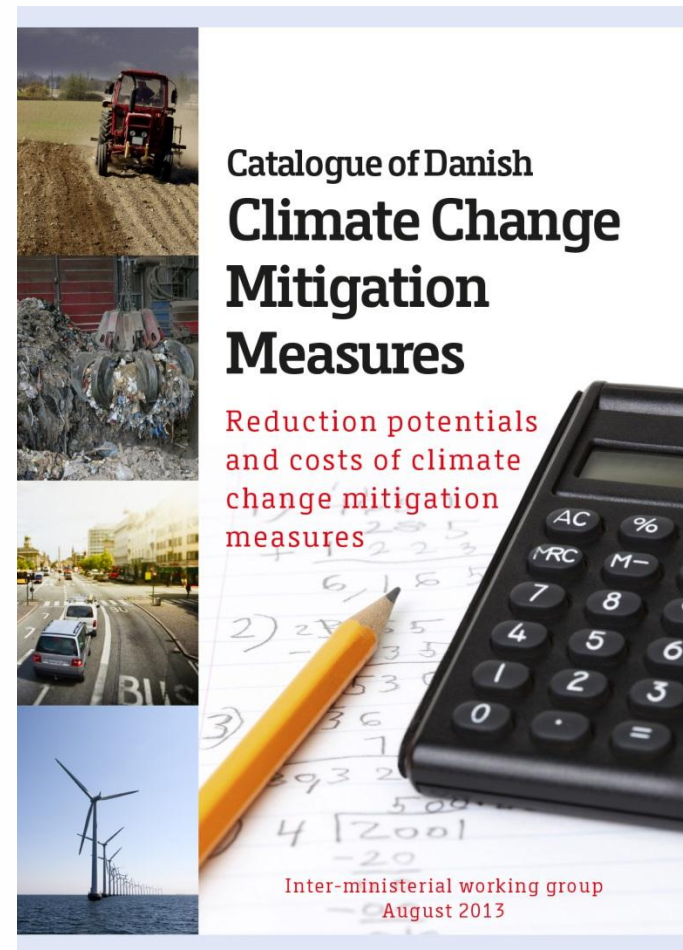
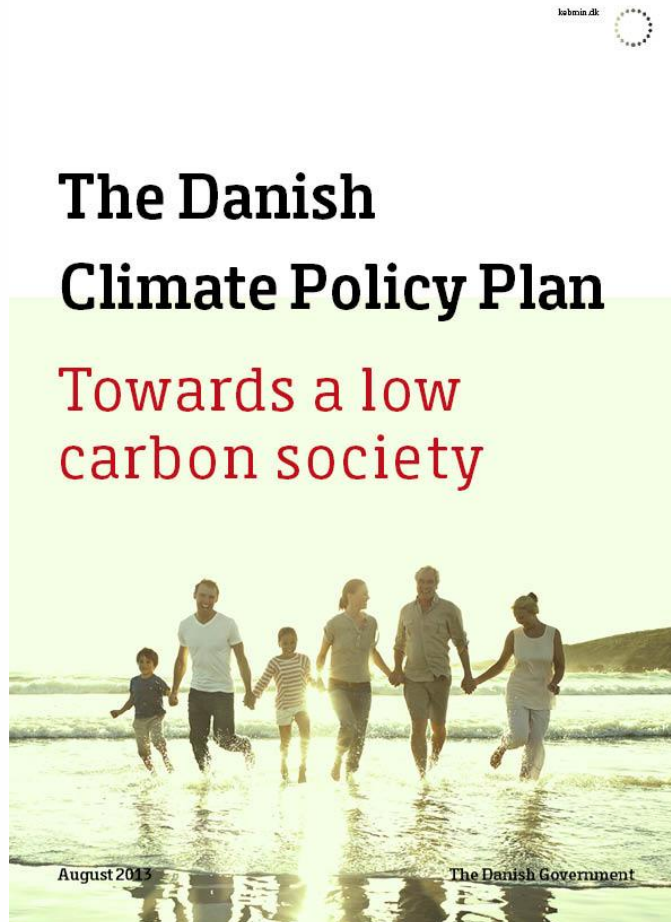
Agenda

