EU Clean Air Policy

Update

6 November 2019

European Commission
Clean Air

Why is air pollution in Europe still a problem?

Europe's **air quality is improving**; between 2000 and 2016 emissions of NH_3 decreased by 9%, and of SO_2 emission even by 77% … **yet still** there are

Health impacts:

More than 400.000 premature deaths each year
incl. 374.000 premature deaths related to $PM_{2.5}$ (2016)
17% of all lung cancer deaths are due to air pollution
Citizens exposed to persistent exceedances

Economic impacts:

More than € 20 billion per year in 'direct costs';
plus € 330 to € 940 billion per year in 'indirect costs'

Environmental impacts:

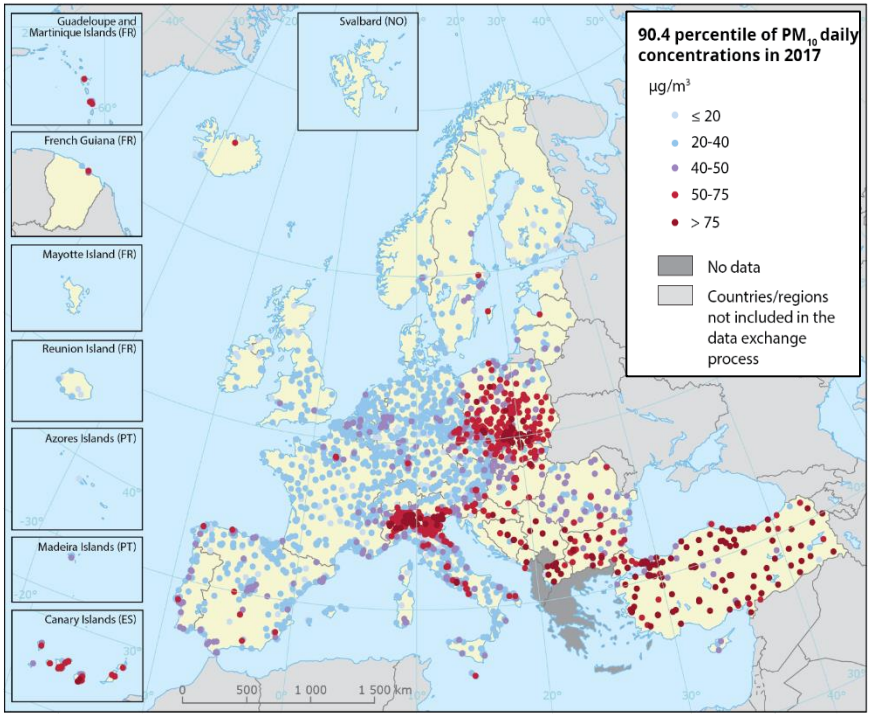
Eutrophication limits exceeded in 62% of ecosystem area in the EU, and in 73% of Natura2000 area

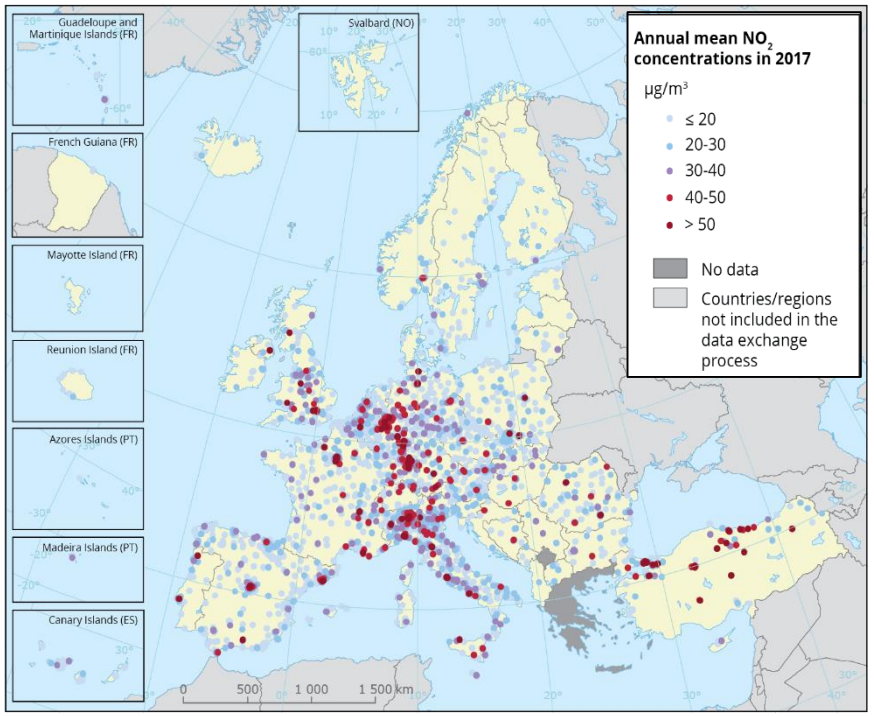
Source(s): EEA (2019), WHO (2017)

