



Environment and Spatial Planning  
*Ministry of Housing, Spatial Planning and  
the Environment*

# Developments in climate and air pollution policies

Klaas-Jan Koops  
*policy coördinator Climate  
Dutch Ministry of Housing,  
Spatial Planning and the  
Environment*

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# Content

1. Climate policies
2. Air pollution policies



# Direction Climate and Air Quality

Ministry of Housing, Spatial Planning and the Environment

Directorate-General Environment

Climate and Air Quality Department

Climate and Energy Unit

Air Quality Unit

Sustainable Industry Unit

Mobility and Transport Unit

Climate policy

Air Quality policy

Climate and Air Quality policies combined



## Climate goals

1. UNFCCC / Copenhagen: temperature rise below 2 degrees.
  - ↳ Concentrations below 450 ppm CO<sub>2</sub>-eq (Current: 390 ppm. Pre-industrial: 280ppm.)
  - ↳ 50 % CO<sub>2</sub>-eq reduction worldwide in 2050
  - ↳ 80-95% CO<sub>2</sub>-eq reduction in developed countries
  - ↳ 30% CO<sub>2</sub>-eq reduction in 2020
  - ↳ Current goals: NL = 30%. EU = conditionally 30%
2. Kyoto Protocol: NL 6% less GHG in 2008-2012 (compared to 1990).



## Greenhouse Gases (GHG)

- CO<sub>2</sub>
  - CH<sub>4</sub>
  - N<sub>2</sub>O
  - Fluorine bond's (HFK's, PFK's, SF<sub>6</sub>)
- } Non-CO<sub>2</sub> GHG's



## National climate policies

(Current) National implementation Climate Policies through the program: **Clean and Efficient** (“Schoon en Zuinig”)

Ambition:

1. Greenhouse gas reduction: 30 % by 2020 (see next sheets)
2. Renewable energy share: 20% in 2020  
( $\approx$  17% needed for the EU 14%-goal)
3. Energy efficiency improvement: 2% annually



## National and EU goals in 2020

	<b>National</b>	<b>EU</b>
Total	30% reduction (baseyear:1990)	20% reduction (baseyear 1990)
	150 Mton	174 Mton
ETS	30% reduction (baseyear 1990)	21% reduction (baseyear: 2005)
	63 Mton	75 Mton
Non-ETS	30% reduction (baseyear 1990)	16% reduction in the NL (baseyear 2005)
	87 Mton	99 Mton



## National Climate Policies

### **Industry/Energy:**

- EIA and MJA3/MEE

### **Build Environment**

- (voluntary) “More with Less” program

### **Transport**

- congestion pricing postponed

### **Agriculture**

- Subsidies and covenants / Manure codigestion

### **GHG reduction, non-CO<sub>2</sub>**

- N<sub>2</sub>O reduction at the nitric acid Industry by 5 Mton CO<sub>2</sub>-eq via opt in ETS
- Total of over 60% CO<sub>2</sub>-eq reduction this sector (without agriculture)!



## EU climate policies

- ETS
- CO<sub>2</sub>-standards for vehicles
- Eco design (no CO<sub>2</sub> reduction, but positive on energy efficiency)
- IPPC → BAT obligatory (but not for ETS companies)
- Agriculture: no EU reduction policies, but 13% of all CO<sub>2</sub> emissions!



