



EU Clean Air Policy

Update

21 January 2020

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 $\text{PM}_{2.5}$ (2016)
17% of all lung cancer deaths are due to air pollution
Citizens exposed to persistent exceedances

Economic impacts:

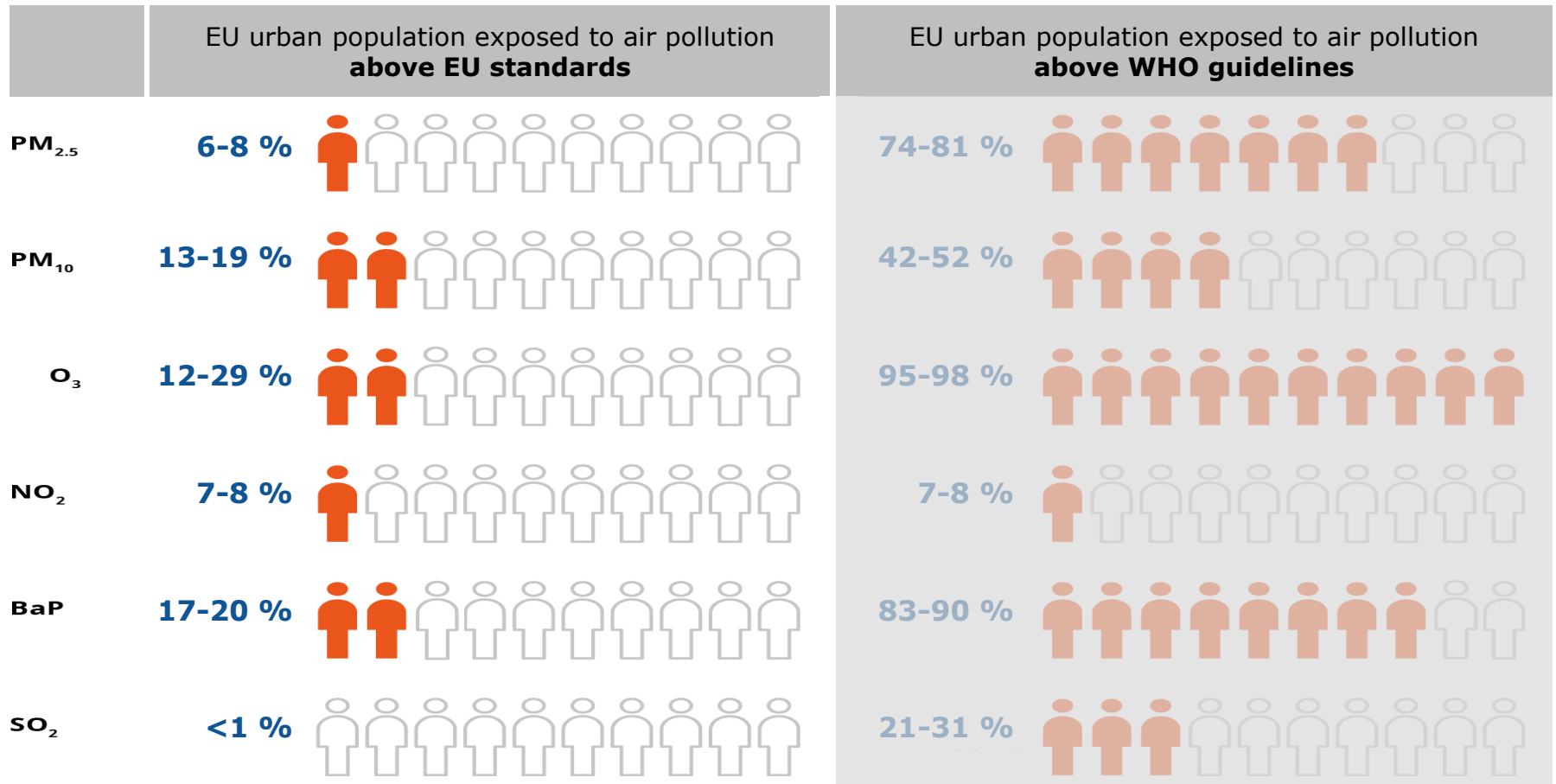
More than € 20 billion per year in 'direct costs';
plus € 330 to € 940 billion per year in 'indirect costs'

Environmental impacts:

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

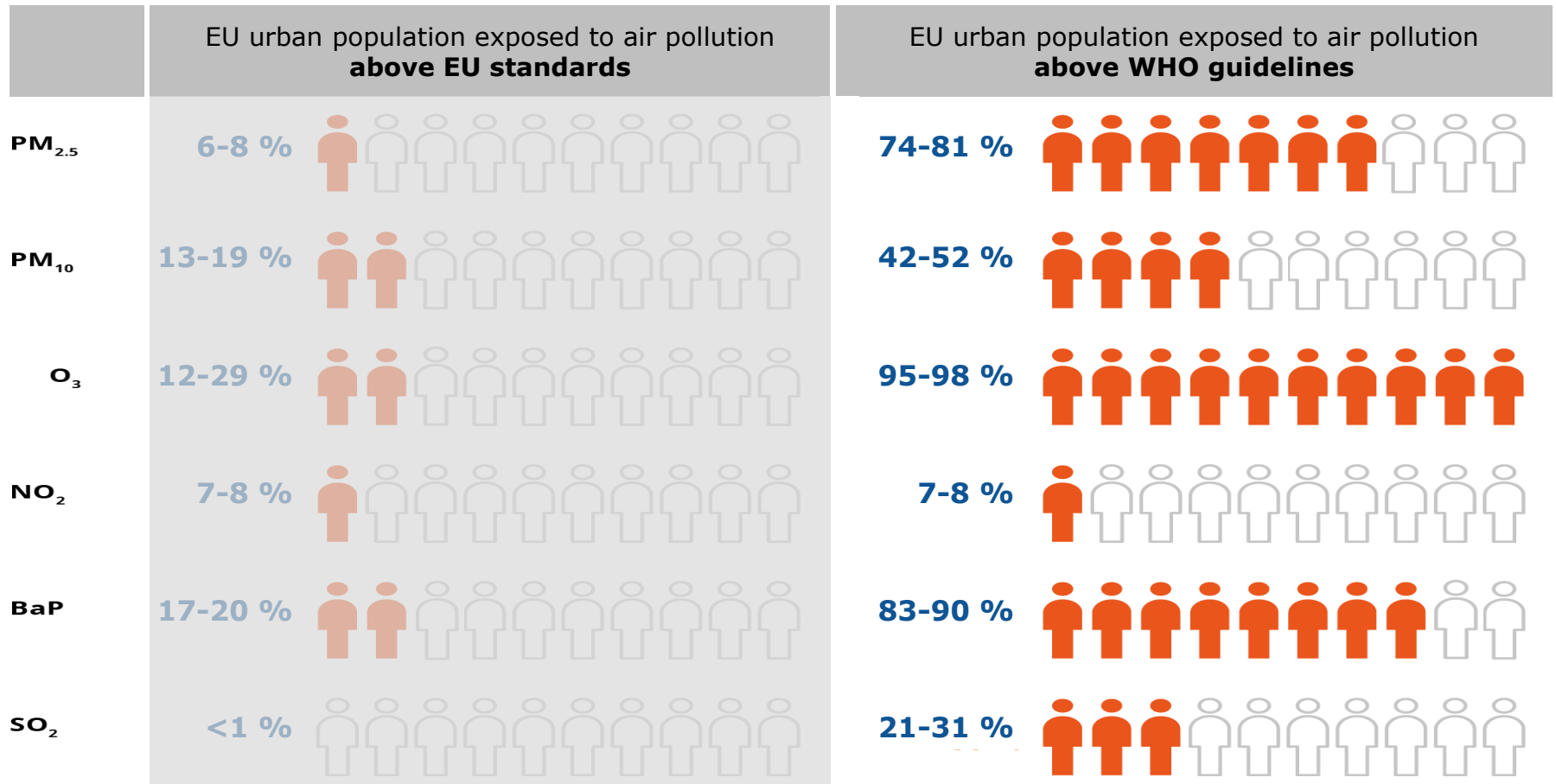


Air pollution remains a health challenge





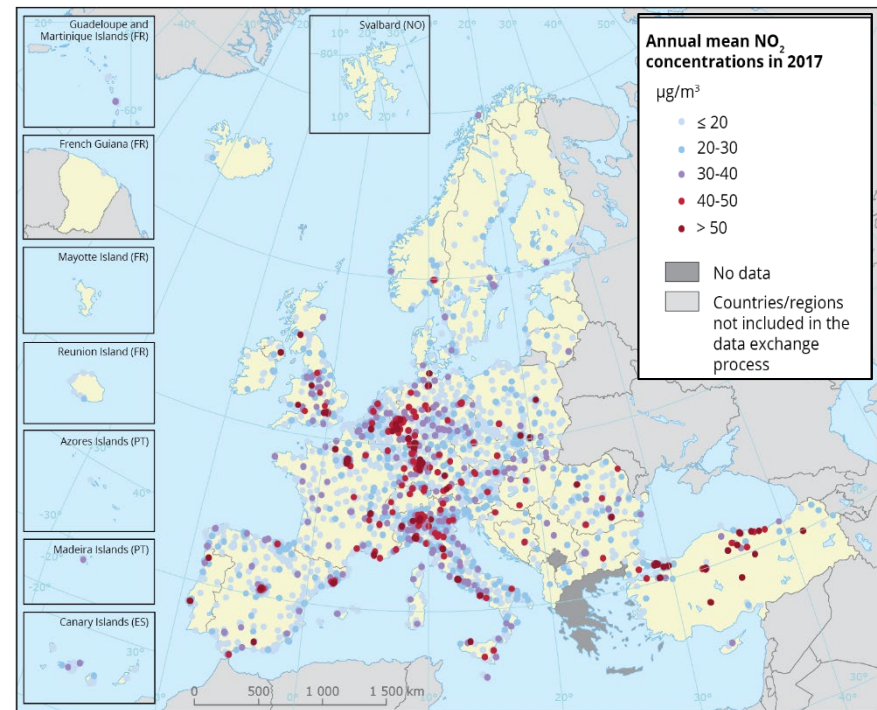
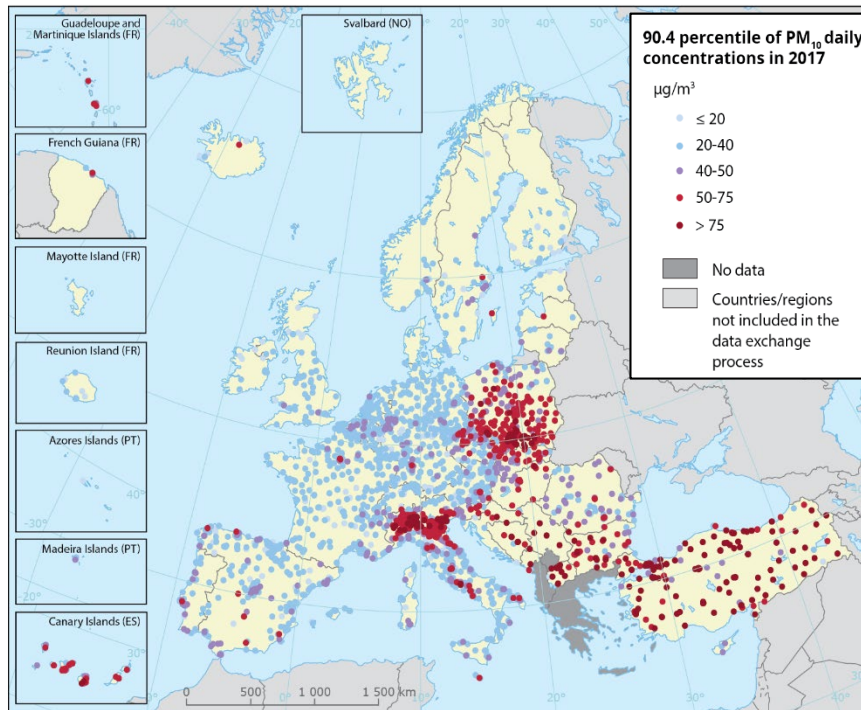
Air pollution remains a health challenge



Where is air pollution in Europe a problem?

PM₁₀ exceedances are often linked to fuel combustion (i.e. heating, transport)

NO₂ exceedances are often linked to traffic, in more than 130 cities in EU.





