

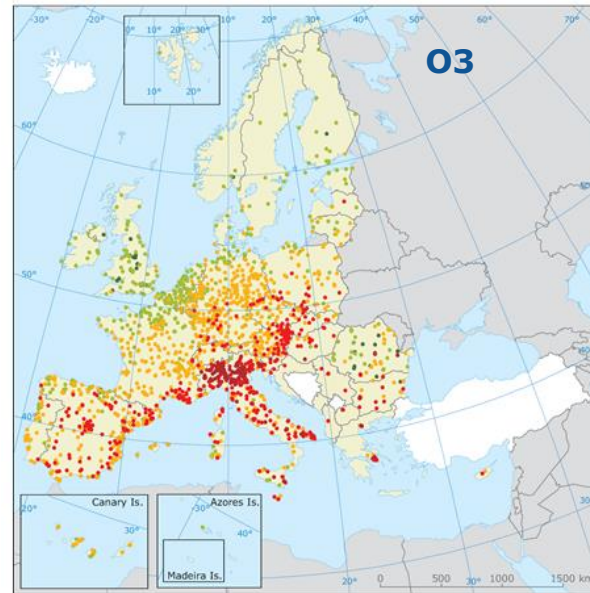
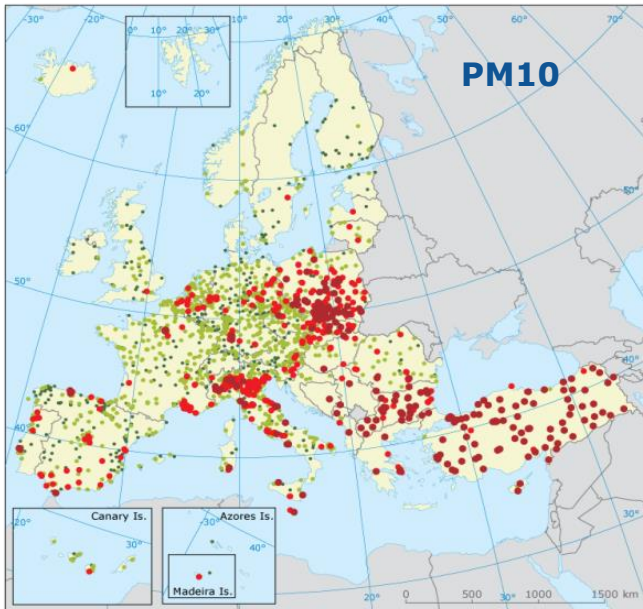


EP Interest Group on Allergy and Asthma

PERSPECTIVES FROM THE EUROPEAN COMMISSION

1 July 2015

**Thomas Verheye
European Commission
Environment Directorate-General**

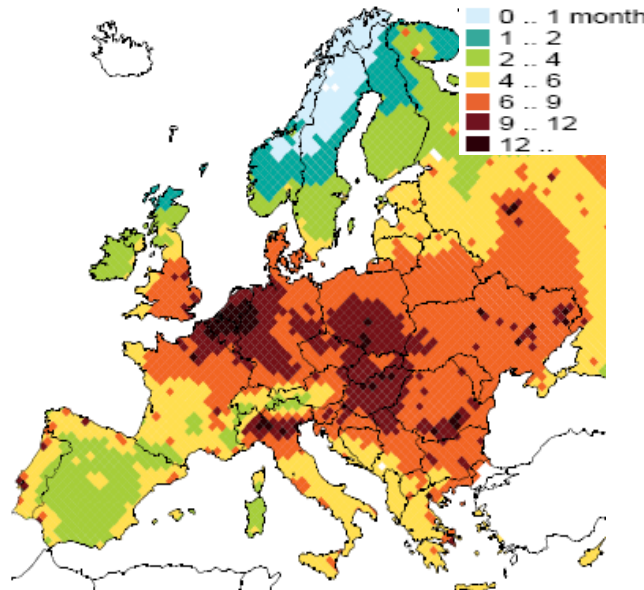
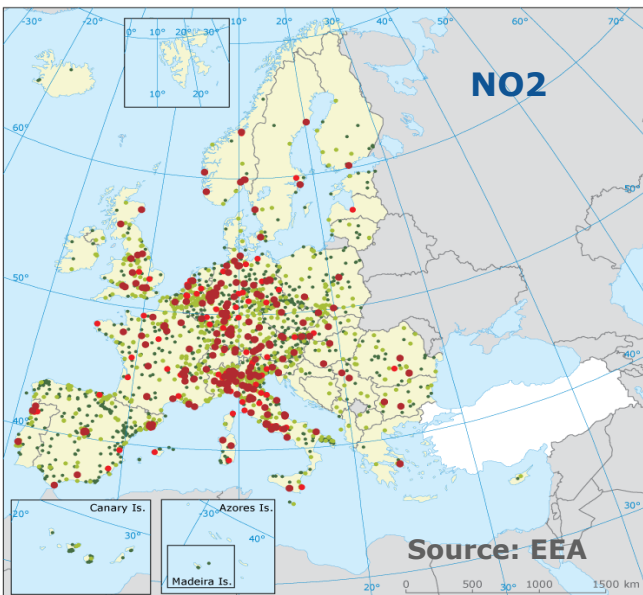


EU AQ standards

**PM10: 50 ug/m3 daily avg
<35 #dys/y**

NO2: 40 ug/m2 ann. av.