Where is air pollution in Europe a problem?

PM_{10} exceedances are often linked to fuel combustion (i.e. heating, transport)

NO_2 exceedances are often linked to traffic, in more than 130 cities in EU.





Source(s): EEA Air Quality in Europe (2019)

Who and what causes air pollution in Europe?

Air pollution has multiple sources …

$PM_{2.5}$: Households (56%), Energy & Industry (23%); Transport (13%),…

NO_x: Transport (47%), Energy (16%), Industry (15%), Households (14%), …

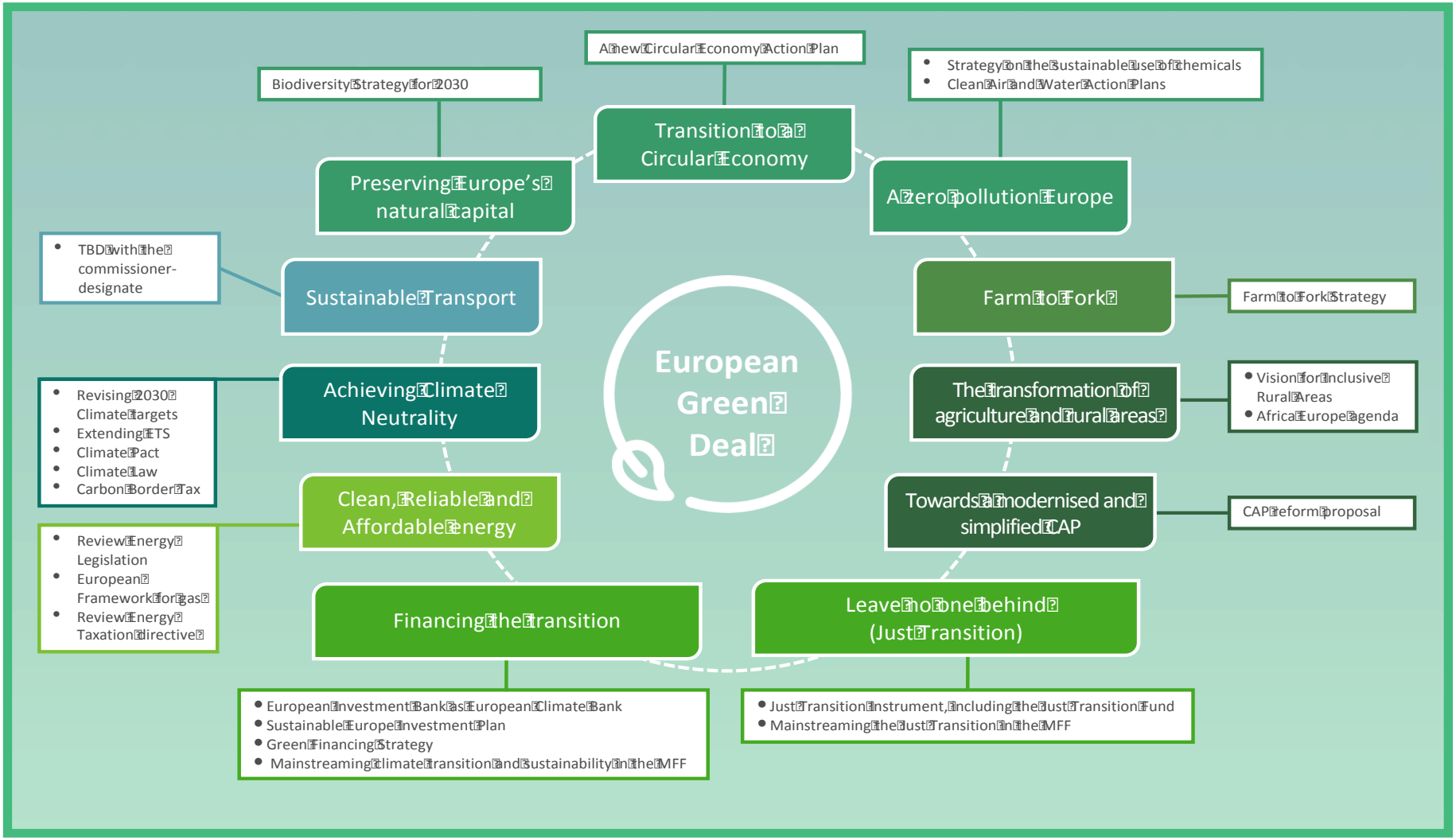
SO_x: Energy (48%), Industry (20%), Households (17%), Transport (3%), …