EU Aim
Cut emissions,
so as to halve
health impacts
in the EU by
2030 (vs 2005)

Clean air for all ... EU policy framework

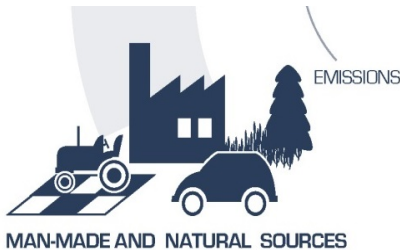


Ambient Air Quality Directives

Maximum concentrations of air polluting substances
(PM₁₀, PM_{2.5}, SO₂, NO₂, CO, O₃ + 6 more)

SETTING OBJECTIVES FOR GOOD AIR QUALITY

REDUCING EMISSIONS OF POLLUTANTS



National Emission Ceilings Directive

National emission totals
(SO₂, NO_x, VOC, PM_{2.5}, NH₃)



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

Fitness Check

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

Evidence: Literature review with more than 600 sources of evidence;
Analysis of reported data as reported over the period 2008 to 2018;
An open public consultation generated 489 responses;
Replies to a targeted questionnaire from 43 stakeholders;
Two stakeholder workshops (June 2018; January 2019);
Four meetings of the Ambient Air Quality Expert Group;
Seven case studies (in BG, DE, ES, IE, IT, SE, SK);
Bespoke modelling and computations (analysis of costs and benefits);
Desk review of EU and national legislation, as relevant.

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

Fitness check – four main conclusions

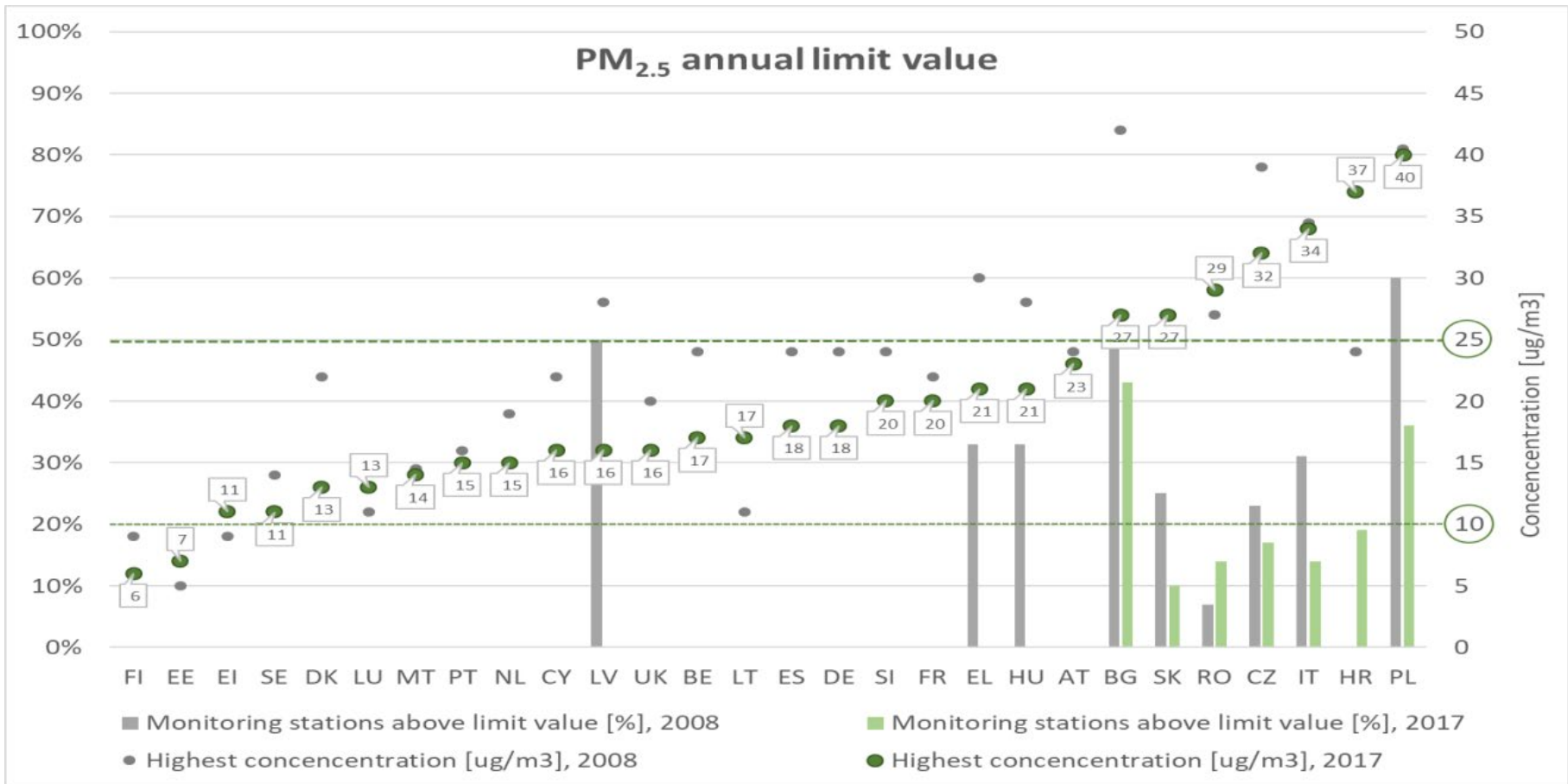
The AAQ Directives are *broadly fit for purpose* (with scope for improvements).

