



# Ministry of Agriculture, Nature and Food Quality

How do we reach our climate goals in The Netherlands for agriculture?

Maarten Kool



### Climate goals of The Netherlands

- 1. 30% reduction of our greenhouse gas emissions in 2020 compared to 1990 levels.
- 2. Reach a share of renewable energy of 20% by 2020.
- 3. Double the rate of yearly energy efficiency improvement from 1 to 2% in the coming years.



# How do we reach our national climate goals?

Clean and Efficient. New energy for climate policy

- market instruments
- standards
- financial instruments
- innovation
- climate diplomacy
- agreements



# Agreements (1)

- 1. Clear and general support for the issues.
- 2. The government needs public and social authorities to achieve goals.
- 3. The public and social authorities needs the government for financial instruments and permitting procedures.
- 4. The introduction of legislation would take more time.



# Agreements (2)

- 5. Bottom-up methods provides better support.
- 6. Bottom-up methods can be tailored to businesses.
- 7. It is difficult not to comply or to withdraw from an agreement when it is accompanied with positive publicity.
- 8. There are no enforcement problems and costs.



### Agricultural agreement

The agricultural agreement was signed in June 2008.

#### **Participants**

- Ministry of Agriculture, Nature and Food Quality, Ministry of Housing, Spatial Planning and the Environment, Ministry of Economic Affairs, Ministry of Finance
- Organisations representing Dutch farmers, horticulturists, flower bulb growers, mushroom growers, food industry, feed industry, wood industry, landowners, agricultural logistics



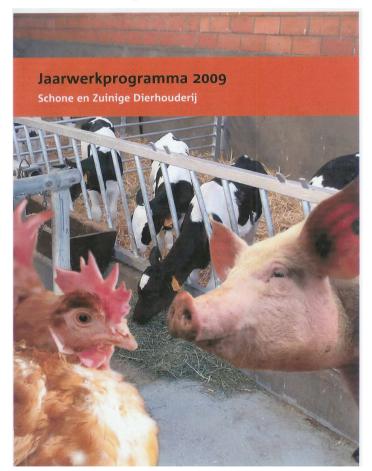
### Goals agricultural agreement in 2020

- 1. The emission of CO2 will be reduced by 3.5 to 4.5 Mton CO2 equivalents.
- 2. The emission of non-CO2 greenhouse gases will be reduced by 4.0 to 6.0 Mton CO2 equivalents.
- 3. The amount of renewable energy produced will be around 200 PJ. For instance with wind power and the use of inland biomass.
- 4. The energy efficiency will be improved by using for instance solar water heaters, solar panels, biofuel, small scale windmills.



# How do we reach our agricultural goals?

- 1. Annual programs
- 2. Innovation programs
- 3. Sound monitoring





# Measures (1)

#### **Innovation**

- 1. low emission housing systems
- 2. low emission feeding strategies
- 3. manure management



# Measures (2)

### Introduction new technology

- 1. closed glasshouses
- 2. precision agriculture
- 3. low energy devices



# Measures (3)

### Transfer of knowledge

- 1. create awareness
- 2. use of demonstration farms
- 3. farmers networks