NH_3: Agriculture (92%), …

… and originates across all scales

- Transboundary pollution
- National level background
- City level sources
- Road-side peaks

This combination requires EU Clean Air Policy to address all sectors & all scales



Source: Twitter @TimmermansEU, 8 October 2019

European Commission

Communication COM(2018)330

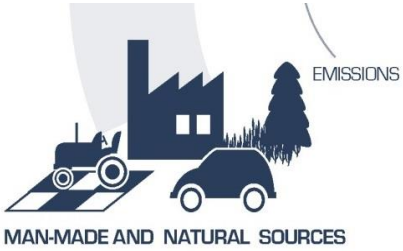
Clean air for all … EU policy framework

SETTING OBJECTIVES FOR GOOD AIR QUALITY

Ambient Air Quality Directives

Maximum concentrations of air polluting substances (PM_{10}, $PM_{2.5}$, SO_2, NO_2, CO, O_3 + 6 more)

REDUCING EMISSIONS OF POLLUTANTS



National Emission Ceilings Directive

National emission totals (SO_2, NO_x, VOC, $PM_{2.5}$, NH_3)

-79% -63% -40% -49% -19%

EU-28 reduction targets btw. 2005 and 2030

Source-specific emission standards

- IED Directive
- MCP Directive
- Eco-design Directive
- Energy efficiency
- Euro and fuel standards

European Commission

Communication COM(2018)330

Clean air for all … continued enforcement action

Compliance gap persists – see COM (2018) 330 'Cleaner Air for All'

For **NO2**: 16 Member States with exceedances in 2018 (more than 130 cities); 14 Member States are facing infringement actions (5 >> Court of Justice of the EU).

For **PM10**: 15 Member States with exceedances in 2018; 15 Member States are facing infringement actions (5 >> Court of Justice of the EU, incl. 2 rulings).

For **PM2.5**: 6 Member States with exceedances in 2018; EU air quality limit value has been binding since 2015.

For **SO2**: 1 Member States with exceedances in 2018; 1 infringement ongoing.

In addition, 2 infringement cases related specifically to monitoring and reporting shortcomings, plus other cases that also address monitoring.