- The **monitoring network** benefits from continuous investment to ensure it is well maintained; additional guidance would be useful to address ambiguities.
- EU **air quality standards** have been instrumental in reducing concentrations and exceedance levels albeit subject to, at times considerable, delays.
- To **reliable and comparable information** is available, but with further scope to make use of e-reporting possibilities, including an acceleration of reporting.
- The **clear requirement to take remedial action** when and where exceedances are observed has been decisive in triggering improvement in air quality.

*[+ Some **redundant provisions** have been identified as well as elements that could reduce administrative burden in terms of air quality reporting.]*



Fitness check – policy partially effective



Fitness check - seven lessons learnt

The AAQ Directives are broadly fit for purpose (*with scope for improvements*).

- Air quality remains a major **health and environmental concern**;
- Air quality standards instrumental, and **partially effective**, to reduce pollution;
- Current EU standards are **less ambitious** than **scientific** advice;
- **Limit values** have been more effective than other types of air standards;
- Legal **enforcement action** by European Commission, and civil society, works;
- Scope to further harmonise **monitoring**, **information**, and **air quality plans**;
- Not all reported data equally useful, **e-reporting** allows for further efficiency.

Fitness check – air quality standards in context

Pollutants	WHO Guidelines	EU Standards	EU Exceptions	Selected Others
PM ₁₀ (annual)	20 µg/m ³	40 µg/m ³	-	AU: 25; CH:20; NO:25 CN: 40/70
PM ₁₀ (daily)	50 µg/m ³	50 µg/m ³	(35d a year)	AU: 50; CH: 50 (3d); NO: 50 (30d); NZ: 50 (1d); US: 150 (1d)
PM _{2.5} (annual)	10 µg/m ³	25 µg/m ³	-	AU: 8; CH: 10; CA: 10; JP: 15 NO: 15; US: 12
PM _{2.5} (daily)	25 µg/m ³	-	-	AU: 25; CAN: 28; JP: 35 (25%); US: 35 (2%)
NO ₂ (annual)	40 µg/m ³	40 µg/m ³	-	AU: 57; CA: 32; CH: 30; NO: 40; US: 101; (SE:20); CN: 40
NO ₂ (hourly)	200 µg/m ³	200 µg/m ³	(18d a year)	AU: 230; CA: 115; NO: 200 (18d); NZ: 200 (9h); US: 191 (2%);
SO ₂ (daily)	20 µg/m ³	125 µg/m ³	3 days a year	AUS: 213 (1d); CH:100 (1d); JP: 107; NO: 125 (3d)
SO ₂ (10m/hourly)	500 µg/m ³	350 µg/m ³	24 hours a year	AU: 532 (1d); JP: 266; NO: 350 (24h); NZ: 350 (9h); US: 200 (1%)
O ₃ (8-hour mean)	100 µg/m ³	(TV) 120 µg/m ³	(75d in 3 years)	CA: 126; US: 140

What's next?

Exceedances gap persists – continued push towards full implementation of existing clean air legislation (see also COM (2018) 330 'Cleaner Air for All'):