**O3: 120 ug/m3 8h avg
< 25 #dys/y**



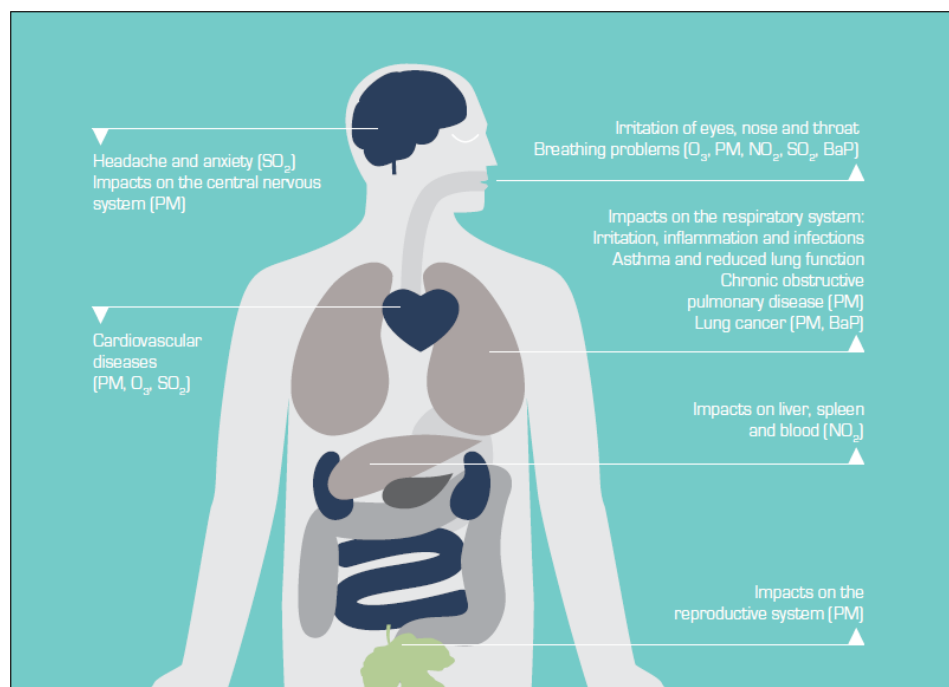
Loss in statistical life expectancy attributable to exposure to PM2.5 from anthropogenic sources (in months for year 2000)

AIR POLLUTION A SIGNIFICANT THREAT TO OUR HEALTH & WELLBEING

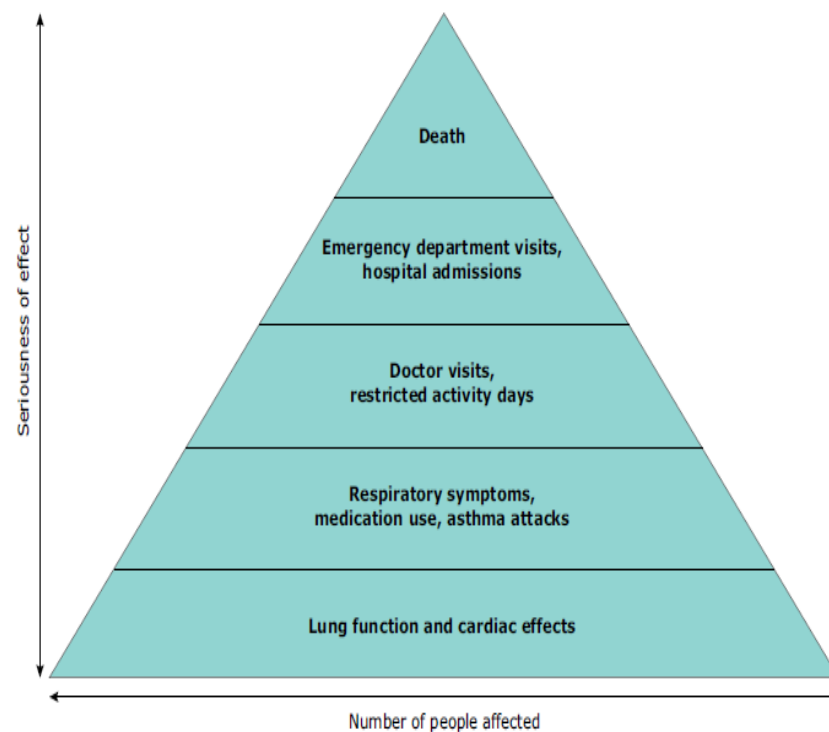
- ✓ AIR POLLUTION IS THE **NUMBER ONE ENVIRONMENTAL CAUSE OF PREMATURE DEATH IN THE EU**, RESPONSIBLE EACH YEAR FOR
 - over 400 000 premature deaths (10 times the toll of road traffic accidents).
 - substantial avoidable sickness and suffering including respiratory conditions (such as asthma) and exacerbated cardiovascular problems.
- ✓ **THE OVERALL EXTERNAL COSTS** OF THESE IMPACTS RANGED BETWEEN €330-940 BILLION, INCLUDING LABOUR PRODUCTIVITY LOSSES AND OTHER DIRECT ECONOMIC DAMAGE VALUED AT €23BN PER YEAR IN 2010.