Source(s): AQ Portal, Clean Air Programme

European Commission

Communication COM(2018)330

Clean air for all … and related EU funding

Cohesion policy (i.e. Regional Development Fund + Cohesion Fund)

- specific allocations for air quality; € 1.8 billion is available for 2014-2020
- in addition, further indirect contributions can benefit air quality, e.g. low-carbon economy (€ 45 billion), environmental protection and resource efficiency (€ 63 billion) and network infrastructure (€ 58 billion)

LIFE funding offers a further € 300 million, including for LIFE Integrated Projects (e.g. for air quality plans) or LIFE preparatory projects (e.g. air quality sensors)

EFSI funding offers a total of € 315 billion, of which 30% have a possible air quality link (e.g. investing in energy and transport, or social infrastructure); in addition **Horizon 2020** indirectly benefits emissions reduction and air quality.

European Commission

Communication COM(2018)330

Clean air for all… EU implementation support

Environmental Implementation Review

- Country specific analysis, and targeted EIR dialogues
- Additional tools and funds to improve Peer-2-Peer exchange

Clean Air Dialogues & Clean Air Forum

- So far, dialogues with 7 Member States: IE, LU, HU, SK, ES, CZ, IT
- First Forum in Nov 2017 (measures in cities, by agriculture, 'clean tech‘)
- Second Forum in Nov 2019 (28 and 29 November 2019)

Bringing together Member States, regions and cities

- EU Urban Agenda to facilitate cooperation
- Urban Innovative Actions

Fitness check: Ambient Air Quality Directives

Scope: Evidence-based analysis of whether EU actions are fit for purpose, and identify regulatory burdens, overlaps, gaps, inconsistencies

>>> started in mid-2017 - to be finalized by end of 2019 <<<

Evidence: Literature review: scientific peer-reviewed as well as other reports

Air quality data as reported over the period 2008 to 2018 to EEA

General stakeholder consultation (incl. Online PC and 2 workshops)

Targeted stakeholder consultation (incl. questionnaires and interviews)

Seven focus case studies (in BG, DE, ES, IE, IT, SE, SK)

Desk review of EU and national legislation, as relevant

Purpose: Retrospective exercise; looking at period 2008 to 2018

Criteria: Relevance, Coherence, Effectiveness, Efficiency, EU Value Added

NOT validated by the European Commission

Fitness check initial findings (support study)

Relevance & EU Added Value

- Current standards are not as strict as latest scientific evidence would suggest they should be to protect human health (i.e. prevention and precaution).
- AAQDs have streamlined monitoring and reporting improved data collection and stimulated more / additional MS action to improve air quality;

Coherence

- AAQDs are largely internally coherent (isolated examples where not); overall coherence with other EU Clean Air legislation
- Some incoherence in implementation of sectoral policies identified, i.e. Euro standards real world emissions (diesel), cross-compliance, and bioenergy.

Source(s): Background document for 2nd stakeholder workshop

NOT validated by the European Commission

Fitness check initial findings (support study)

Effectiveness

- Air quality has generally improved in the assessment period in all MS- but most MS have reported exceedances for at least one pollutant, even in 2017.
- Several stakeholders noted that the Directives are not prescriptive enough, and allow for degree of interpretation (e.g. for monitoring micro-siting).

Efficiency

- Data for air quality monitoring indicate a total annual cost across the EU in the order of €0.2 to € 1/person/year (only partly attributable to AAQDs).
- 2008-2016: Health benefits of the AAQDs estimated €25 to 76 bn. But costs of poor implementation (> limit values) are estimated at €100 to 500 bn.

Source(s): Background document for 2nd stakeholder workshop

Some concluding reflections

COM(2018)330 emphasizes urgent need to improve air quality through **full implementation** of air quality standards – for now, compliance gaps remain.

The European Commission continues to **support implementation** by Member States – such as via Clean Air Dialogues, or via funding opportunities.

With the on-going Fitness Check we are seeking to understand what works well, and what could work better: **whether the Directives are fit for purpose**.

EU Court of Auditors have recommended an update of the AAQ Directives, e.g. advance dates of reporting, precision of requirements for monitoring, …

Thank you

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