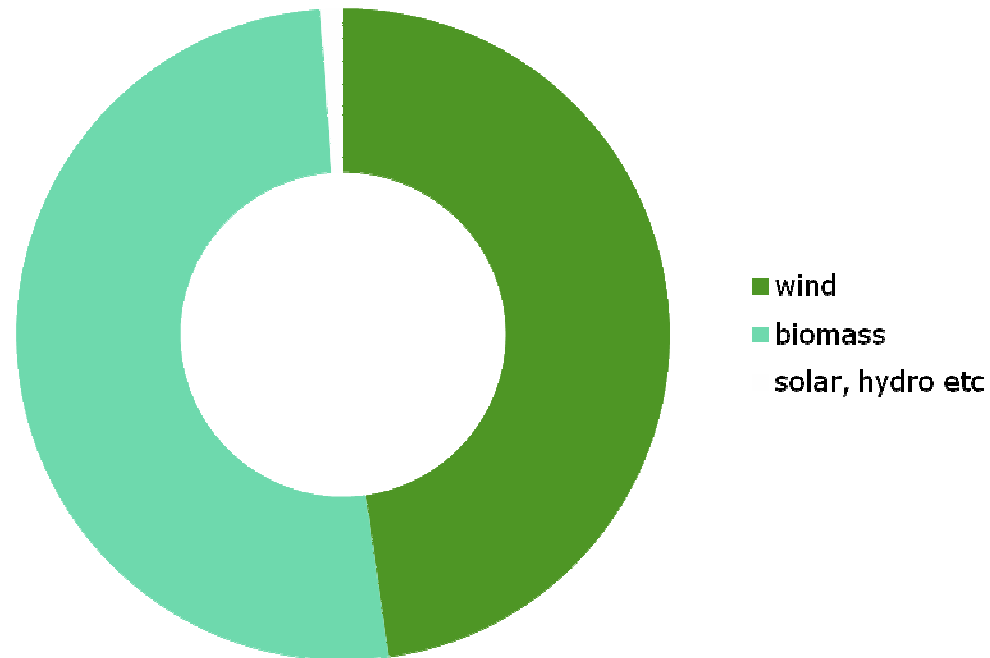
## Biofuels

- Renewable Energy Directive: 14% target and 10% in transports
- sustainability criteria for liquid biomass and biofuels
  - minimum CO2 reduction
  - may not come from land with high biodiversity, carbonstocks and wetlands
- 2nd generation biofuels must count double in the target
- two important issues are not solved yet:
  - sustainability criteria for solid biomass
  - Indirect land-use-change (ILUC)



## Biomass

Biomass supplies a significant proportion of renewable energy in the Netherlands





## CCS

- Ambition for a 100% renewable energy supply
- This is not realistic (yet?)
- So techniques like CCS are needed (as transition technique?)
- The government is working on the decision criteria: which demonstration project will be subsidised.
- Dominant criterion: Euro per ton CO<sub>2</sub> reduction
- Environmental quality in general is also of importance



## Current issues

### Goals vs. Realization

- 20% CO<sub>2</sub>-eq, 15,5% RES, 1,3 energy efficiency

### Will Dutch goals remain the same with a new government?

- Dutch goals more ambitious than EU goals
- RES-E (and the "SDE") under pressure due to expenditure cuts

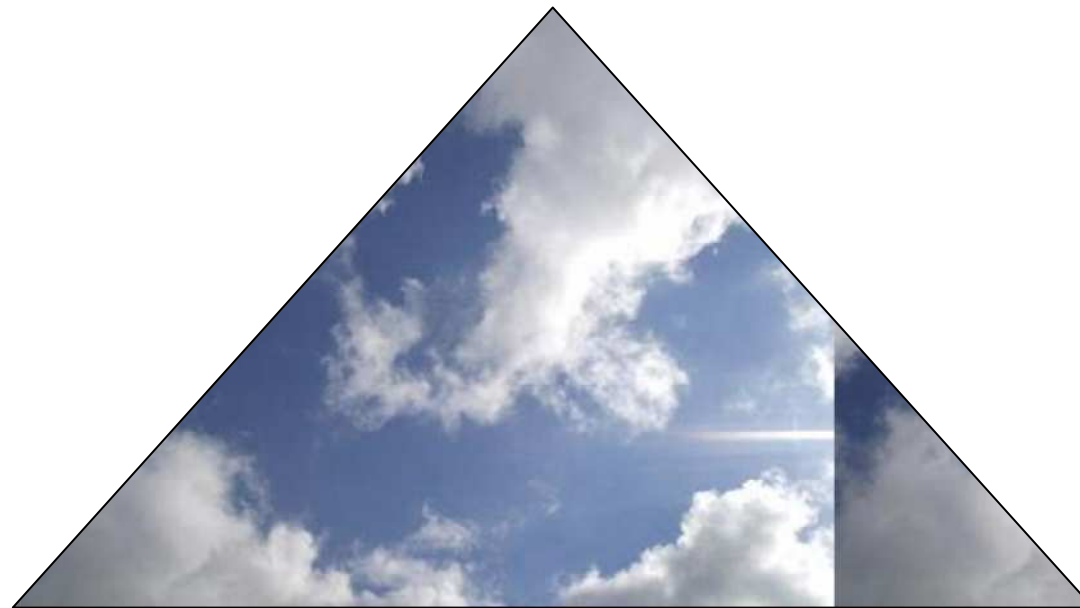
### Policies under question:

- obligatory fase-out of G and later on F labels combined with White Certificates?
- Future of congestion pricing?



# Air quality policies

National emission ceilings



(Local) Air Quality

Source measures



# Pollutants

## **National Emission Ceilings:**

- SO<sub>2</sub>
- NO<sub>x</sub>
- NH<sub>3</sub>
- VOC
- Particulate Matter (foreseen for 2020)

## **(Local) Air Quality:**

- NO<sub>x</sub>
- Particulate Matter



## National emission ceilings

UN/ECE: **Convention on Long-range Transboundary Air Pollution (CLRTAP, since 1979).**

**NEC-Directive:** Slightly more stringent implementation in the EU.



## (Local) air quality

Implementation of EU standards on air quality through the National Co-operation Program on Air Quality ("NSL").