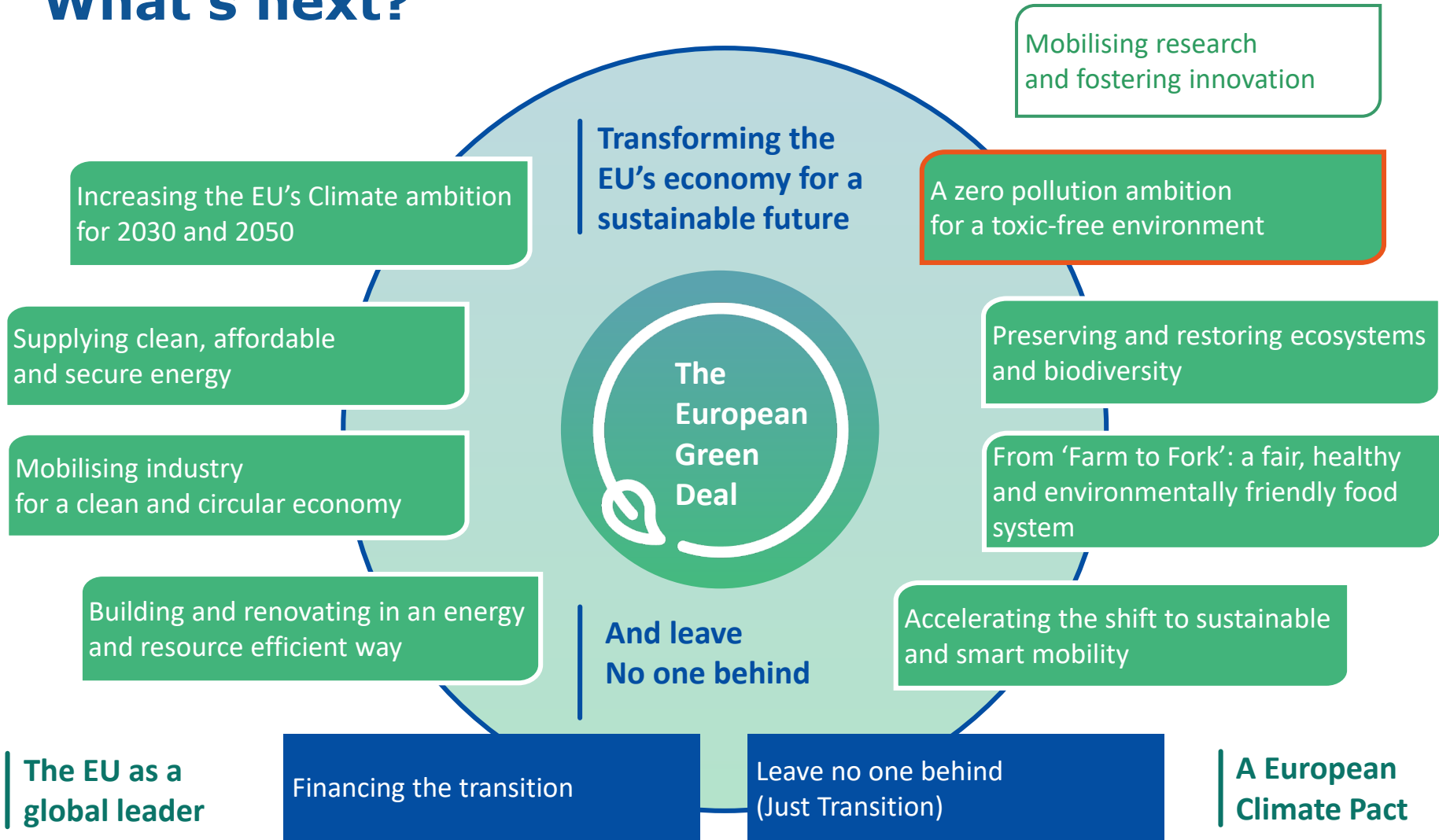
Continued enforcement action: currently, 31 cases addressing 19 Member States as relates PM₁₀, NO₂, and SO₂ exceedances, as well as monitoring gaps

EU funding for clean air: specific allocations for air quality of some EUR 2 billion (2014-2020), plus substantial indirect contributions, under cohesion policy *plus* LIFE projects, Horizon 2020, EFSI funding, Urban Innovation Actions

Implementation support: bringing together Member States, regions and cities, incl. Environmental Implementation Review, Clean Air Dialogues, Clean Air Forum

National Air Pollution Control Programmes: to set a 2030 clean air trajectory

What's next?



What's next?

The European Green Deal announces that the Commission will adopt a **zero pollution action plan for air, water and soil** in 2021.

The Commission will draw on the **lessons learnt from the evaluation** of the current air quality legislation.

It will also propose to strengthen provisions on **monitoring, modelling** and **air quality plans** to help local authorities achieve cleaner air.

The Commission will notably propose to revise **air quality standards** to align them more closely with the World Health Organization recommendations.



Thank you

European Commission
Clean Air