



Air pollution and climate change policy

A European perspective

Energy for a Changing World

Air&Climate,

Intermediate climate policies

Gothenburg 19 to 21 October 2009,

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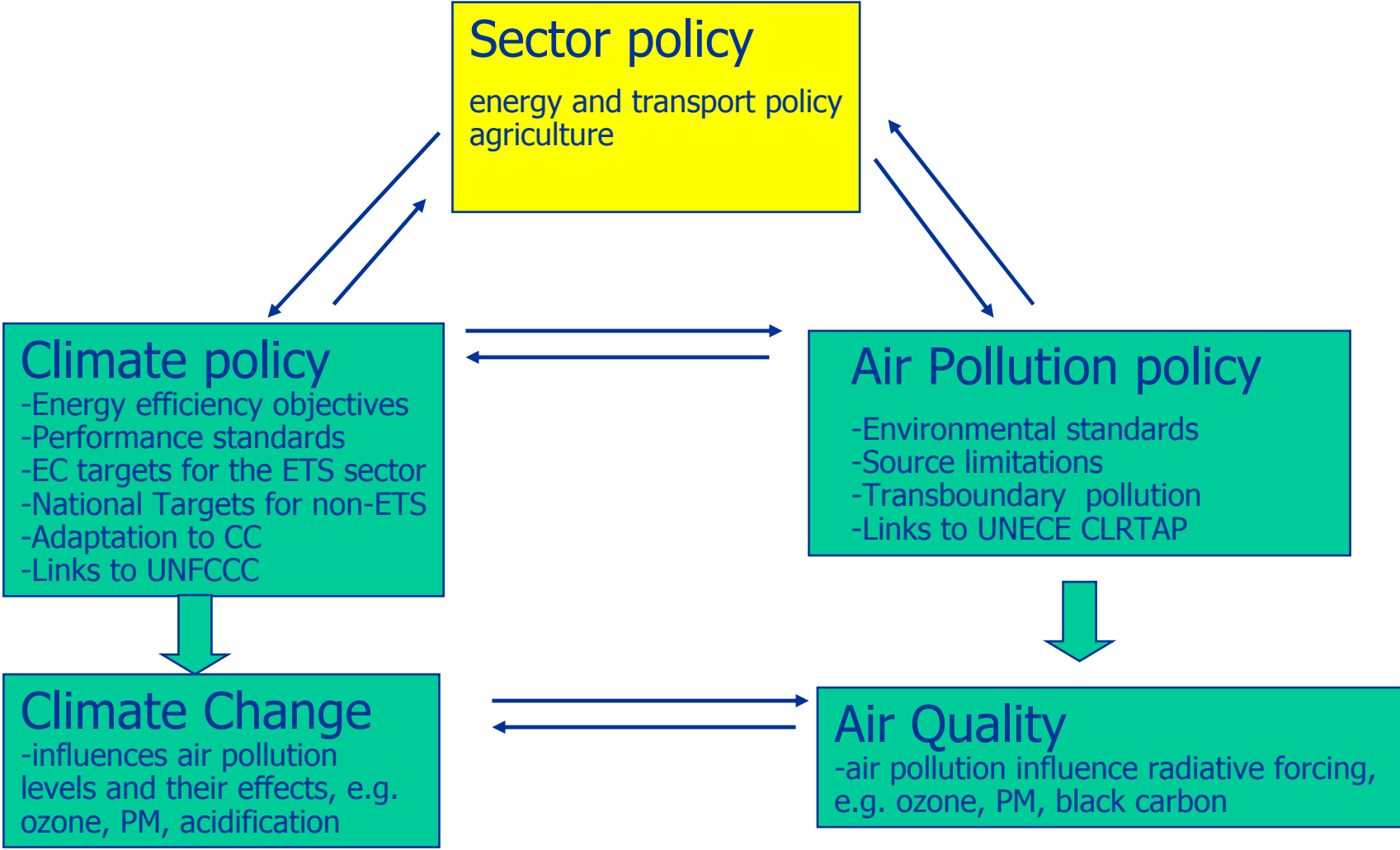


Our overall policy objectives

- Treaty: Art 174
 - preserving, protecting and improving the quality of the environment,
 - protecting human health,
 - prudent and rational utilisation of natural resources,
 - promoting measures at international level to deal with regional or worldwide environmental problems
- European Community 6th Environment Action Programme
 - Climate change: long term objective of a maximum global temperature increase of 2 °Celsius over pre-industrial levels ... shall guide the Programme
 - Air pollution: achieving levels of air quality that do not give rise to significant negative impacts on and risks to human health and the environment problems