- Introduction
- Overview over emissions
- Danish agricultural emission reductions
- Policies and measures



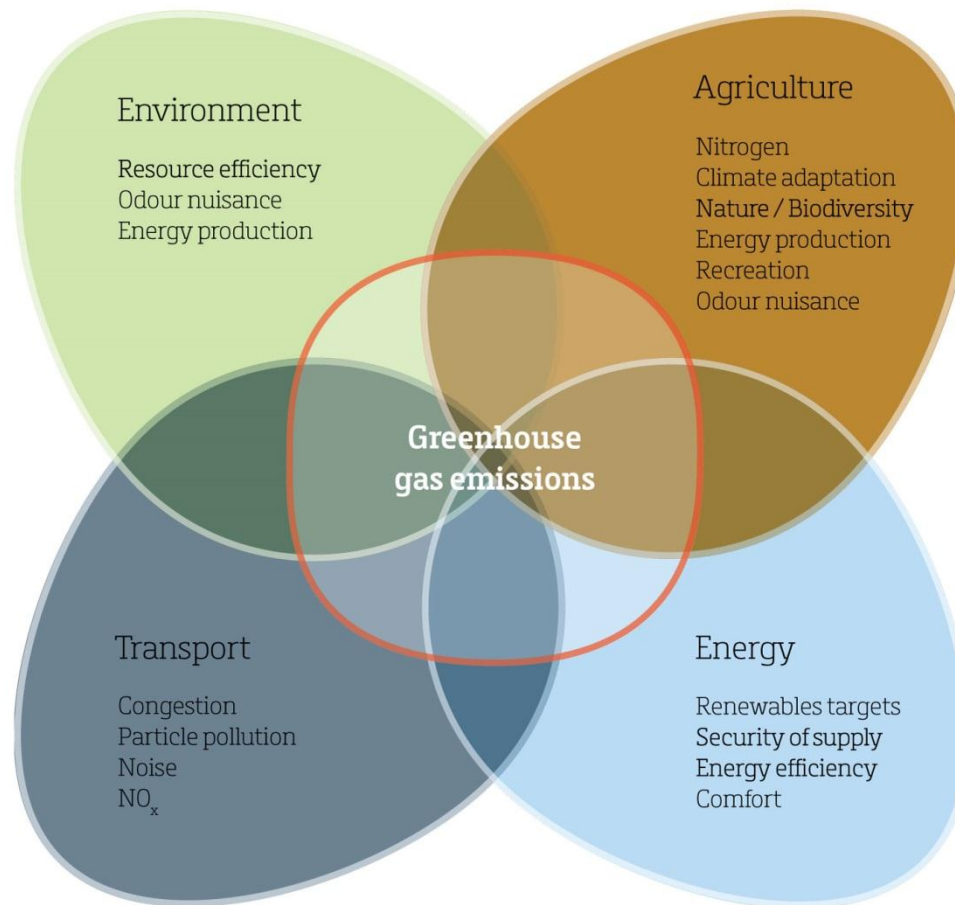
