



# CO<sub>2</sub>-reduction in transport

In the Netherlands

Henk Wardenaar (coordinator climate affairs), Paris, 2007 May 21-22

# I. EU and national objectives

## EU 2020

- > 20 % reduction CO<sub>2</sub>, compared to 1990
- 20 % reduction in energy consumption
- 20 % renewable energy

## NL 2020

- 30 % reduction greenhouse gases (incl. CO<sub>2</sub>), compared to 1990
- 2 % reduction in energy consumption annually
- 20 % renewable energy

# European and national instruments

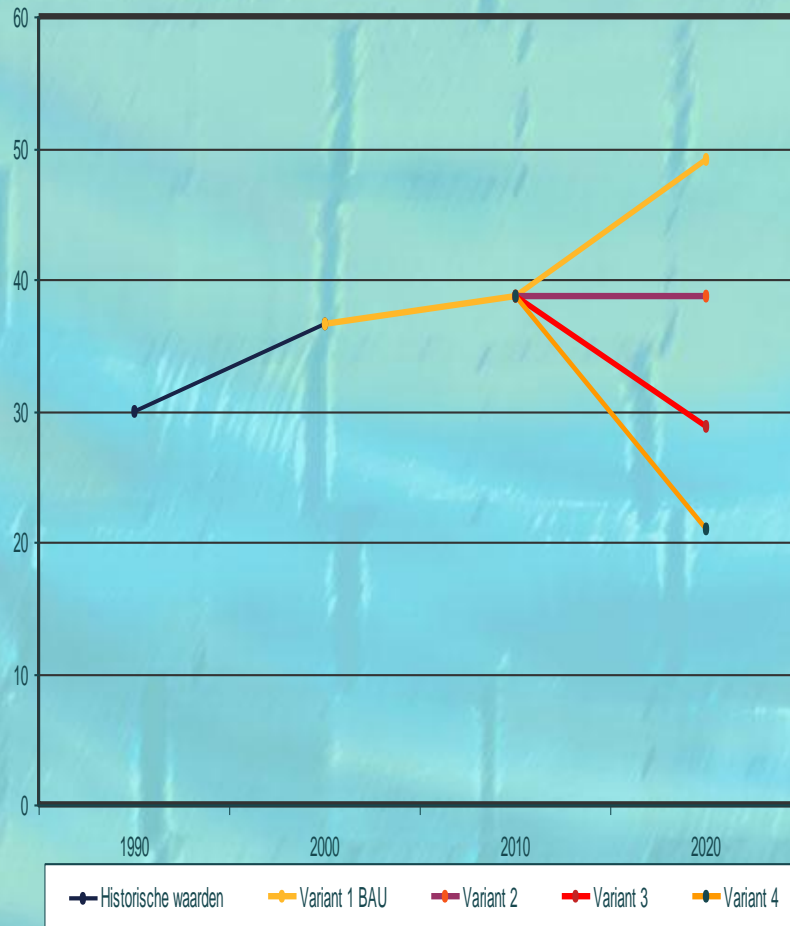
## EU

- Regulation
- Norms (targets) for
  - Gaseous emissions
  - Noise emissions
- Emission trading scheme
- Research, technology development and demonstration
  - FP7
  - CIP
- Level playing field
- Private sector investments?

## NL

- Implementation of European regulation
- National legislation
- Taxation (BPM, EIA, MIA)
- Implementation of emission trading scheme
- Research programmes
- Innovation programmes
  - Automotive
  - Maritime
  - Etc.
- Monitoring, control and sanctions
- Private sector investments?

## II. Scenario's for NL (Mton CO2)



- European and national overall objectives are clear.
- Implications for traffic and transport under debate
- Mitigation CO2 by traffic and transport
  - 1990-2000 growing (30-37)
  - 2000-2010 slowing down (37-39)
  - 2010-2020: scenarios
    - 1: BAU: 39-49 (economic growth)
    - 2: stabilization 2010: 39
    - 3: reduction below 1990: 29
    - 4: -30% from 1990: 21

# increasing energy efficiency

NL – transition programme

Innovation programme (holistic approach)

“Roads to the future”:

- Smart driver behaviour
- Smart car (ITS and car2car communication)
- Smart infrastructure and services  
(collaborative systems in traffic management)

Legislation on biofuels and Innovation programme

- Smart (bio-)fuels

### III. CO<sub>2</sub> reductions in the transport sector in 2010

**Km charge** 2 Mton

**Speed limits** 0.3 Mton

**Fiscal measures** 0.3 Mton

**First NL ecodriving program** 0,9 Mton

**Biofuels** 2 Mton

- 2% in 2007 → 5.75% in 2010
- Innovative biofuels (subsidy programma → € 12mln; 10% better CO<sub>2</sub>-reduction compared to fossil fuels)

**Hybrid vehicles** 0.2 Mton

# Fiscal measures

## Purchase-tax depending on CO<sub>2</sub>-reduction

Energielabel	Hybrid vehicle	Non-hybrid vehicle
A	- € 6.000	- € 1.000
B	- € 3.000	- € 500
C	€ 0	€ 0
D	+ € 135	+ € 135
E	+ € 270	+ € 270
F	+ € 405	+ € 405
G	+ € 540	+ € 540

A = most fuel-efficient,

G = less fuel-efficient, compared to vehicles with about the same size

# NL eco driving program

- Programme to positively influence attitude and behaviour of car users and fleet owners: to drive more calm and comfortable
- Profit: lower costs (and less CO<sub>2</sub>-reduction) and more traffic safety
- Co-operation in a platform with more than 30 consumer and retail organisations (AA, Shell, BP, fleetowners etc.)



# Driving style recommendations 2

- **When you have to slow down or to stop, decelerate smoothly by releasing the accelerator in time, leaving the car in gear**
- **Monthly control of the tension of the tyres**
- **Usage of the in-car apparatus: revolution counter, onboard computer, cruise control**

# Results of the three eco driving programs

- **First programma: budget € 11.5 M**
- **2004: 0.2 Mton CO<sub>2</sub> reduction**
  
- **Second programma: budget € 10 M**
- **2005: 0.5 Mton CO<sub>2</sub> reduction**
  
- **Third programma: budget: € 15.5 M**
- **2005: 0.6 Mton CO<sub>2</sub> reduction**
  
- **Target (all 3 programmes):**
  - **1.5 Mton CO<sub>2</sub> reduction in 2010**

# Driving style recommendations

- **Shift up as soon as possible:  
2000 – 2500  
revolutions/minute**
- **Maintain a steady speed, using  
the highest gear possible**
- **Look ahead as far as possible  
and anticipate to surrounding  
traffic**