Air pollution and climate change policy inter-linkages





Air Pollution Policy on three legs

Thematic Strategy on Air Pollution

Improvements by 2020 relative to 2000

Life Years lost from particulate matter (million)	47%
Acute mortality from ozone	10%
Ecosystem forest area exceeded from acidification	74%
Ecosystem freshwaters area exceeded from acidification	39%
Ecosystem area exceeded from eutrophication	43%
Forest area exceeded by ozone	15%

Air quality legislation

New legislation since 2008
PM10 and PM2.5 limit values
PM2.5 Average exposure indicator target for each MS

Source oriented legislation

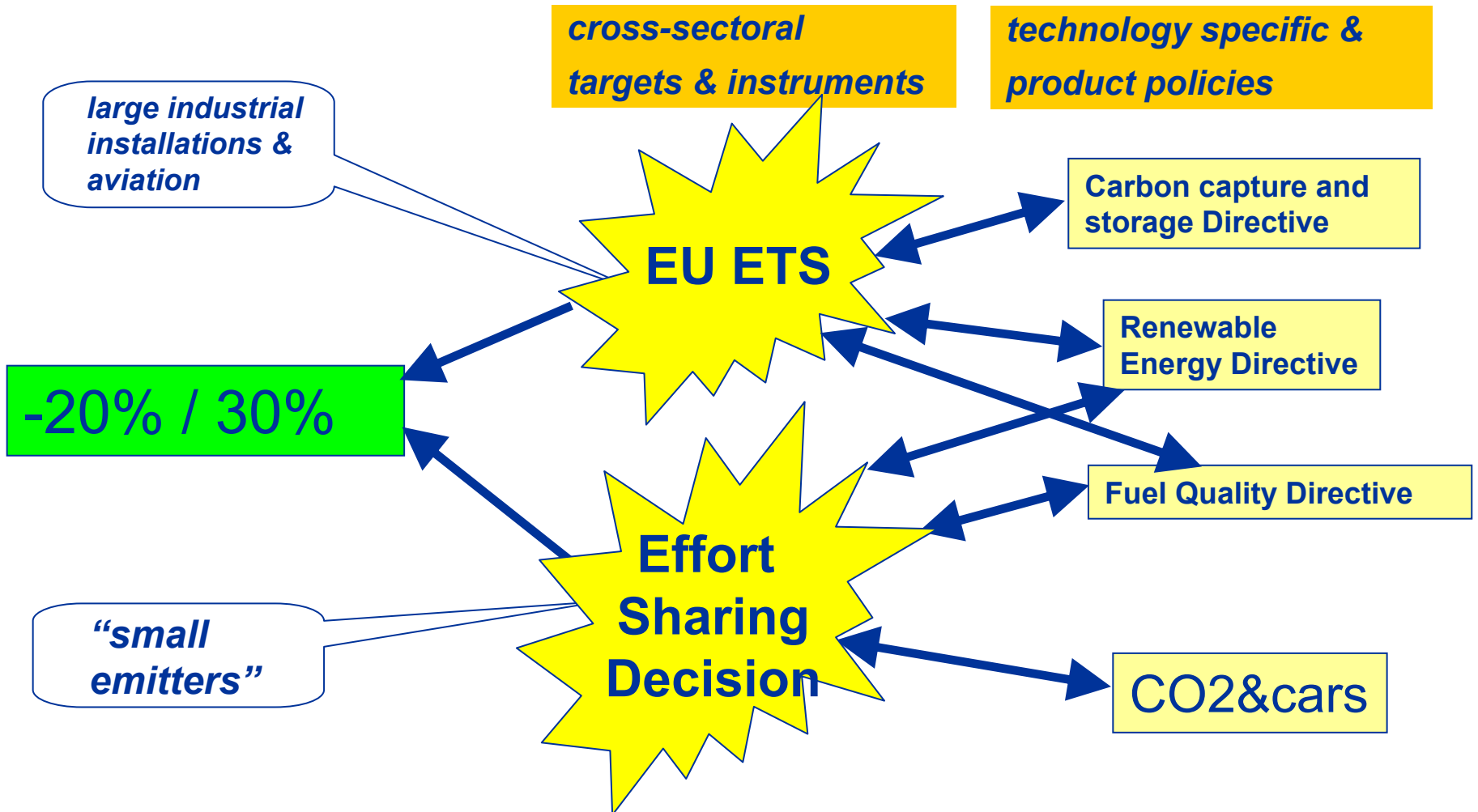
Mobile sources -EURO standards for vehicles
Stationary sources
Industrial and large installations
VOCs in solvent use
Product standards (paints)..