Intro (I): Danish Climate Policies

- 40 % reduction in 2020



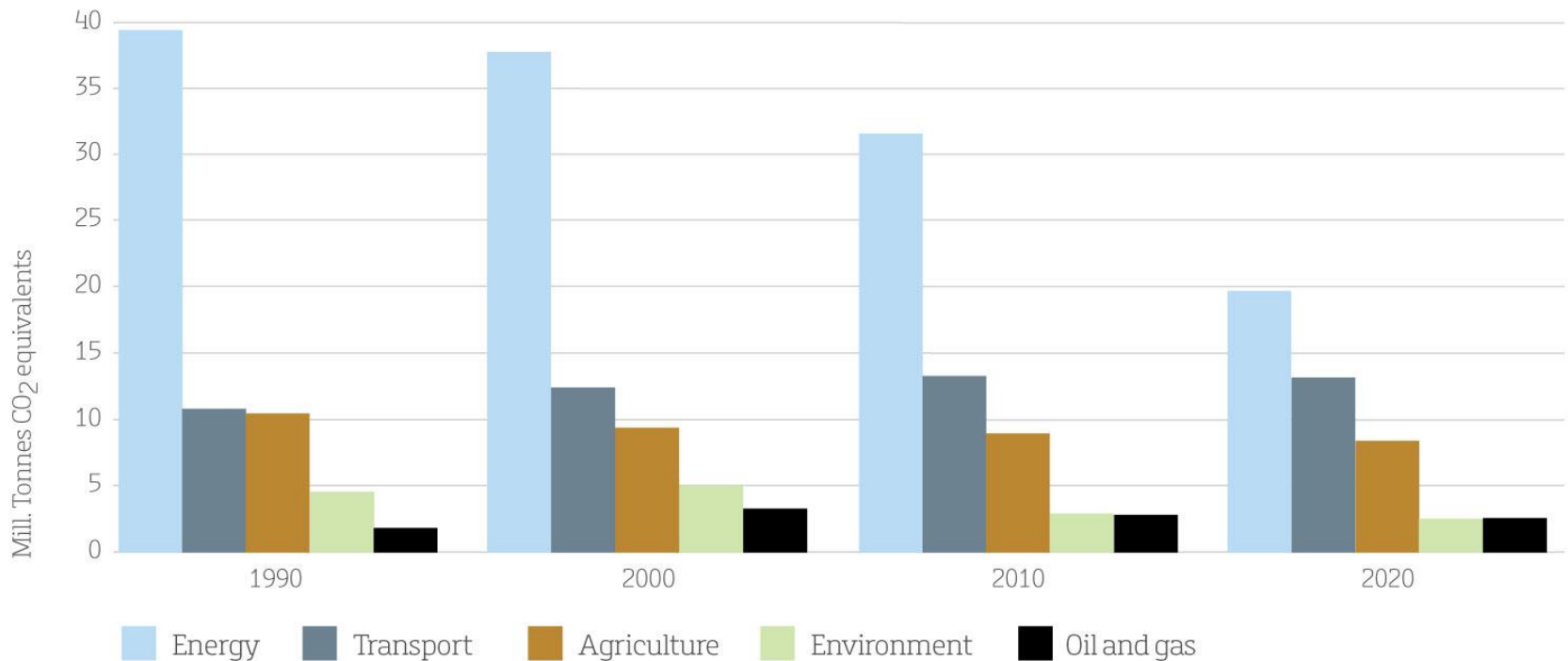
Intro (II): Principles of mitigation

- Climate mainstreaming



