

The New Air Quality Directive and the Commission Perspective For the Future




The new Air Quality Directive and the Commission Perspective for the future




Andrej Kobe
C3, DG Environment

Particles in Europe, June 2006 1

 **Contents**


- **The Thematic Strategy on Air Pollution**
- **The new Commission proposal**
 - Main elements
 - Co-decision process
- **Perspectives**

Particles in Europe, June 2006 2

 **Birth of CAFE**


- **2002: 6th Environmental Action Programme**
 - *'achieving levels of air quality that do not give rise to significant negative impacts on and risks to human health and the environment'*; (Art 7.1. of 6th EAP)

Particles in Europe, June 2006 3

 **The CAFE Objectives**


- **Benchmark current and future air pollution with regard to significant impacts**
- **Define interim objectives up to 2020**

Particles in Europe, June 2006 4

 **How were the interim objectives defined?**

- **Science**
- **Integrated assessment**
- **Cost benefit analysis**
- **Peer review**
- **Stakeholder involvement**

Particles in Europe, June 2006 5

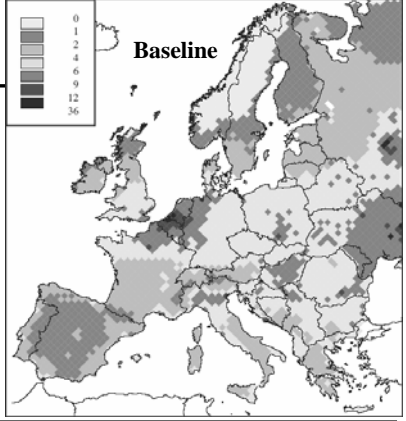


Baseline

2020
under current legislation

Loss in life expectancy due to fine particles
(in months)

270,000 premature deaths annually



Particles in Europe, June 2006 6

The New Air Quality Directive and the Commission Perspective For the Future

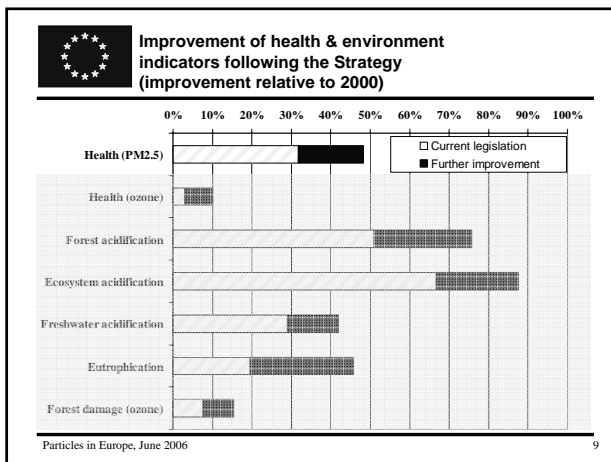
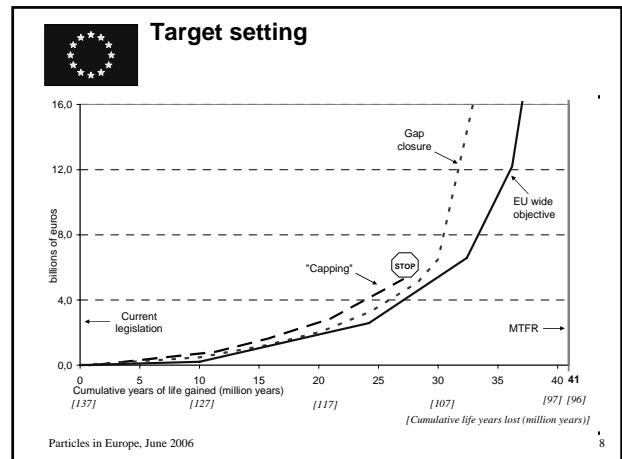
Addressed Impacts

Costs, Benefits

- **Health: Fine Particles (PM_{2.5})**
- **Others : Health/ozone, Acid rain, eutrophication, ozone (non-health)**

- **Cost : €7.1 billion per annum**
- **Benefits : €12-135 billion per annum**

Particles in Europe, June 2006 7



- ## The measures

 - **Euro standards - vehicles**
 - **Revision of the NECD**
 - **Small scale combustion**
 - **Ships**
 - **Agriculture**
 - **Revise Air quality legislation**

Particles in Europe, June 2006 10

- ## AQD revision

 - **CAFE results**
 - **Experience with implementation**
 - **Better regulation**

Particles in Europe, June 2006 11

- ## What is new in the directive?