Transboundary air pollution

National emission ceilings
Links to the CLRTAP



The Climate Change & Energy package at a glance

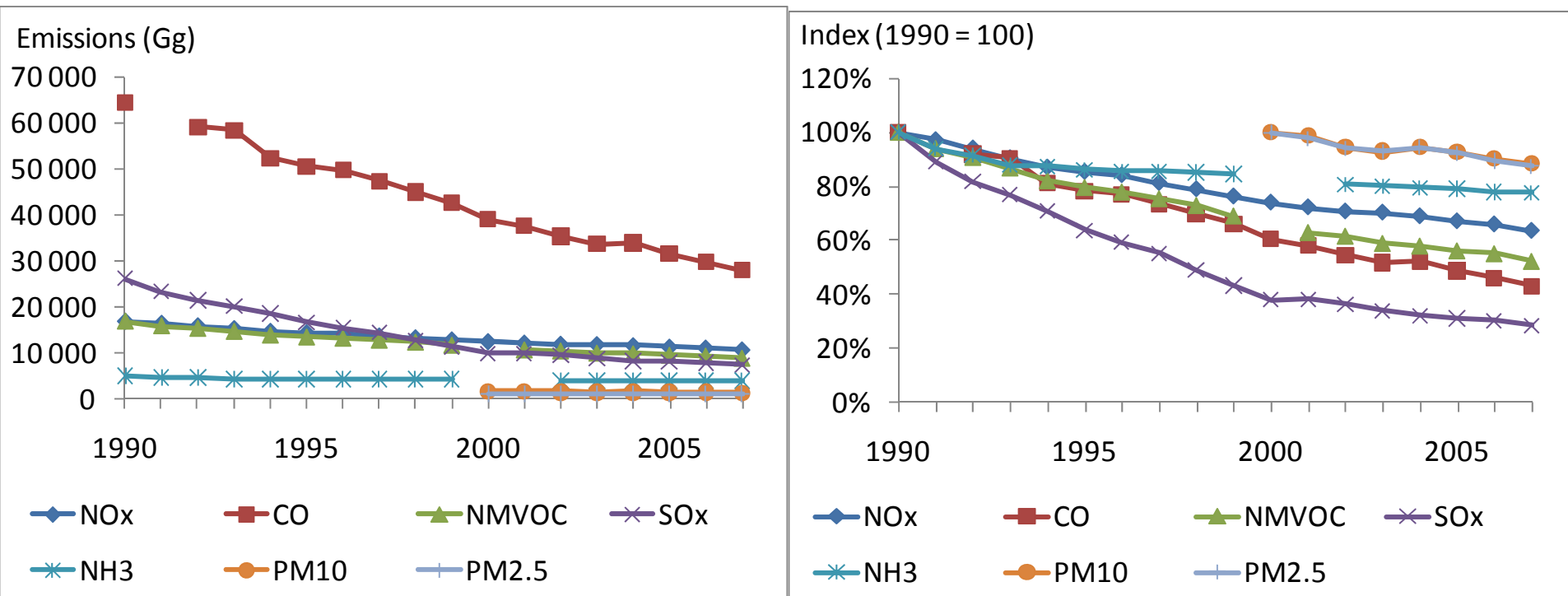




Our track record

Emission trends in the EU 27

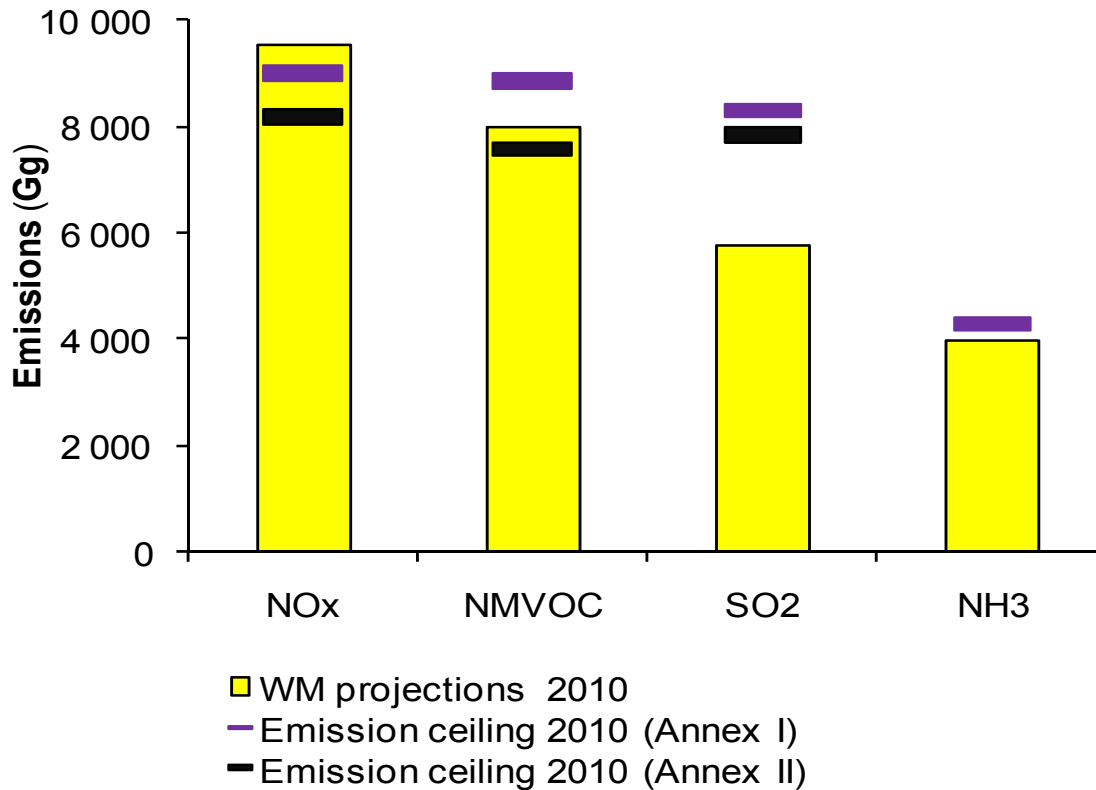
EU-27 emission trends in absolute (Gg) and relative terms for NO_x, CO, NMVOCs, SO_x, NH₃, between 1990 and 2007 (index year 1990 = 100), and for PM₁₀ and PM_{2.5} between 2000–2007 (index year 2000 = 100)