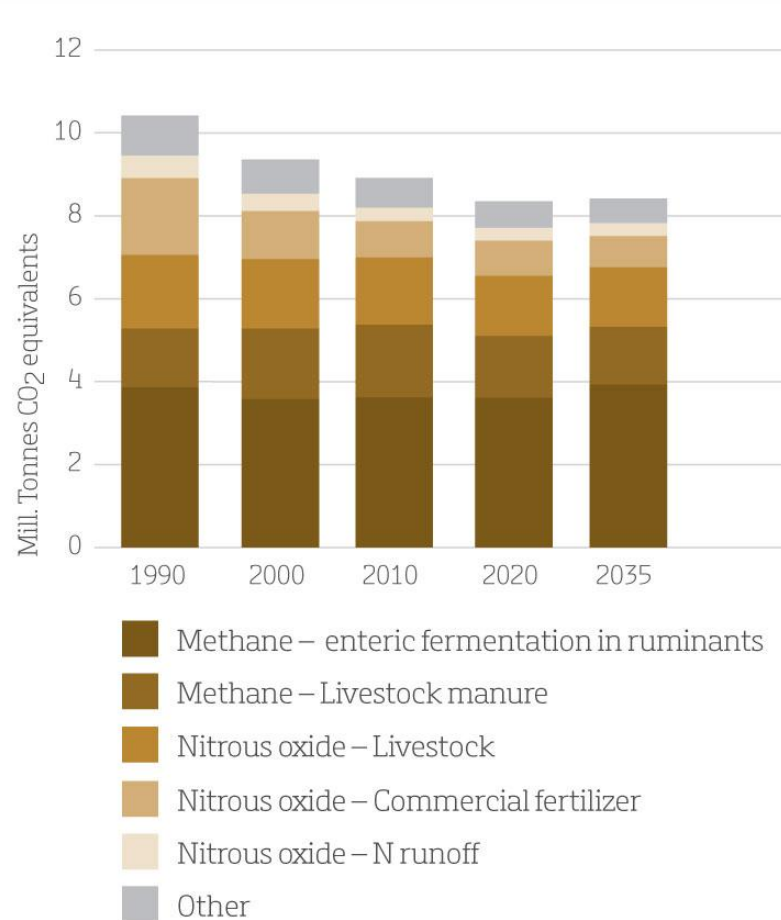
Danish GHG emissions (I):

- Agriculture's share is increasing



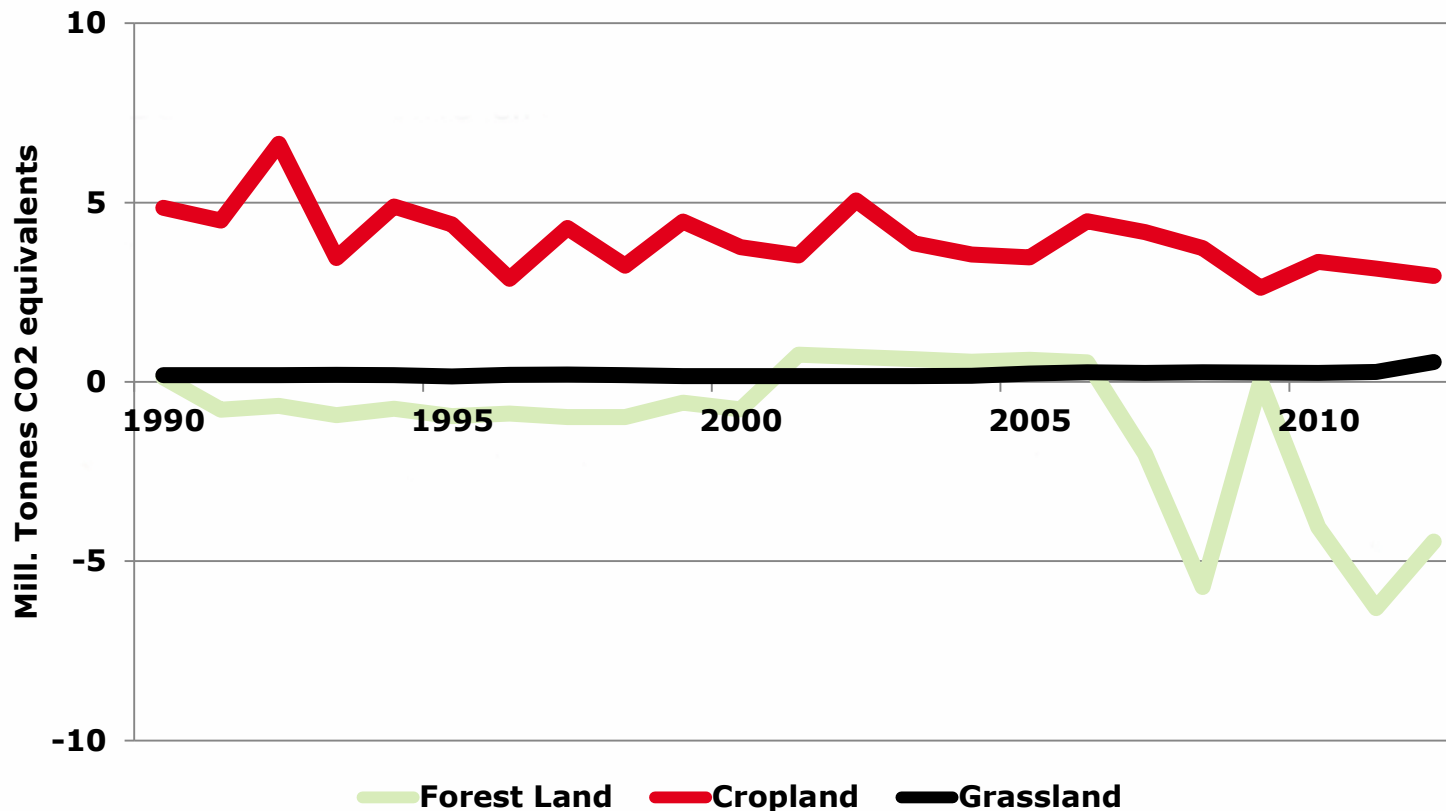
Danish GHG emissions (II):