 - A. Respond to updated health advice**
⇒ environmental objectives for PM_{2.5}
 - B. Address current compliance problems**
⇒ flexibility of attainment date
 - C. Can tackle only man made pollutant**
⇒ deduction of natural sources
 - D. Modernize reporting system**
 - E. Miscellaneous**

Particles in Europe, June 2006 12



What's new (1)

Environmental objectives for PM_{2,5}

Concentration cap

Legally binding, 25 µg/m³ in 2010

Exposure reduction target

20%, 2010-2020

national target, measured in urban bckg



What's new (2)

Addressing compliance problems

- **Attainment date not yet arrived (NO₂)**
- **Attainment data passed (PM₁₀)**
 - **Condition 1 : rationale**
 - **Condition 2 : homework (existing leg., plan)**
 - **Condition 3 : all measures considered**



Exceeding PM10 limit values

- **2006**
 - **Daily LV already exceeded in number of countries**
- **2005 : official data in September**
- **2004 :**
 - **exceedences LV+MoT throughout Europe**
 - **More than 1/3 of all zones in exceedance**
 - **Some countries : all zones in exceedance!**
 - **9(5) countries with >130 days over 50 µg/m³ on at least one sampling point**



What's new (3)

Natural sources

- **Can tackle only man-made pollution**
- **Natural sources include**
 - **natural events (sahara dust)**
 - **Other (sea-spray)**
- **Guidance will be prepared to enable harmonized implementation**
 - **Work ongoing at JRC**



What's new (4)

Modernising reporting system

- **Work in progress**
 - **(Data Exchange Group)**
- **More effective collection/use of assessment information generated**



What's new (5)

Miscellaneous

- **Background monitoring**
 - **Chemical speciation PM_{2.5}**
- **Further specification on QA/QC**
- **4th DD codified after transposition**



Co-Decision – Council (1)

- **Presidency text**
- **Problems of some Member States**
 - Does PM_{2.5} cap need to be legally binding?
 - More time extension!
- **Environment Council 27 June**
 - General approach



Co-Decision – Council (2)

- **Presidency text**
 - **Review : reference to automated PM**
 - **Annex I**
 - NRL accredited for reference methods
 - Reference method/equivalence : derogation for existing equipment
 - Mutual recognition of test reports
 - **Annex III : change of fixed monitoring siting criteria**
 - **Annex VI : 25% reduction of minimum PM monitoring requirements**



Co-Decision – Parliament

- **Vote postponed**
- **EP Plenary vote scheduled in September**

- **Towards 1st reading agreement?**



Summary new AQD

- ❖ **Merge, streamline and modernize**
- ❖ **New objectives on PM_{2.5}**
- ❖ **Address compliance problems**



Ongoing

- **CEN**
 - Revision PM₁₀, PM_{2.5}
 - Standard for automatic?
- **QA/QC**
 - Equivalence, PM_{2.5} (Workshop Q1 2007)
 - JRC/AQUILA
- **Monitoring – siting, “correction factors”**
- **RTD programmes**
- **GMES atmospheric services**



Research needs

- **Understanding PM and its health effects**
 - EU long term epi (cohort) studies
- **Transboundary/hemispheric air pollution**
- **Emission sources**

