



The New Air Quality Package

A Clean Air Programme for Europe

An Overview

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Main elements of the AQ package

- ❑ Communication on the new European Clean Air Programme ("Strategy")
- ❑ Proposal for a revised Directive on National Emission Reduction Commitments ("NEC")
- ❑ Proposal for a Directive on controlling emissions from Medium Combustion Plants ("MCP")
- ❑ Proposal for a Council Decision on ratification of the Gothenburg Protocol amendment ("GPRI")
- ❑ Accompanying Impact Assessment ("IA")

The existing Air Policy Framework

At international level

- UN ECE Convention on Long-Range Transboundary Air Pollution (CLRTAP) and its Protocols (e.g. the Gothenburg Protocol with national emission ceilings for 2010 and 2020)

At EU level

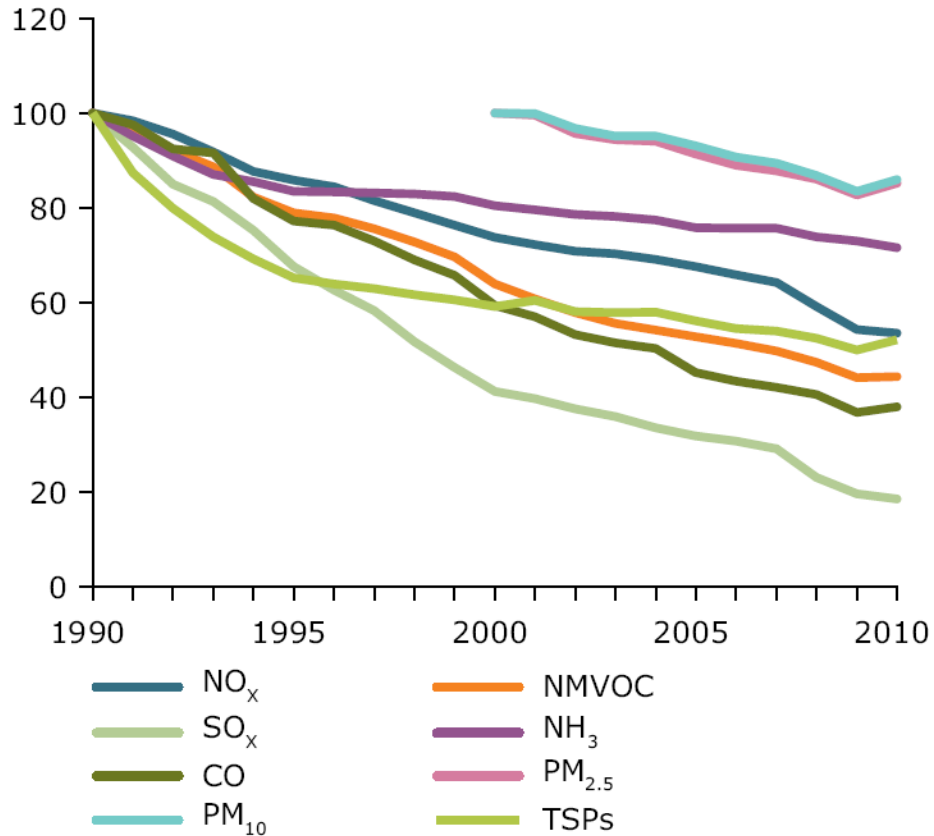
- STRATEGIC OBJECTIVES: The EU Thematic Strategy on Air Pollution (2005)
- EMISSION CAPS: The National Emission Ceilings (NEC) Directive
- LOCAL AIR QUALITY LIMITS: The Ambient Air Quality Directives
- SOURCE-SPECIFIC LEGISLATION: the Industrial Emissions Directive, Euro standards, energy efficiency standards etc