AIR POLLUTION A SIGNIFICANT THREAT TO OUR HEALTH & WELLBEING



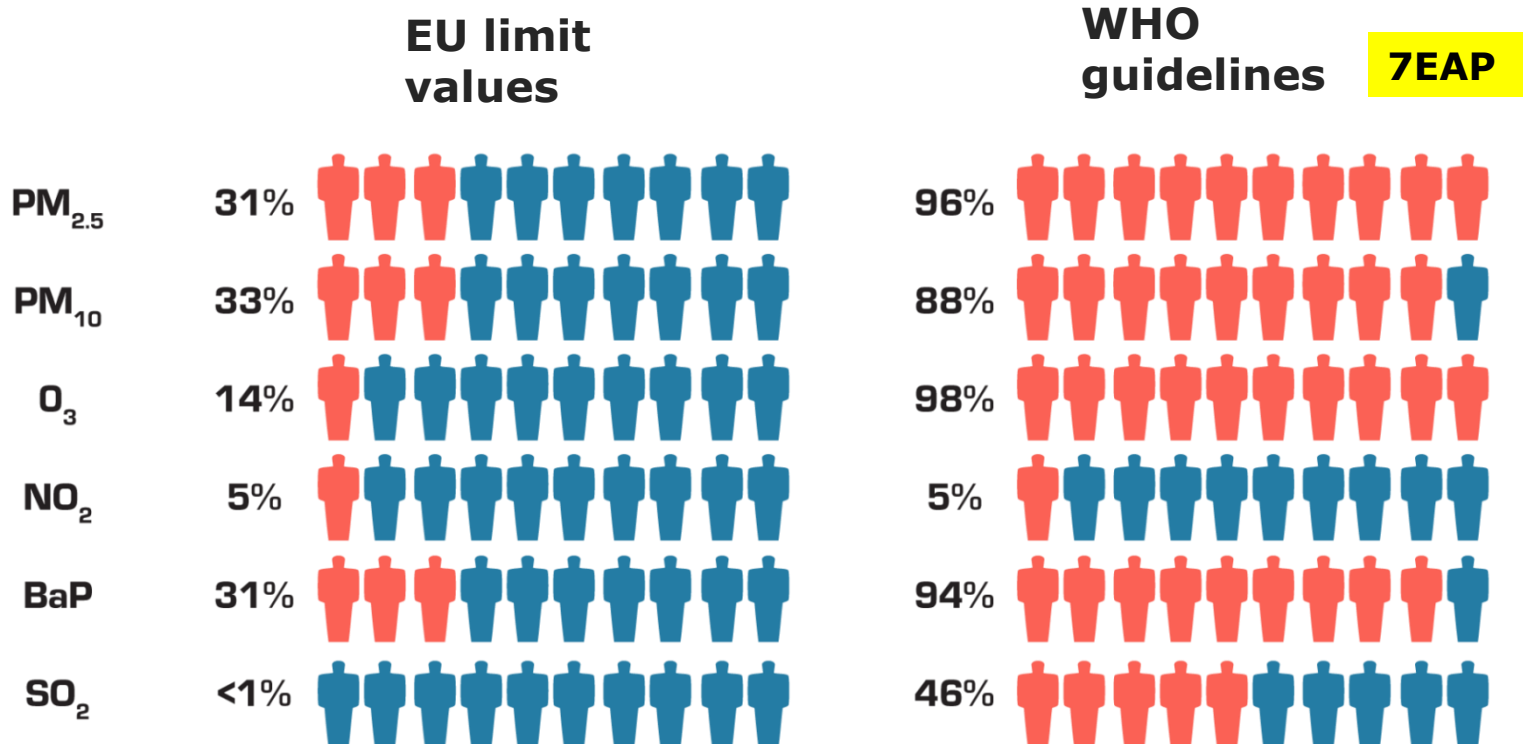
Source: EEA, 2013f.