- Stagnation in reductions



Danish GHG emissions (III):

- LULUCF inclusion (FM, CM & GM)



A note on GHG inventories (I):

- Emission factors let's remember the end of pipe

General rules

- Aggregate data

$$\textit{Emissions} = \textit{activity data} * \textit{emission factors}$$

- Activity data
 - "Normal", "head count", areas etc.
- Emission factors
 - Different tier levels

A note on GHG inventories (II):

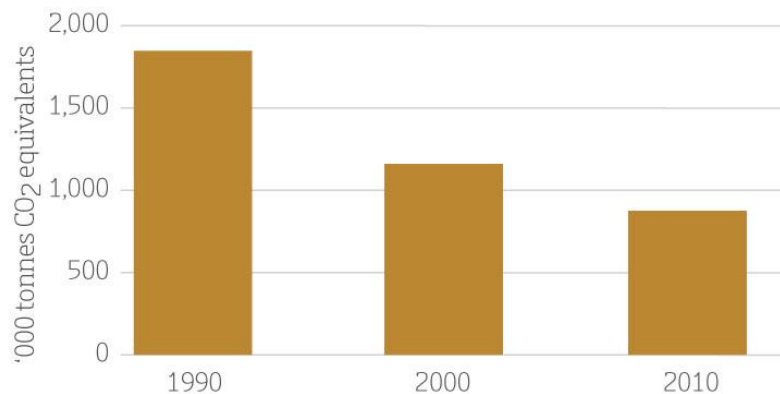
- Let's remember the end of pipe



Danish agricultural emission reductions(I):

