



WHO:s riktvärden

Siiri Latvala och Matthew Ross Jones, Naturvårdsverket



GR Luftvårdsförmiddag, 30 nov 2021

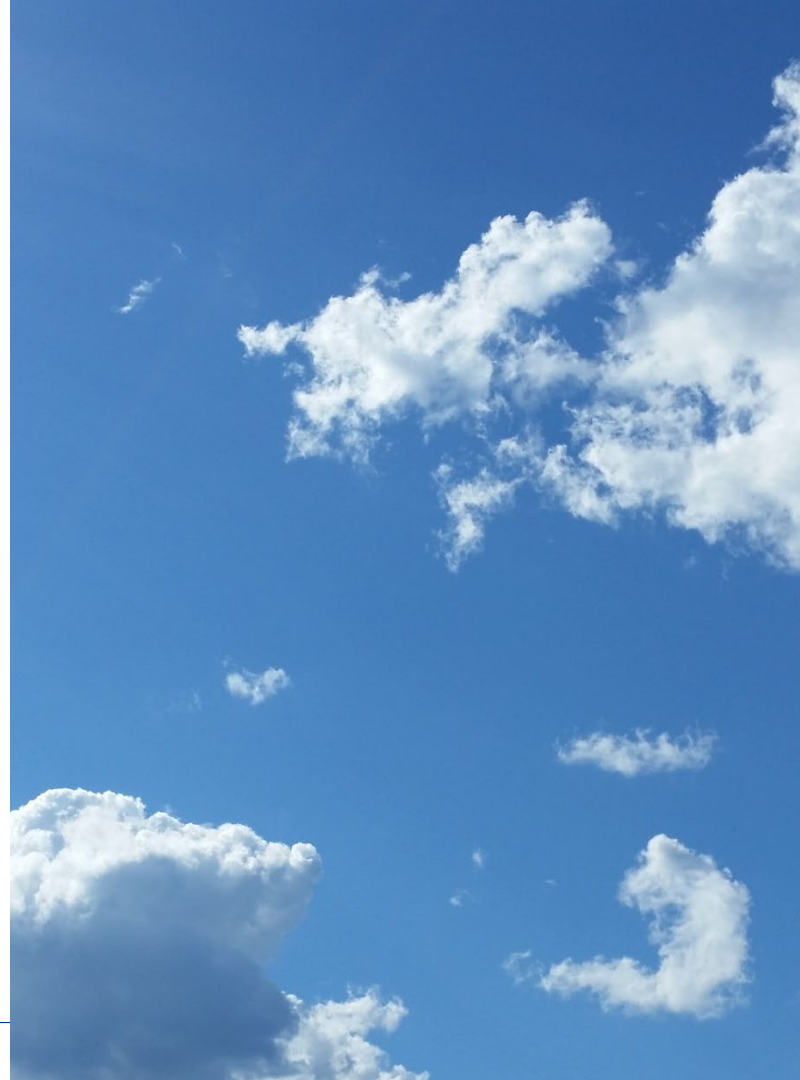
WHO:s riktvärden och revideringen av EU:s luftkvalitetsdirektiv