Source: Based on US EPA.

THE PROBLEMS WILL PERSIST BEYOND COMPLIANCE WITH CURRENT AIR QUALITY LEGISLATION

EU urban population exposed to harmful levels of air pollution in 2011, according to:





THE AIR POLICY RESPONSE **ELEMENTS OF THE AIR PACKAGE**

- ❑ **Communication** setting out the Clean Air Programme for Europe and the strategic objectives for 2020 and 2030
- ❑ Proposal for a revised **Directive on National Emission Ceilings** (NECD) setting levels for 2020 and 2030
- ❑ Proposal for a new **Directive on controlling emissions from Medium Combustion Plants** ("MCPD")
- ❑ **Proposal allowing EU ratification of the UNECE Gothenburg Protocol** amended in 2012
- ❑ Accompanying **Impact Assessment**

THE AIR POLICY RESPONSE STRATEGIC OBJECTIVES

Year	Health impact reduction vs 2005 (premature deaths)	Air quality compliance (PM _{2,5})
2020	33%	Full compliance with existing air quality legislation (including PM ₁₀ and PM 2.5 @ 25µg/m ³) (USA at 12µg/m ³ from 2012)
2030	52%	Most Member States would reach PM 2.5 levels close to or even below the WHO standards of 10µg/m ³

COM's AIR POLLUTION POLICY RESPONSE MEDIUM AND LONG-TERM OBJECTIVES

National Emission Reduction Ceilings vs. 2005

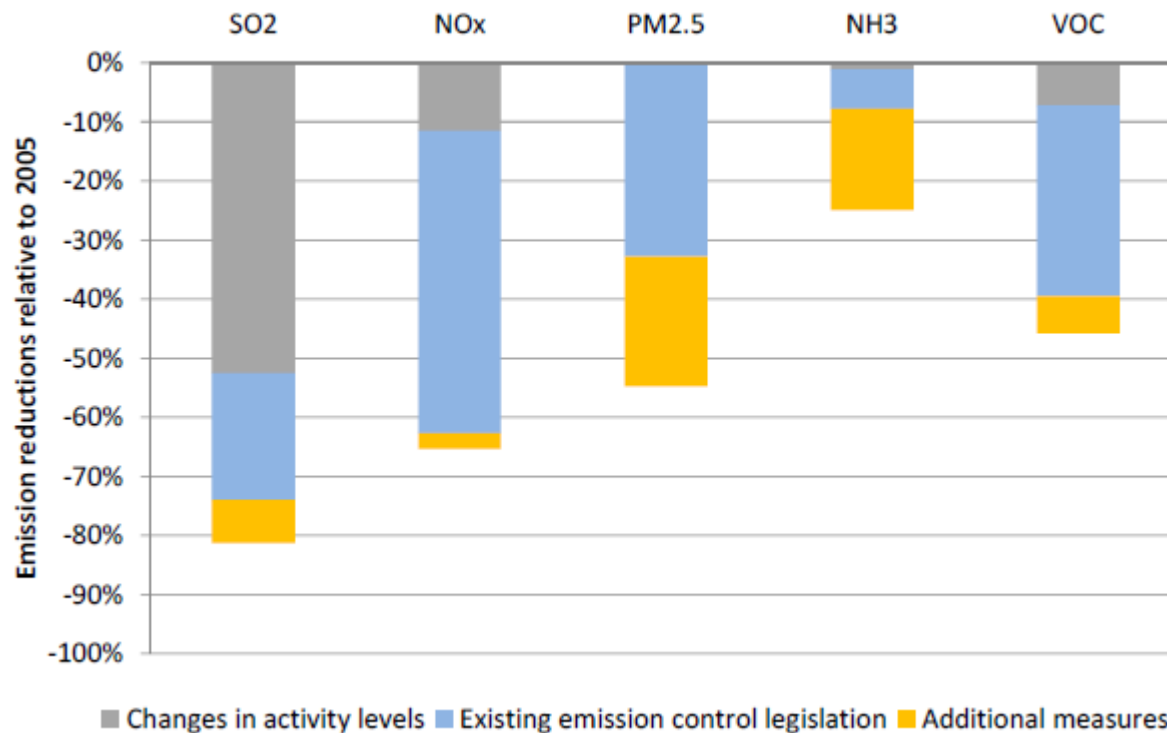
(EU averages ~ 52% health improvement target)