Source: European Environment Agency



Comparison of aggregated EU-27 WM emissions projections and ceilings in 2010

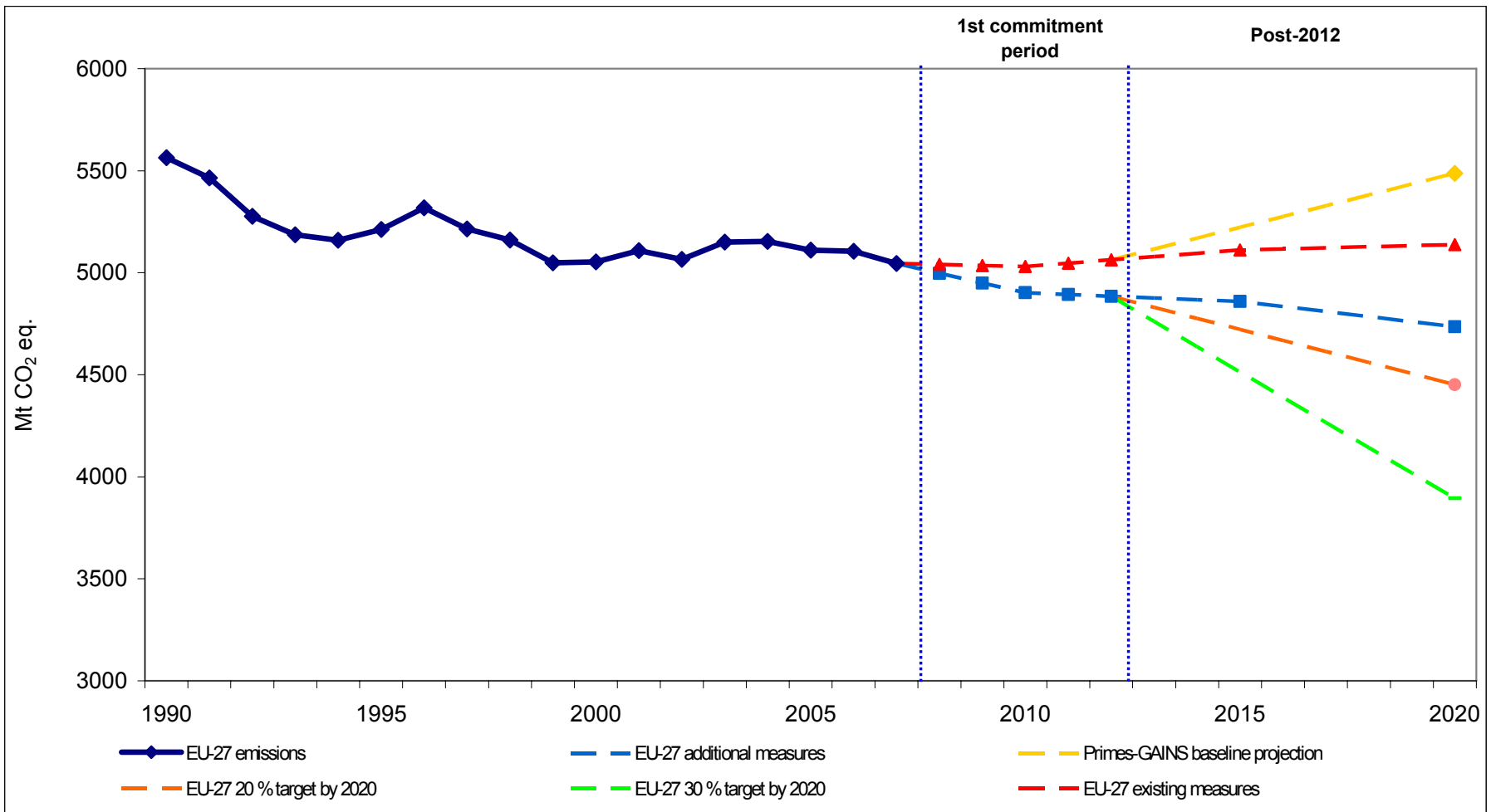


Source: European Environment Agency



Our track record

Emission trends in the EU 27



Source: European Environment Agency



STATE OF PLAY

- Air Pollution

- Implementing the existing legislation on air quality and sources
 - Specific challenges to achieve the PM10 and PM2.5 limit values
 - Follow-up on EC Directives on Integrated Pollution Prevention and Control and Large Combustion Plants
- Preparation for new legislation
 - The new comprehensive Directive on Industrial Emissions and application of BAT- in co-decision
 - NEC Directive revision addressing transboundary air pollution still pending



Effect of new proposal for a Directive on industrial emissions

- LCPs = main source of industrial emissions of SO₂ and NO_x
 - 74% (SO₂), 49% (NO_x) of 2005 NECD industrial emissions
- BAT implementation is lagging behind and BAU policy will not lead to full BAT implementation (RAINS)
- Significant emission reductions are needed to achieve the objectives of the Thematic Strategy on Air Pollution
 - LCPs play a key role



Effect of new proposal for a Directive on industrial emissions

- COM Proposal for a Directive on industrial emissions
 - recasts IPPC and 6 sectoral Directives
 - strengthens minimum emissions standards for LCPs
= align limit values with upper end of BAT (based on 2006 LCP BREF)
 - Only relevant in case of derogation from BAT levels
- Expected additional emissions reductions for LCP in 2020:
 - SO₂: 450 kt/y
 - NO_x: 290 kt/y
- Help closing big gap between application of current legislation and TSAP objectives (taking into account CC package) => BAT necessary but not sufficient