At national level

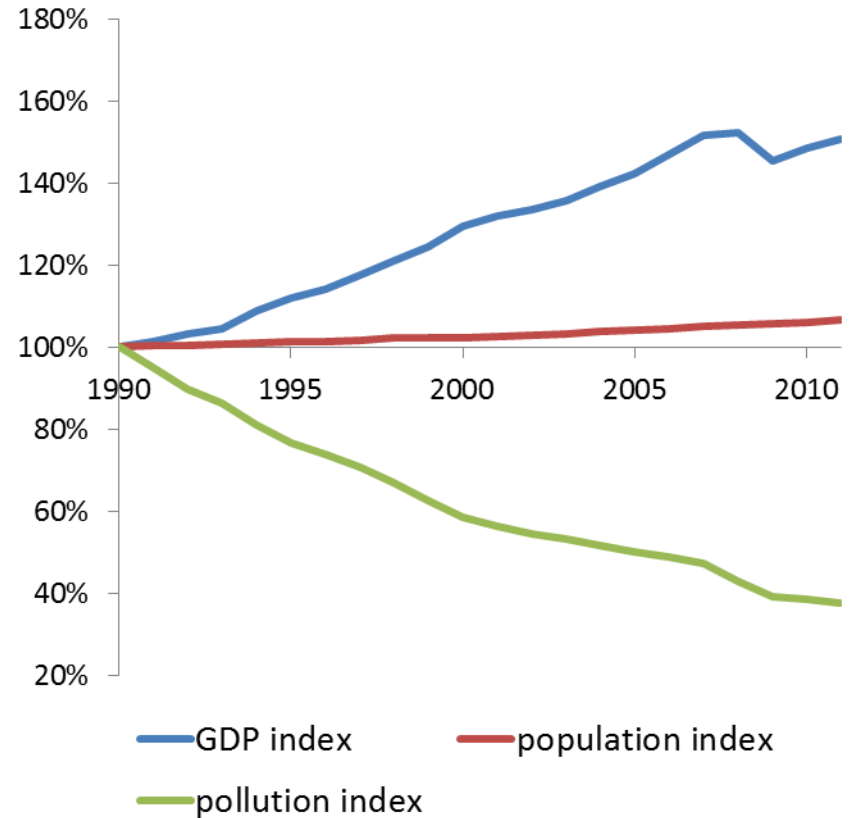
- National and local legislation and instruments

Air policy works: Emissions of major air pollutants greatly reduced ...

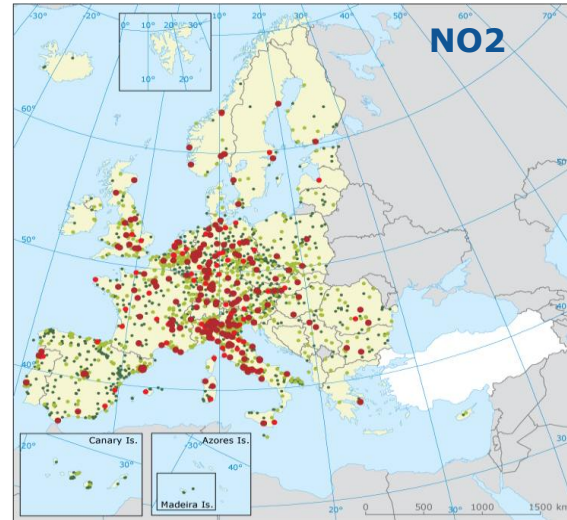
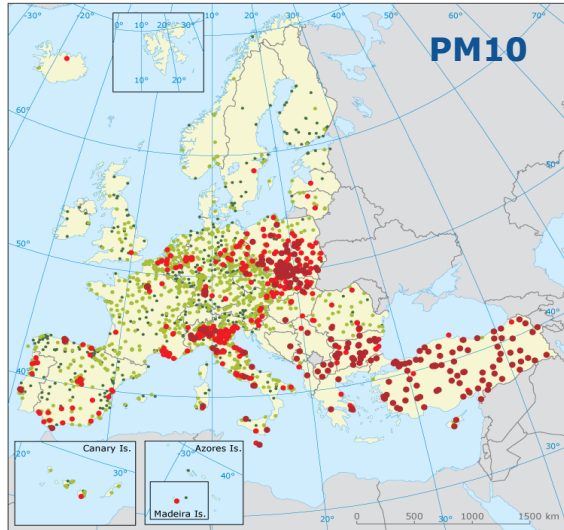
Index (1990 (2000) = 100)