	<u>2020*</u>	<u>2030**</u>	<u>Δ '20-'30</u>
SO₂	59%	81%	22%
NO_x	42%	65%	23%
NM_{VOC}	28%	46%	18%
NH₃	6%	25%	19%
PM_{2.5}	22%	54%	32%
CH₄	--%	33%	33%

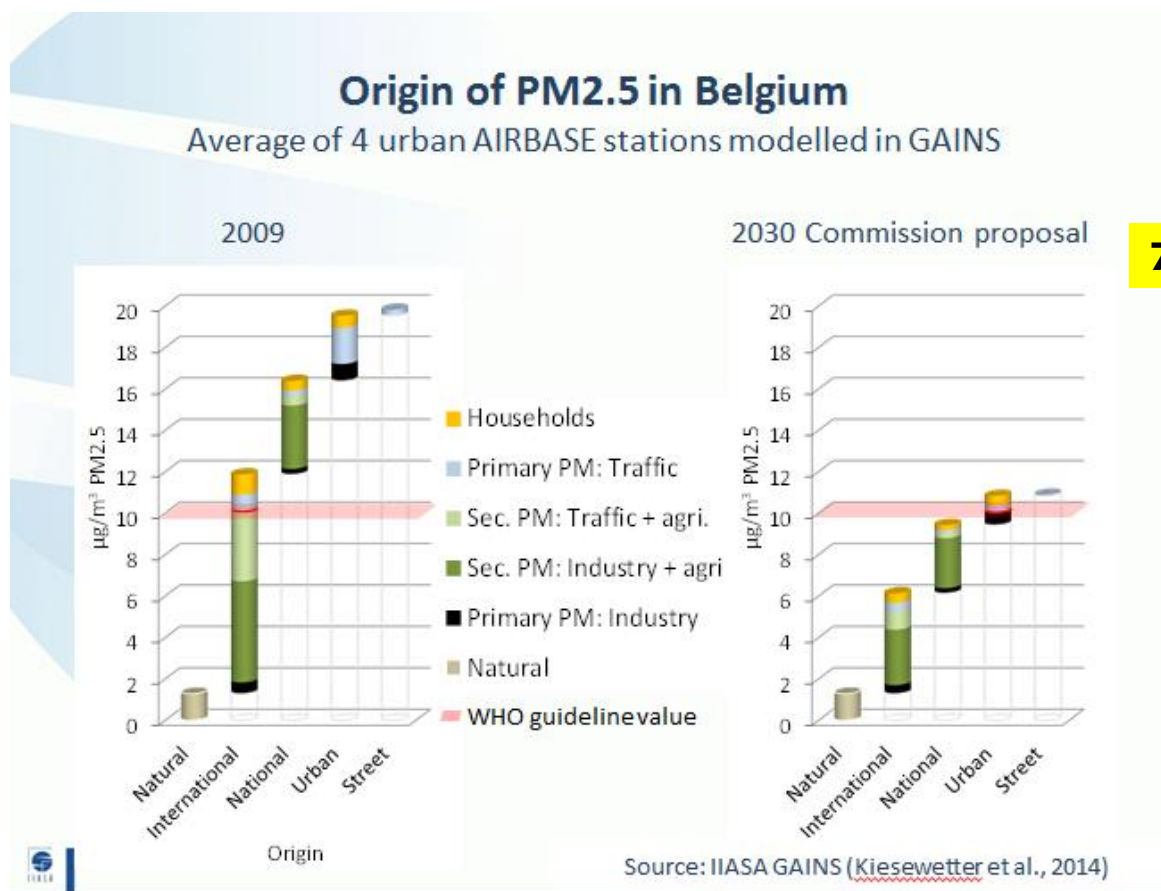
* Transposed from UNECE Gothenburg Protocol already agreed in 2012

** Recalculated following most recent MS data revisions; See IIASA TSAP 16

COM's AIR POLLUTION POLICY RESPONSE MEDIUM AND LONG-TERM OBJECTIVES



COM's AIR POLLUTION POLICY RESPONSE MEDIUM AND LONG-TERM OBJECTIVES





COM's AIR POLLUTION POLICY RESPONSE BENEFITS AND COSTS

52% Health Impact Reductions (2030 vs. 2005)

- 200.000 avoided premature deaths/yr (from ca. 400.000)
(Circa 60.000 more compared to business as usual)
- 140 mln less restricted activity days/yr (from ca. 400-450 mln)
- 5 mln less minor restricted activity days/yr (from ca. 80.000)

Significant Environmental Impact Reductions (2030 vs. 2005)

- Eutrophication: 35% (NO_x, NH₃)
- Acidification: 85% (SO_x, NH₃)