1. The NSL gives the opportunity to balance the effect of spatial projects and measures to improve air quality. The balance has to be positive: in 2015 all standards should be met

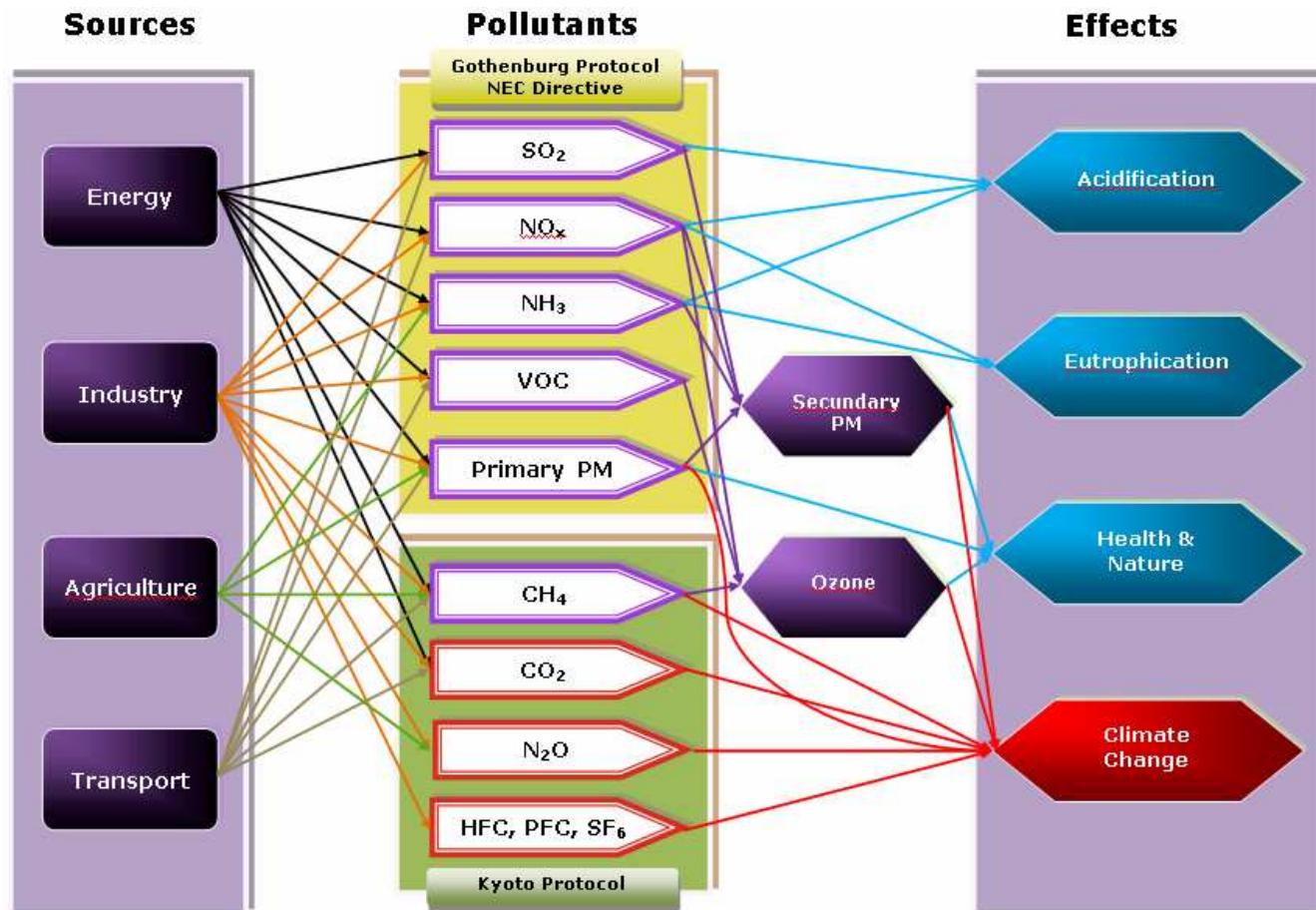
2. The NSL consist of a great number of local and national measurements.

For example: Soot filters, sustainable public transport, better traffic flow, early introduction of new cars

Some municipalities took climate effects of measures into account



# GHG and air pollutants interaction





Thank you for your attention

Klaas-Jan Koops  
Klaas-jan.koops@minvrom.nl