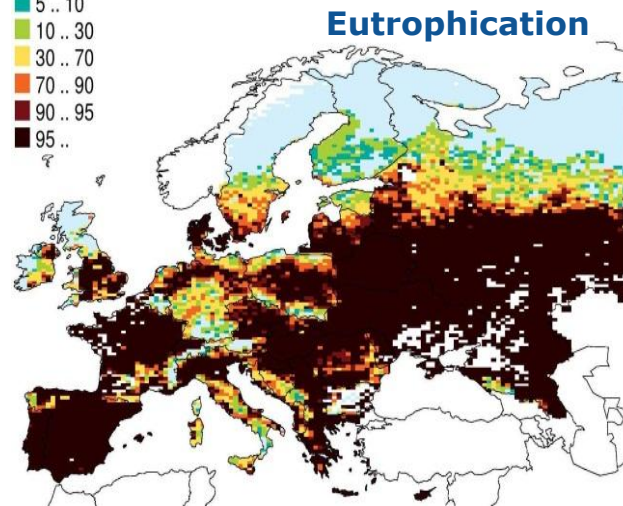
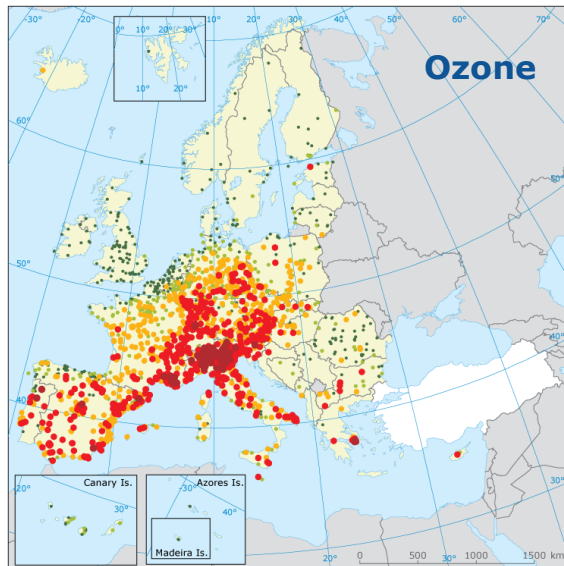
Index 1990 = 100%



... But significant air quality problems remain in the EU (2010)



See also EEA Reports



Key compliance issues

PM10 limit values

- 2008 TEN process completed
- 17 MS have been facing compliance problems
- Outlook positive but trends reversing in some cases

NO2 limit values

- 2008 TEN process ending
- High number of (local) compliance problems

Ozone target value

- Peak concentrations improved
- Background concentrations remaining problematic

[Environmental impacts]

- Nitrates and Natura 2000 related legislation

Why Is This a Problem?

Premature deaths due to PM and ozone	Restricted activity days due to PM	Forest area exceeding acidification limits	Lake area exceeding acidification limits	Ecosystem area exceeding eutrophication limits	Natura 2000 areas exceeding eutrophication limits
406,000	569 Million	9%	25%	62%	71%

PM10 compliance	NO2 compliance	O3 attainment	PM10 population exposed above the limit value	NO2 population exposed above the limit value	O3 population exposed above the target value
68%	76%	65%	40%	6-12%	35%