COM's AIR POLLUTION POLICY RESPONSE BENEFITS AND COSTS

External cost savings (health only): €44 -140 bn/year

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

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

Implementation costs: € 2.2 bn / year

- [Latest downward revision after Member States' additional scrutiny in 2014]
- Ca. €1 bn/year cheaper if jointly implemented with Climate & Energy Package
- Positive overall impact on employment
- Positive overall impact on clean technology sector and related investments
- Positive overall impact on GDP growth
- No significant competitiveness impacts



CONCLUSION

The rationale for adopting the NECD is sound and solid

The EP has been catching up with Council fast

All but a few MS remain hesitant albeit June Council endorsed health target

Agreement in MS emission reduction targets for 2030 will remain challenging

A strong voice from the health community can help overcome (undue) resistance to taking further cost-effective action

Significantly delayed and/or diluted emission reduction targets will not help the industry and the economy whilst costing thousands of lives

Healthy citizens = Healthy economy (and vice versa)

More information

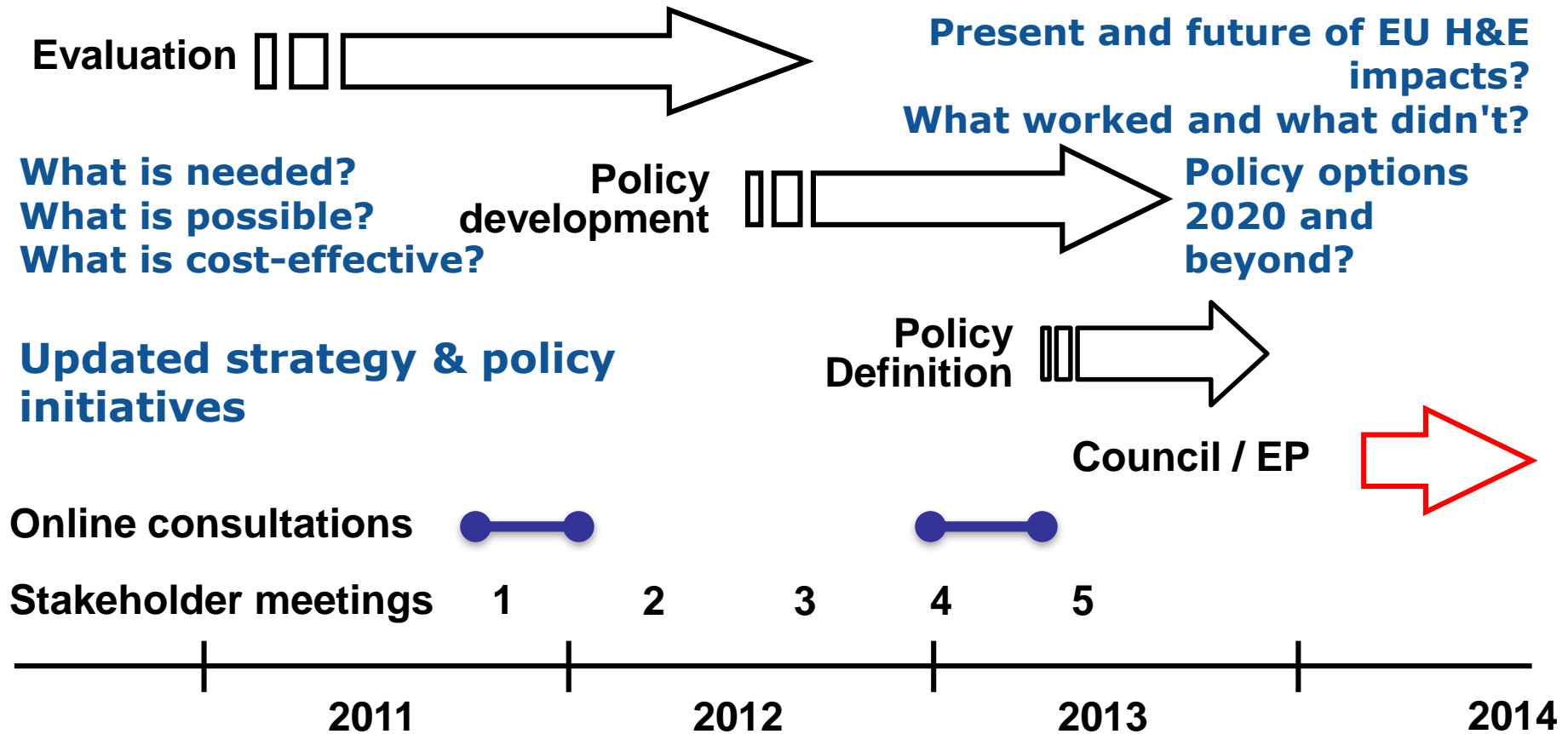
Air policy package and review:



























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

Thank you











The EU Air Policy Review (2011 – 2013)