 - SO₂: 64% of LCP gap closed by BAT (upper end)
 - NO_x: 36%
- Net (health) benefits: 7 – 28 bn EUR per year
 - Additional environmental benefits could not be monetised



STATE OF PLAY

- Climate change
 - Implementing the existing Climate and Energy package in Member States
 - European Trading Scheme for large point sources
 - Increase the proportion of renewable sources to 20%
 - Burden sharing decision – fair and effective targets for emission limitations per Member State in the sectors outside of the ETS
 - Preparation for the Copenhagen Conference
 - Reduce GHG emissions by 30% if other parties take similar commitments



Outlook

- **2013 review of the AQ directive**
 - Further steps towards long term objectives
 - Revise air quality standards where needed
- **Major efforts will be needed in future to meet our objectives for air quality and limiting climate change.**
 - Increased negative effect of climate change on air pollution, (“the climate change penalty” relevant for ozone and PM)
 - Potential of co-policies and co-measures
- **Challenges ahead in the short and medium term**
 - Reaching the already set objectives and targets for air quality and climate change.
 - Globalisation of air pollution and climate change issues
 - Ground level ozone is a hemispheric problem and has to be solved at a large scale, most likely in conjunction with issues of greenhouse gases.
 - Need to address both the short term needs of air pollution and long term needs for climate change
 - Need to further address inter-linkages air pollution and climate change effects in the medium term- Specific challenge with ozone and black carbon