Siiri Latvala och Matthew Ross-Jones

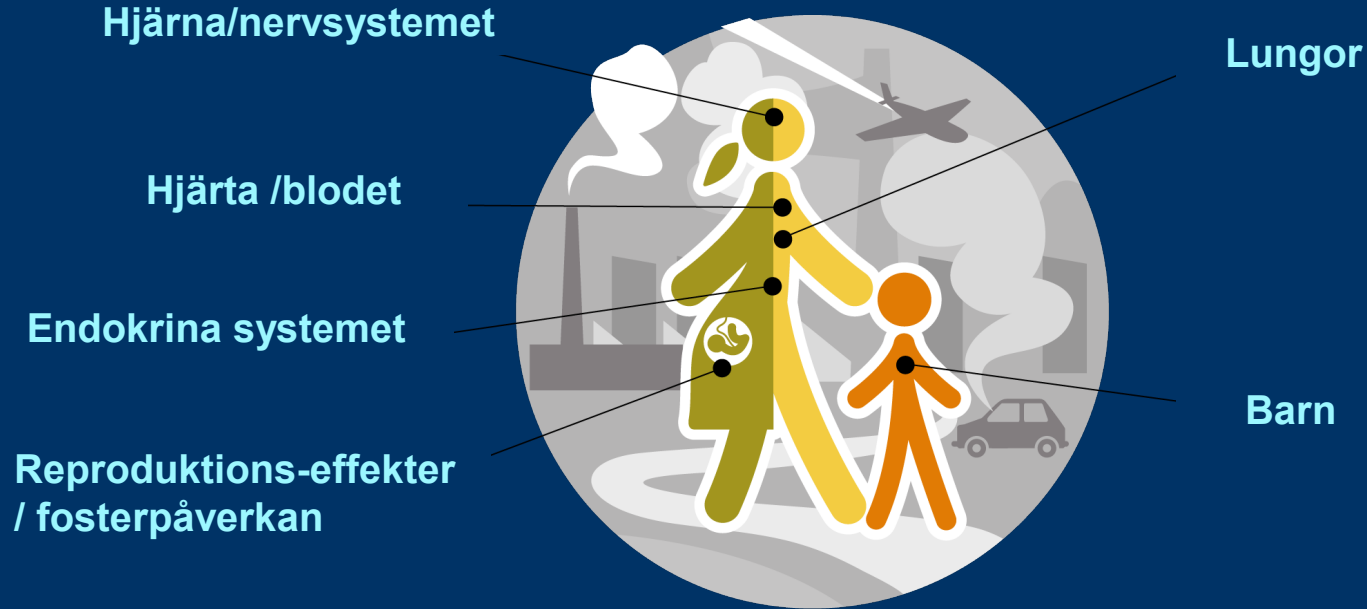
Naturvårdsverket

siiri.latvala@naturvardsverket.se

matthew.ross-jones@naturvardsverket.se



Hälsoeffekter av luftföroreningar

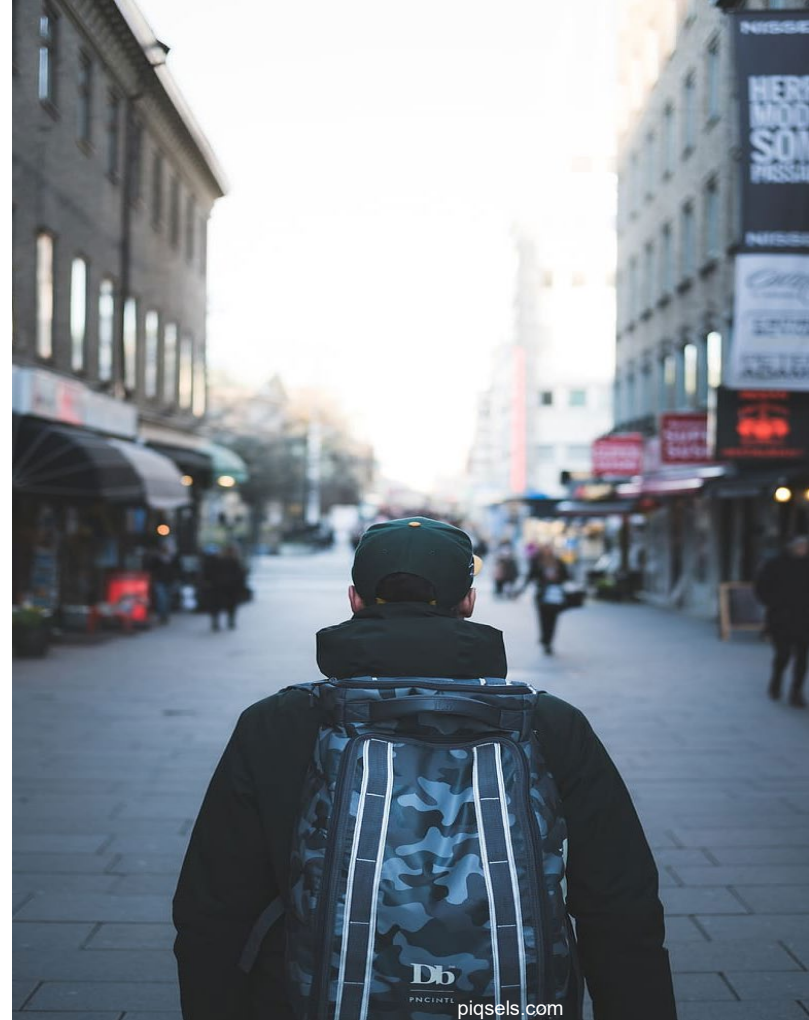


Nya WHO riktvärden

Förorening	Tid för medelvärde	2005 AQGs	2021 AQGs	AAQD 2008/50/EG	MKN SFS 2010:477	Miljö-kvalitetsmål
PM _{2,5} (µg/m ³)	År	10	5	25	25	10
	24 h	25 ^a	15 ^a	-	-	25 ^c
PM ₁₀ (µg/m ³)	År	20	15	40	40	15
	24 h	50 ^a	45 ^a	50 ^e	50 ^e	30 ^p
O ₃ (µg/m ³)	Säsongs-högsta	-	60 ^b	- ^o	- ^o	-
	8 h	100 ^a	100 ^a	120 ⁿ	120	70
	Timme	-	-	-	-	80
Ozonindex	Timme	-	-	-	-	10 000 ^q
NO ₂ (µg/m ³)	År	40	10	40	40	20
	24 h	-	25 ^a	-	60 ^f	-
	Timme	200	200 ^r	200 ^k	90 ^g	60 ^d
SO ₂ (µg/m ³)	24 h	20 ^a	40 ^a	125 ^l	100 ^h	-
	Timme	-	-	350 ^m	200 ⁱ	-
	10 min	500	500 ^r	-	-	-
CO (mg/m ³)	24 h	-	4 ^a	-	-	-
	8 h	10	10 ^r	10 ^j	10 ^j	-
	1 h	35	35 ^r	-	-	-
	15 min	100	100 ^r	-	-	-

Vad betyder detta?

- Inga säkra nivåer för luftföroreningar
- Stora hälsovinster med WHO:s nya riktvärden - halvering av förtida dödsfall pga PM2,5 enligt [EEA](#)
- Konsekvenser för det svenska och europeiska luftvårdsarbetet





EU:s Zero Pollution Action Plan (COM(2021)400)

”Nollföroreningsvision för 2050 som innebär att utsläpp av föroreningar till luft, vatten och mark har minskat till nivåer som inte längre anses vara skadliga för människors hälsa eller ekosystemen och som respekterar planetens gränser och därmed leder till en giftfri miljö.”