Air Quality Standards	PM10	PM2.5	NO2	O3
EU	40	25	40	120
WHO	20	10	40	100



Ensuring compliance by 2020

Key compliance obstacles pre-2020 (and solutions)

❑ **Transport**

- Euro 6 (2014 implementing acts)
- Synergies with sustainable mobility plans

❑ **Small and medium scale combustion**

- Ecodesign Directive (< 1MW)
- Targetted fuels switching programmes –PL, CZ, SK, BG
- Synergies with sustainable energy plans

❑ **Background pollution** (within MS, intra-EU, global)

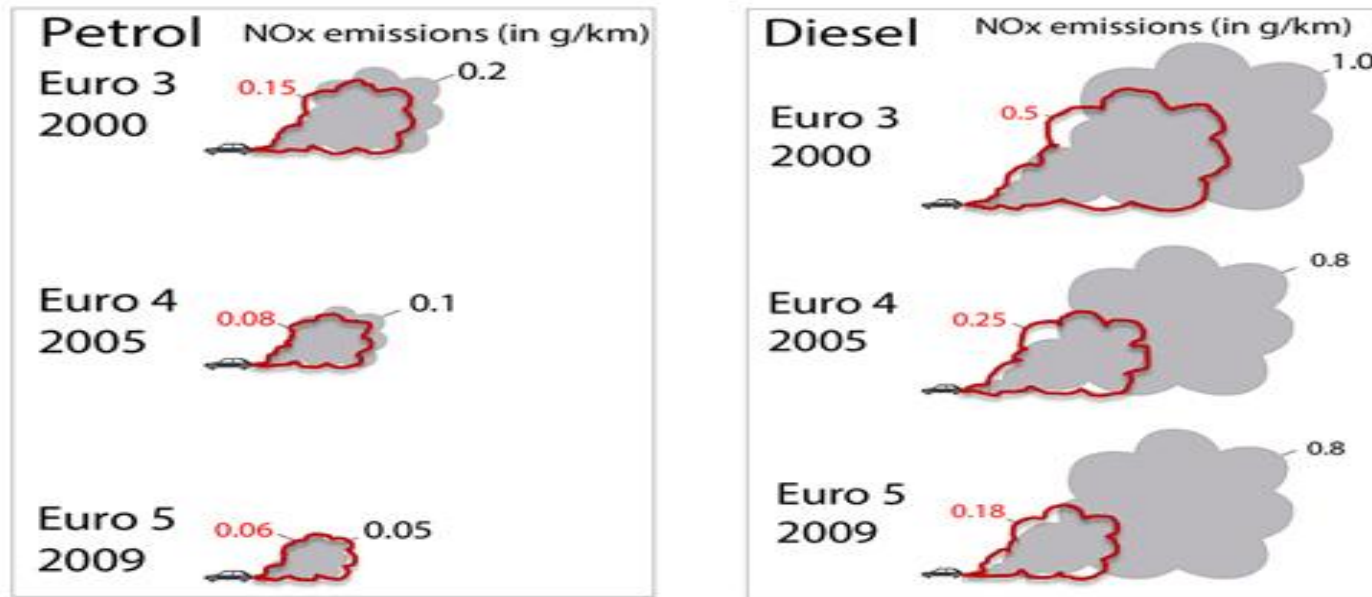
- Implementation of existing legislation (IED, Marine Fuels,...)
- Implementation of National Emission Reduction Commitments for 2020 (GP)

❑ **Governance**

- Co-ordination of AQ and emissions policy, capacity for assessment and management

Key compliance obstacles pre-2020 (and solutions)

The problem: diesel car "Real World Emissions"