- **Research infrastructure**

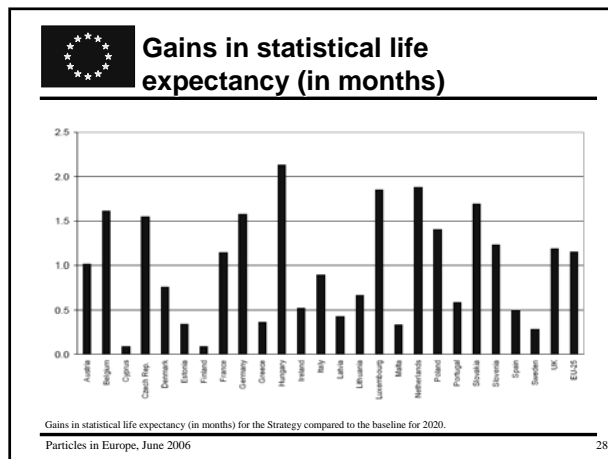
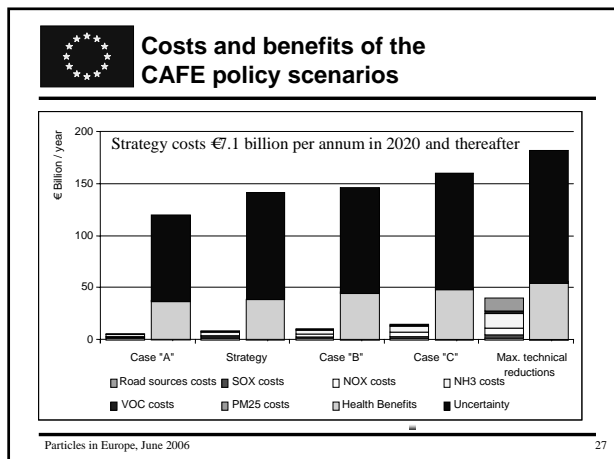
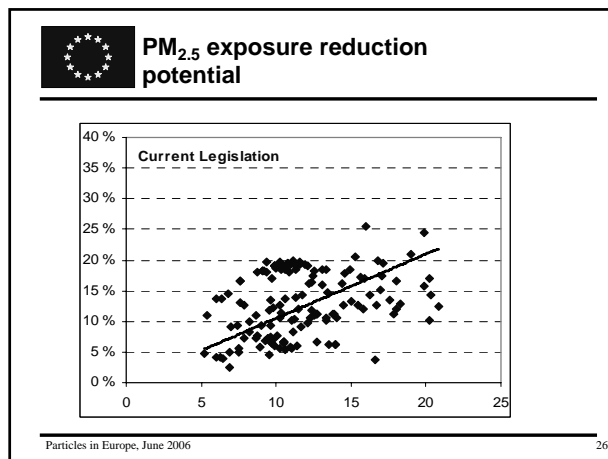
The New Air Quality Directive and the Commission Perspective For the Future

Perspectives

- Review (2013) : PM_{2.5} exposure reduction obligation, differentiated per country
- Equivalent, standardised PM automatic method(s)
- Primary PM_{2.5} emission ceiling in NECD
- Measures in place : EURO, small scale combustion, ships
- Better understanding of PM
- Effective regional/local measures

- *Improved health and quality of life!*

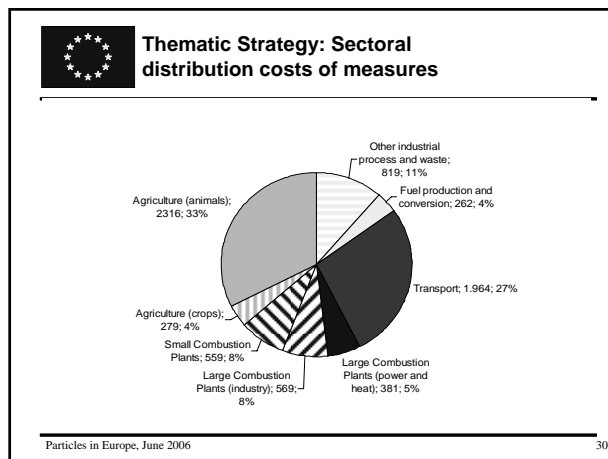
Particles in Europe, June 2006
25



Summary of Strategy – Costs & Benefits

Ambition level	Benefits								Costs per annum (€bn)
	Human health			Natural environment				Forest area exceeded ozone (000 km ²)	
	Life Years Lost (million) PM _{2.5}	Premature deaths (000s) PM _{2.5} and ozone	Range in monetised health benefits per annum (€bn)	Ecosystem area exceeded acidification (000 km ²)		Ecosystem area exceeded eutrophication (000 km ²)			
			Forests	Semi-natural	Fresh-water				
2000	3.62	370	-	243	24	31	733	827	-
Baseline 2020	2.47	293	-	119	8	22	590	764	-
Strategy	1.91	230	42 – 135	63	3	19	416	699	7.1
MTFR	1.72	208	56 – 181	36	1	11	193	381	39.7

Particles in Europe, June 2006
29



The New Air Quality Directive and the Commission Perspective For the Future