6 nollföroreningsmål för 2030

33 åtgärder för 2021-2024



EU:s luftvårdspolitik



Mål- och gränsvärden för
luftkvalitet
skydd för hälsa och miljö

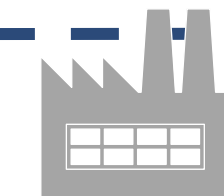
Luftkvalitets
direktivet



Minska utsläpp av
olika föroreningar

Takdirektivet

Sektors
lagstiftning



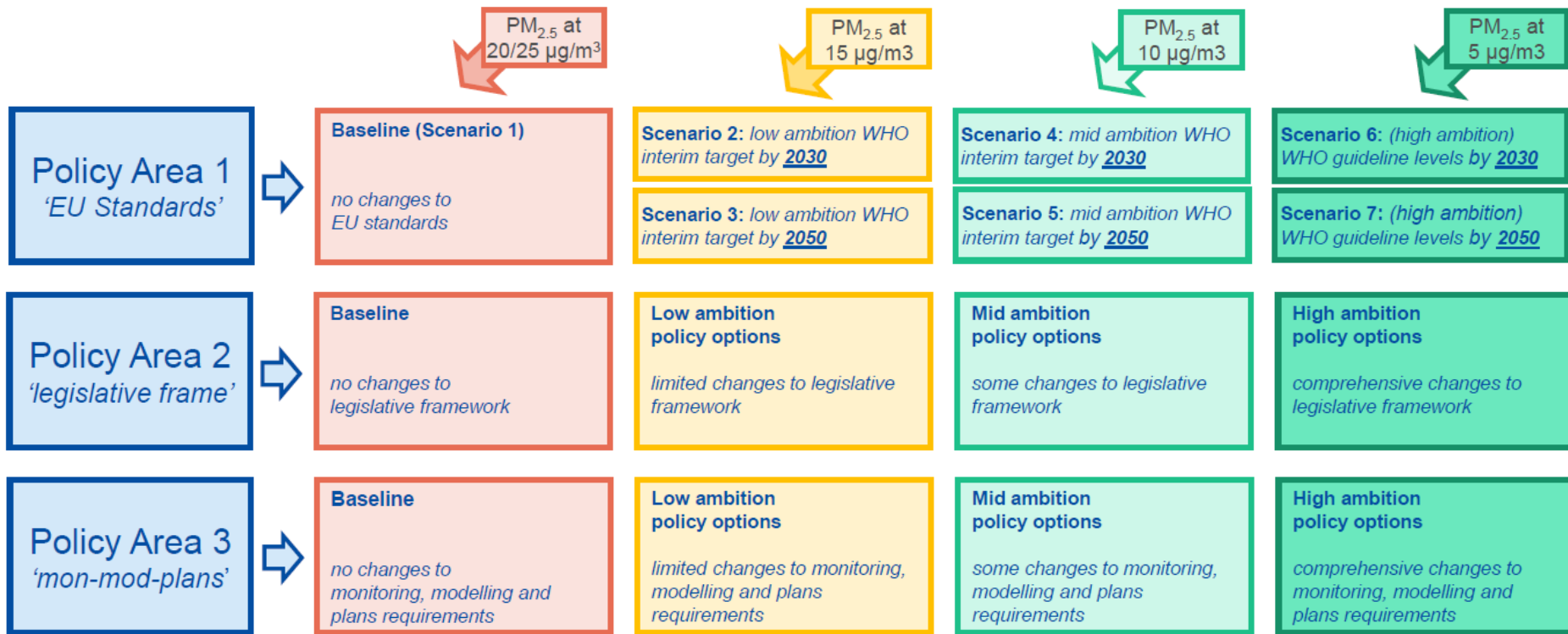
Aktiviteter
Utsläppskällor



Tidslinjen för revidering av luftkvalitetsdirektivet (enligt plan)