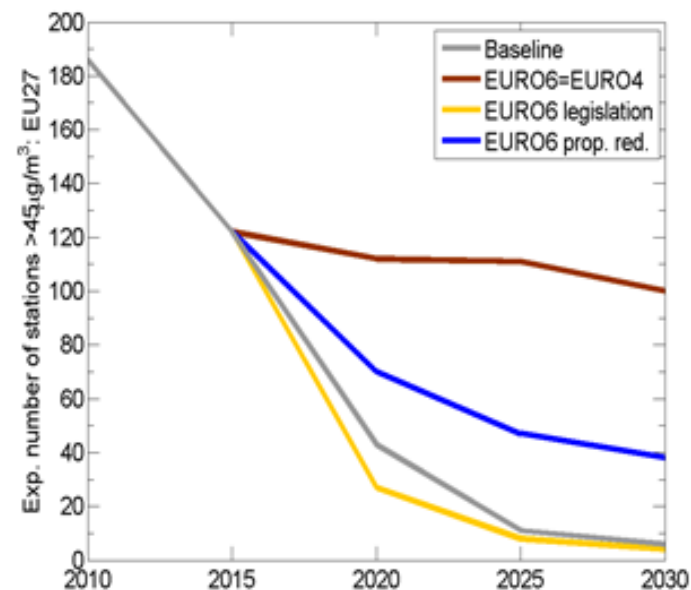
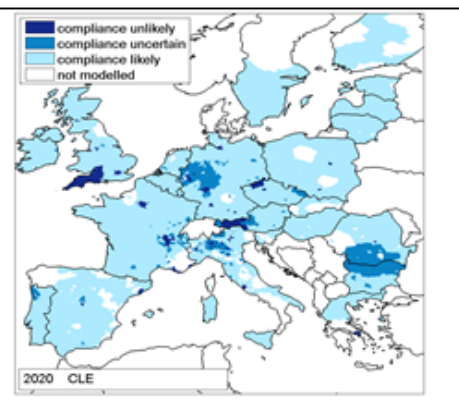
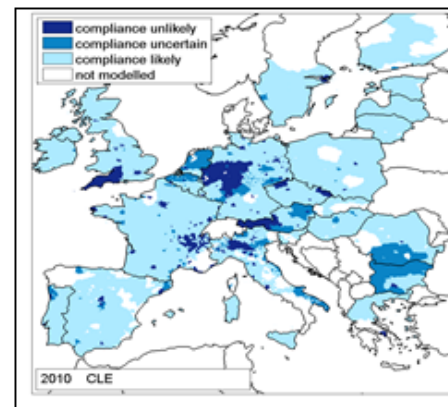
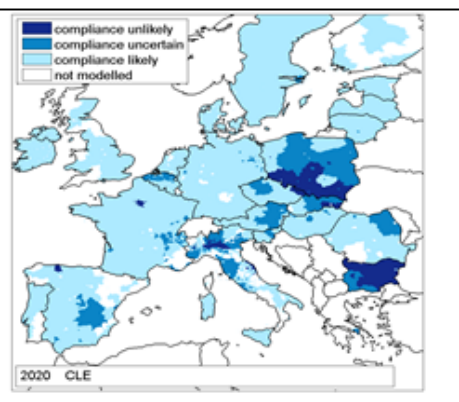
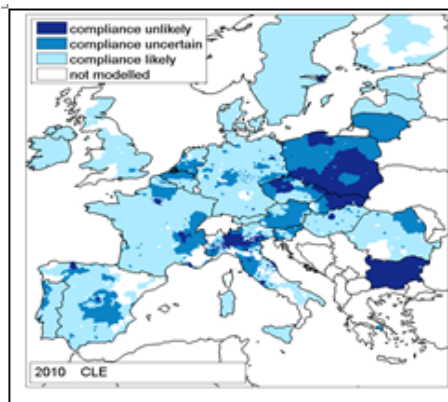
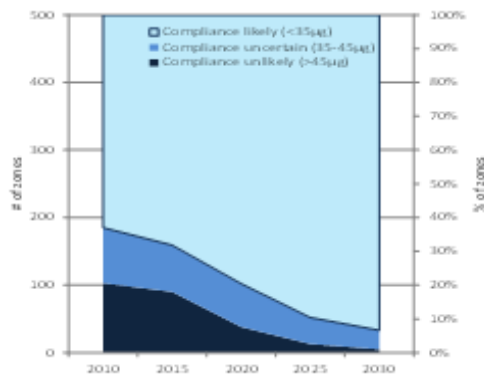
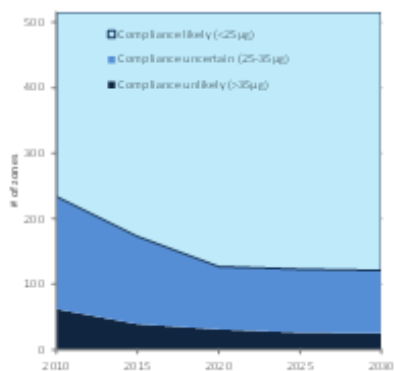