The Current EU Ambient Air Quality Standards								
Pollutant / Standard type ¹	Max. Conc.		Measurement Periods	Max. Exceed.	Compl. Date.	T.E.N .	Compl. Status	Outlook (2020)
Dir. 2008/50/EC								
SO₂ (1999/30/EC)	350µg/m ³ 125µg/m ³	LV LV	Hourly Avg. Daily Avg.	24 hrs/yr 3 d/yr	2005 2005			
PM₁₀ (1999/30/EC)	50 µg/m ³ 40 µg/m ³	LV	Daily Avg. Annual Avg.	35 d/yr	2005 2005	06.11 06.11		
Pb (2008/50/EC)	0.5µg/m ³	LV	Annual Avg.		2005 ²			
CO (2000/60/EC)	10mg/m ³	LV	8h running avg.		2005			
NO₂ (1999/30/EC)	200µg/m ³ 40µg/m ³	LV	Hourly Avg. Annual Avg.	18 hrs/yr	2010 2010	12.14 12.14		
Benzene (2000/60/EC)	5µg/m ³	LV	Annual Avg.		2010	06.11		
Ozone (2002/3/EC)	120µg/m ³ 120µg/m ³	TV LTO	Max daily 8h µg Max daily 8h µg	25 days/yr ³ --	2010 --			
PM_{2.5}	25µg/m ³ 25µg/m ³ 20µg/m ³	TV LV ILV	Annual Avg. Annual Avg. Annual Avg.	-- -- --	2010 2015 2020			
	20µg/m ³ 18µg/m ³	AEI AEI	3-yr run. a.m. 3-yr run. a.m.	-- --	2016 2021			
Dir. 2004/107/EC								
Arsenic	6ng/m ³	TV	Annual Avg.	--	2013			
Cadmium	5ng/m ³	TV	Annual Avg.	--	2013			
Nickel	20ng/m ³	TV	Annual Avg.	--	2013			
BaP	1ng/m ³	TV	Annual Avg.	--	2013			

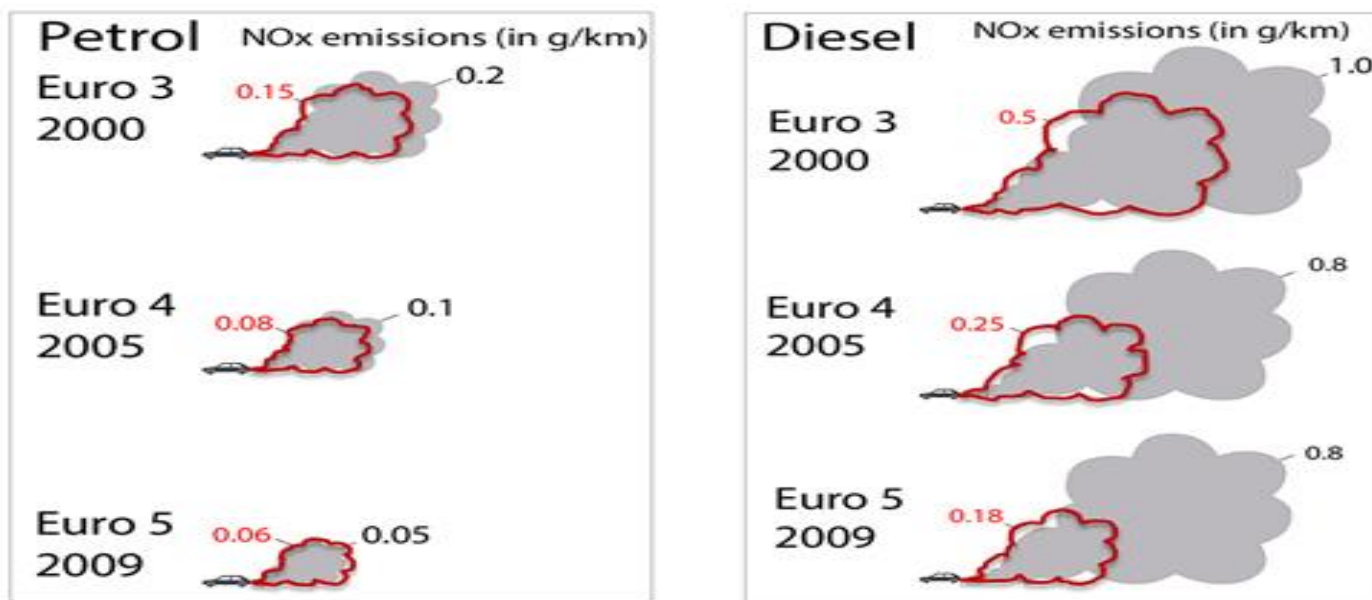
2010 Interim National Emission Ceilings (NECD 2001/81/EC)