- Historical measures

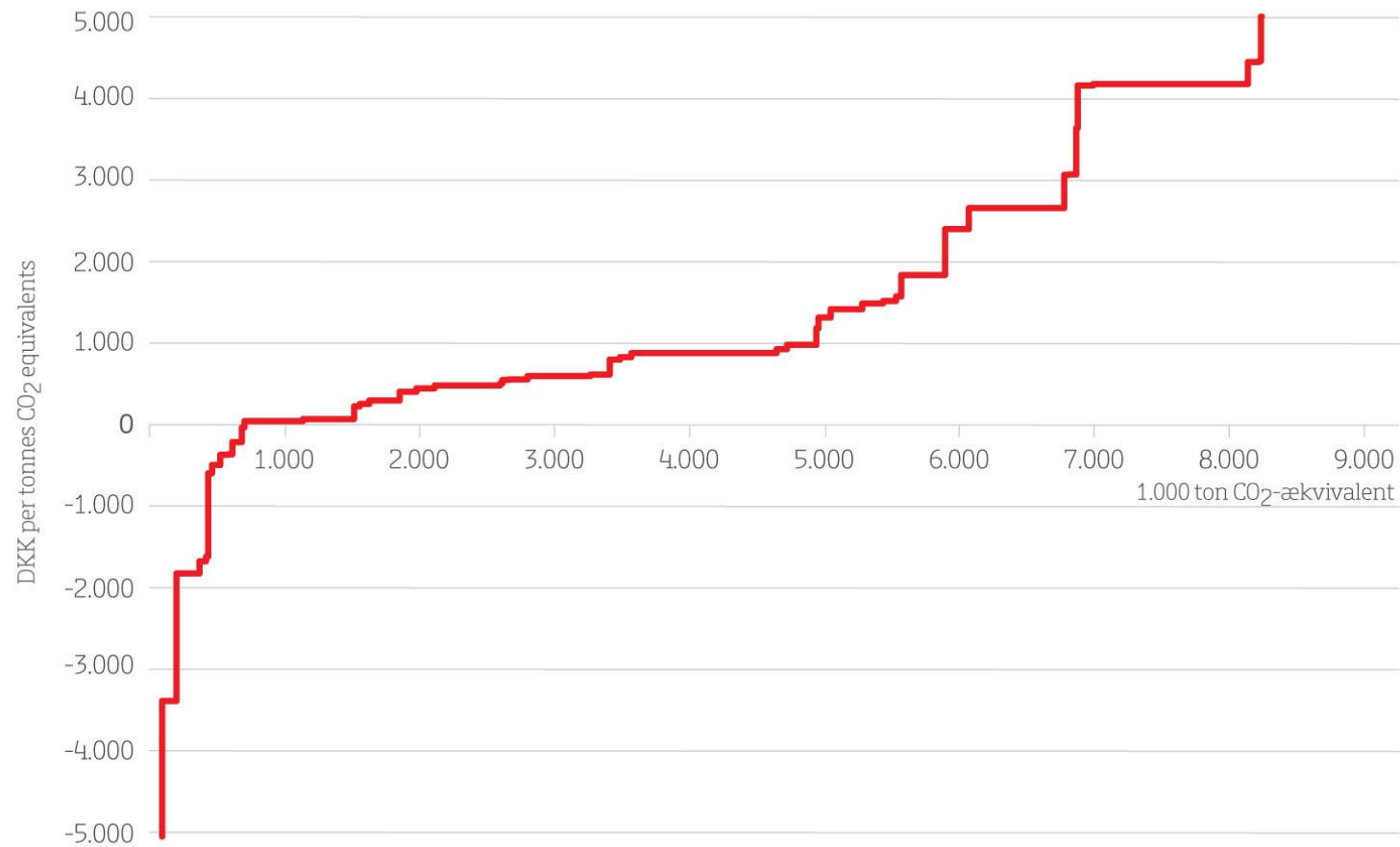
- Ban on field burning
- Reduced nitrogen quota
- Nature protection
- Biogas



Agricultural emissions of greenhouse gases
from mineral fertiliser

Danish agricultural emission reductions(II):

- New cost-effective measures



Danish agricultural emission reductions(III):

- Efficient regulation should optimize co-benefits

- Preservation of peat soils
 - Carbon, nitrogen, biodiversity and recreation
- Biogas
 - Methane reduction, higher fertilizer quality, energy independence and resource utilization
- Dairy management
 - Feed utilization, genetic selection, methane reductions, improved farm profits

Key messages

- Agricultural and "nature" measures can be cost-effective climate mitigation measures
- Optimize co-benefits from policies by simultaneous policy design
- EU framework should address the special nature of agricultural emissions

Thank you for your attention

ADAM LENTZ – ABL@ENS.DK

READ MORE: WWW.ENS.DK