The solution (Regulation 715/2007, CARS 2020)

- ❑ Real Driving Emissions of Euro 6 recorded and communicated as from mandatory Euro 6 dates (2014)
- ❑ No later than three years after, RDE compliance with limit values should be the basis of type approval (with robust not-to-exceed limits)
- ❑ Committee vote on new test cycle June 2014

How Will the Problem Evolve?

Compliance Prospects



Policy options selected to achieve compliance by 2020 (summary)

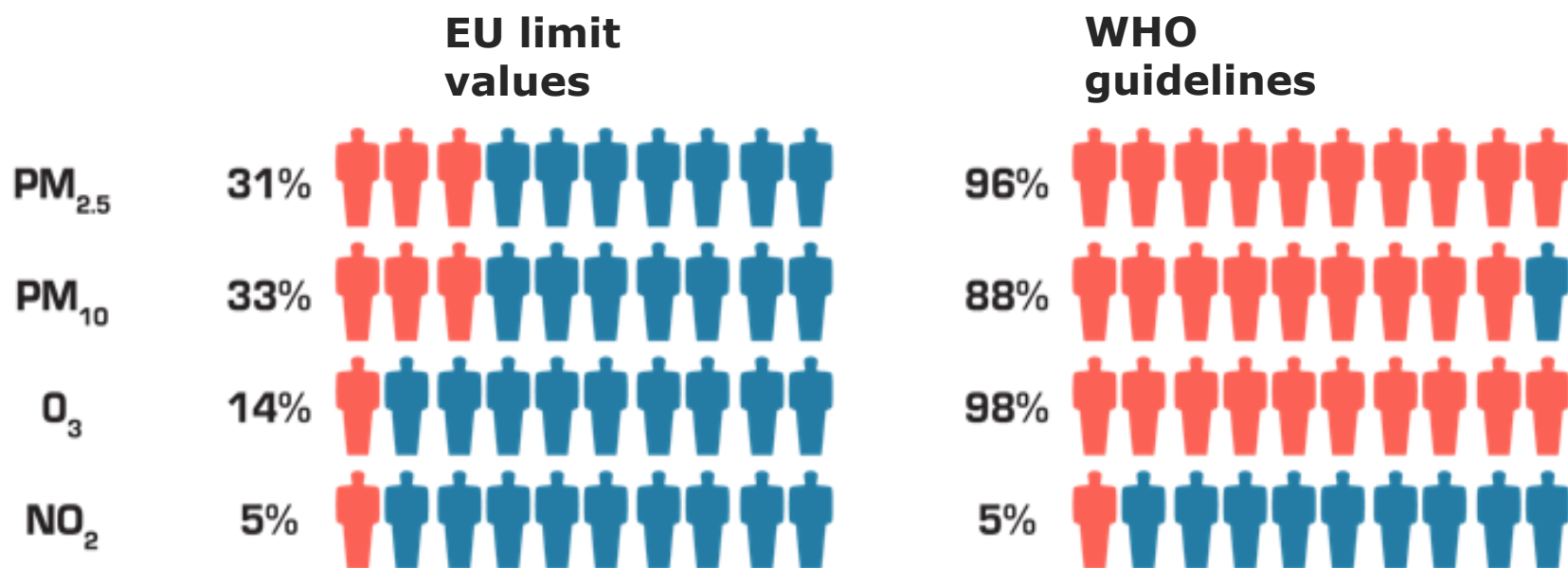
- ❑ Full **implementation of existing measures**, in particular Euro 6
- ❑ Support for **national and local action through LIFE** and other EU funds
- ❑ Supporting **implementation of Gothenburg Protocol** in neighbouring states
- ❑ Reinforced **research and innovation agenda in Horizon 2020**