(Average state of compliance EU 28 and pre-2020 outlook)

Pollutant	Max. Emiss.	Compl. Date.	Compliance Status (2010)	Compliance Outlook (2020)
SOx Sulphur Oxides	8.367 Kt/yr	2010		
NOx Nitrous Oxides	9.090 Kt/yr	2010		
NMVOG Non-Methane Volatile Organic Compounds	8.938 Kt/yr	2010		
NH3 Ammonia	4.324 Kt/yr	2010		

SHORT TERM: COMPLIANCE

(Part of) the compliance problem: diesel car "Real Driving Emissions"



The solution (Regulation 715/2007, CARS 2020)

- ❑ Real Driving Emissions of Euro 6 recorded and communicated, provisions already agreed (May 2015)
- ❑ No later than 2017 (new type approval)/2018(existing), RDE compliance with limit values should be the basis of type approval (with robust not-to-exceed limits)



COM's AIR POLLUTION POLICY RESPONSE

RECENT EU MEASURES TO TACKLE POLLUTION AT SOURCE

Large Industrial Installations: Following the adoption of the Industrial Emissions Directive in 2010, MS are obliged (vs previously encouraged) to issue permits including average emission limits based on Best Available Technology Reference Documents for which the conclusions are binding; 7 Commission Implementing Decisions on BAT conclusions have published in the OJ to date including for the cement, iron and steel, and refinery industries. Major flexibility schemes for Large Combustion Plants (> 50 MWth) will expire in 2016 and 2020 and the new BAT conclusions are being finalized. MS have 4 years to update permits accordingly.

Maritime Emissions: Following adoption in 2012 of COM proposal to transpose IMO agreement of 2008 into the Sulphur Content of Liquid (maritime) Fuels Directive, cleaner maritime fuels in the Baltic, North-Sea and Channel apply from 2015 (max 0.1 % sulphur) and rest of EU/Global waters from 2020 (max 0.5 % sulphur vs ca 3% before). Current COM/MS efforts focused on monitoring and enforcement.



COM's AIR POLLUTION POLICY RESPONSE

RECENT EU MEASURES TO TACKLE POLLUTION AT SOURCE

Medium Combustion Plants (1-50 MWth): an informal agreement has been reached on the Commission's 'MCP' proposal of 18 December 2013 between the legislators in a Trialogue on 23.06.2015. After endorsement by the Council's Committee of Permanent Representatives (COREPER) on 30.06 the agreed text will be put to a vote in ENVI on July 2015 and in plenary on 1/10/2015.

Road Transport: PM emissions from (diesel) passenger cars significantly reduced since introduction of Euro 5 in 2009 and Euro 6 in 2014. NO₂/x emissions remain unacceptably high under "real world driving" conditions (also for euro 6 which on average exceed test limits by 700% according to ICCT); COM 'RDE' implementing act requiring manufacturers to "record and report" under new testing rules ("PEMS") from 2016 at the latest endorsed by MS Committee in May 2015 (following intense resistance from industry and majority of MS for several years); second implementing act defining binding "conformity factor" under preparation since June 2015 with a view of seeking MS Ctee opinion in September 2015. Lobbying efforts to obtain CF's around 3 or more applying as late as possible or else seeking "adequate" boundary conditions remain high.



COM's AIR POLLUTION POLICY RESPONSE

RECENT EU MEASURES TO TACKLE POLLUTION AT SOURCE

Non Road Mobile Machinery: the Commission adopted on 25 September 2014 a proposal for revising the 'NRMM' Directive with a view of strengthening type approval emission limits for internal combustion engines used in rail, inland vessels, and other non-road mobile machinery. It is under negotiation in Council and in Parliament with main pressure on the ambition level of inland water way transport emissions. Adoption hopefully this year.

Small Combustion Installations: Ecodesign measures that address energy efficiency and emissions from domestically used products has been adopted in 2015 for local space heaters, for solid fuel local space heaters and for solid fuel boilers. Requirements for water heaters and space heaters were published in 2013.



COM's AIR POLLUTION POLICY RESPONSE

RECENT EU MEASURES TO TACKLE POLLUTION AT SOURCE

National and local air pollution programmes: Have long remained too weak or ineffective due to poor coordination. COM infringement procedures on PM 10 (17 MS) and more recently on NO₂ (10 MS) revamp action that is needed to reach broad compliance.

EU Ratification of Gothenburg (, Heavy Metals, and POPs) **Protocol:** No majority of MS in favour to date but Council deliberations ongoing.

National Emission Ceilings Directive: Council and European Parliament deliberations ongoing. ENVI Committee vote on the EP report in July. Plenary debate planned for September (tbc). ITRE has adopted its opinion on 24 March and the AGRI Committee voted on amendments at the end of May.

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