European
Commission

Impact reduction beyond 2020

Post 2020: Persisting problems even after full implementation



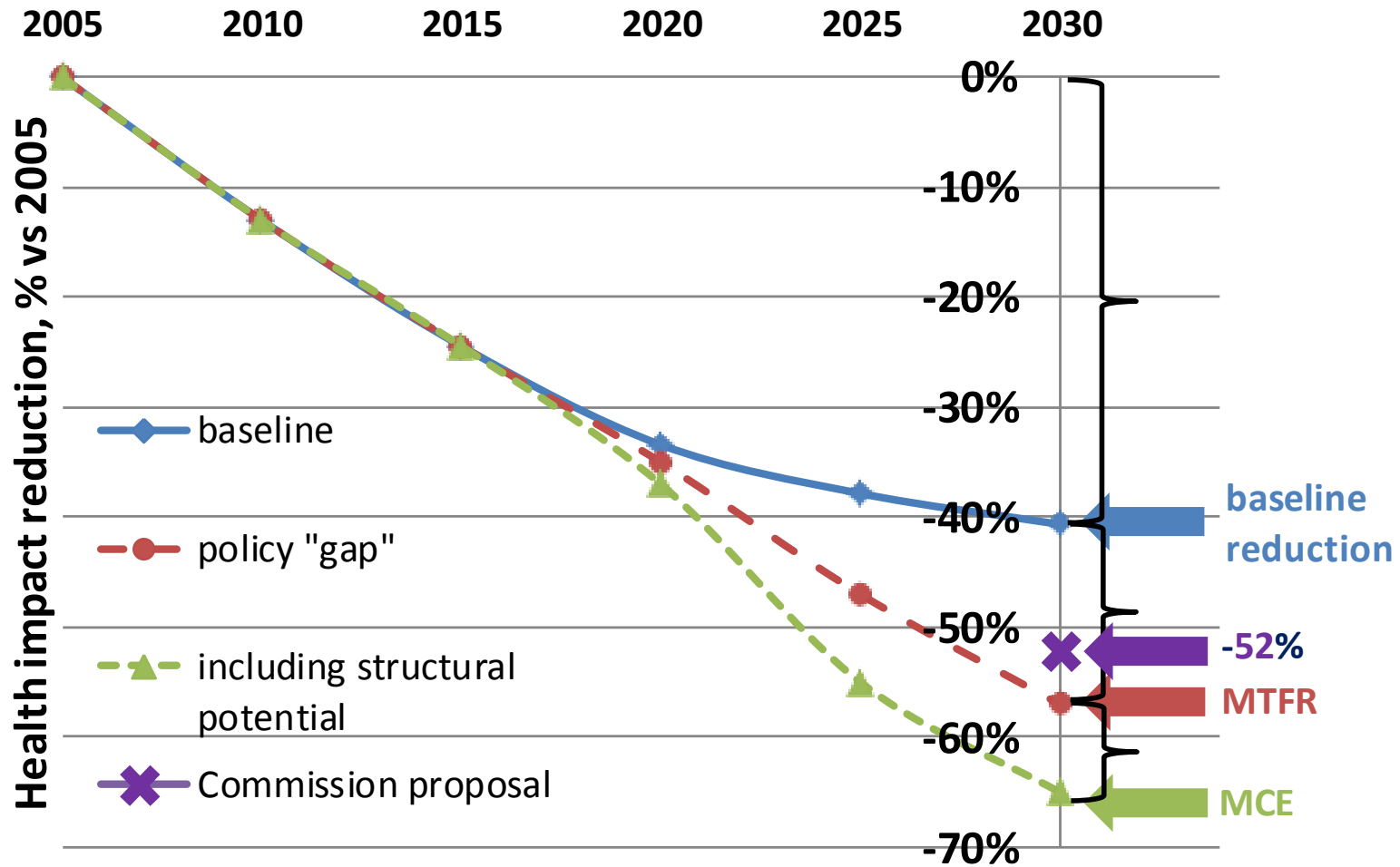
Post 2020: Persisting problems even after full implementation

Health & Environment Headline Indicators	2010	2020	2025	2030
Premature deaths from PM and ozone exposure	406.000	340.000	330.000	327.000
Percentage area with excess eutrophication	62	55	53	52

External costs –low estimate (€ billion)	330	243	224	212
External costs – <u>high</u> estimate (€ billion)	940	775	749	740

"Gap-closure" for different options

Health impact in 2030



Monetised benefits and costs for 2030

External cost benefits (health only): €44 -140 bn/year
= 12-40 times higher than implementation costs

Direct cost savings (health only): €3 bn/year

Of which:

- Higher productivity of the work force: €1850 m
- Lower health care costs: €650 m
- Higher crop yields due to lower ozone levels: €220 m
- Less damage to buildings: €120 m

Implementation costs: € 3.3 bn per year

- Cheaper if 2030 climate and energy package is implemented
- Positive overall impact on GDP growth
- Positive overall impact on employment

What the policy brings over time

Policy milestones

Year	PM health impact reduction vs 2005	Air quality compliance (PM _{2,5})
2020	33%	Full compliance with existing legislation (25µg/m ³)
2030	52%	Full compliance with 20µg/m ³ , and 90% of stations comply with 15µg/m ³ (USA at 12µg/m ³ from 2012)
2050 (indicative)		90% of stations comply with 10µg/m ³ (WHO guideline value)

International comparison

Air Quality Standards	PM10	PM2,5
EU	40	25
China	40	-
Japan	-	15
USA	-	12
WHO	20	10



The policy package

How will the Strategy be delivered?

A proposal for a new NECD

- Reduction commitments for six principal pollutants for each MS
 - SO₂: 81%
 - NO_x: 69%
 - NMVOCs: 50%
 - NH₃: 27%
 - PM_{2,5}: 51%
 - CH₄: 33%
- Staged tightening of commitments
 - 2020 – Gothenburg
 - 2030 – 70% gap closure
- Interim targets for 2025 to ensure timely compliance
- Flexibilities
- Reinforced implementation

A proposal on Medium Combustion Plants

- Tackles main gap in policy framework
- Delivers emission reductions for SO₂, NO_x and PM from plant of a rated thermal input between 1MW and 50MW
 - ❑ Up to 20% of the reductions needed for overall policy
- Fuel-specific emission limit values, distinguishing between
 - ❑ new and existing plants (with staged implementation)
 - ❑ engines, turbines and others
- Low admin burden - registration rather than full permitting
- Benchmark values for plant in zones not complying with AQ standards

Conclusions

The New Air Package Is

- ❑ The Commission's strategic response addressing a significant problem facing the EU citizens and the environment
- ❑ Based on state of the art scientific and technical information and analysis, including the WHO guidelines
- ❑ Cost-effective, feasible, and supportive of the EU's clean technology sector
- ❑ Consistent with EU 2020 (Climate, Energy, Industry, People)

Thank You

Further info

http://ec.europa.eu/environment/air/clean_air_policy.htm