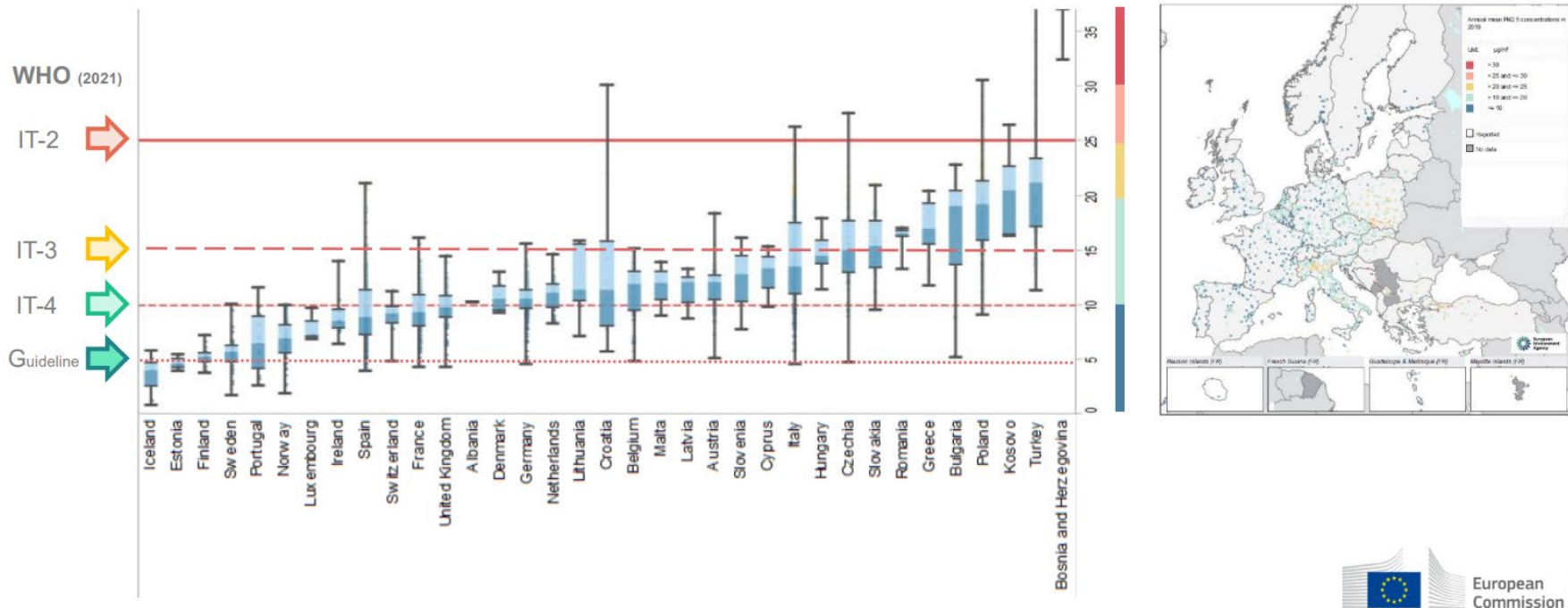


Översikt av policyområden / policyalternativ



→ based on assessment of consequences, combine different policy options to **policy packages**

PM_{2.5} concentrations in 2019 by country



Source(s): EEA Europe's air quality status 2021

Table 0.1. Recommended AQG levels and interim targets

Pollutant	Averaging time	Interim target				AQG level
		1	2	3	4	
PM_{2.5}, µg/m³	Annual	35	25	15	10	5
	24-hour ^a	75	50	37.5	25	15
PM₁₀, µg/m³	Annual	70	50	30	20	15
	24-hour ^a	150	100	75	50	45
O₃, µg/m³	Peak season ^b	100	70	–	–	60
	8-hour ^a	160	120	–	–	100
NO₂, µg/m³	Annual	40	30	20	–	10
	24-hour ^a	120	50	–	–	25
SO₂, µg/m³	24-hour ^a	125	50	–	–	40
CO, mg/m³	24-hour ^a	7	–	–	–	4

^a 99th percentile (i.e. 3–4 exceedance days per year).

^b Average of daily maximum 8-hour mean O₃ concentration in the six consecutive months with the highest six-month running-average O₃ concentration.

Möjligheter att påverka EU:s arbete

- Pågående allmänt samråd (t.o.m. 16 dec 2021)
https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12677-Revision-of-EU-Ambient-Air-Quality-legislation/public-consultation_en
- Kommande expertsamråd om policy alternativen (dec 2021 – jan 2022)
- Möte med intressenter (våren 2022)
- Resultat från tidigare expertsamråd (feb 2021)
https://ec.europa.eu/environment/air/quality/documents/20210831_SR9%20Phase%201%20Report_TechAnnex.pdf



Det svenska arbetet & konsekvenser för våra normer och mål

- Nytt luftkvalitetsdirektiv i bästa fall 2023. 2024 / 2025 mer realistiskt!
- Genomfört i svensk lagstiftning 2025 – 2027 (ca 2 år efter EU har antagit direktivet)
- Fördjupad utvärdering av miljömålen 2022-2023



Det svenska arbetet med revideringen & förhandlingar

- Regeringskansliet ansvarar, Naturvårdsverket tar fram underlag
- Aktivt deltagande i expertgruppsmöten och samråd
- Dialog mellan myndigheter om kommande arbete
- Kommunikation via relevanta kanaler

Läsa mer

- [Revision of the AAQ Directives - Legislation - Air - Environment - European Commission \(europa.eu\)](#)
- [AAQ Revision - Stakeholder Meeting 2021/09/23 \(pdf\) \(europa.eu\)](#)

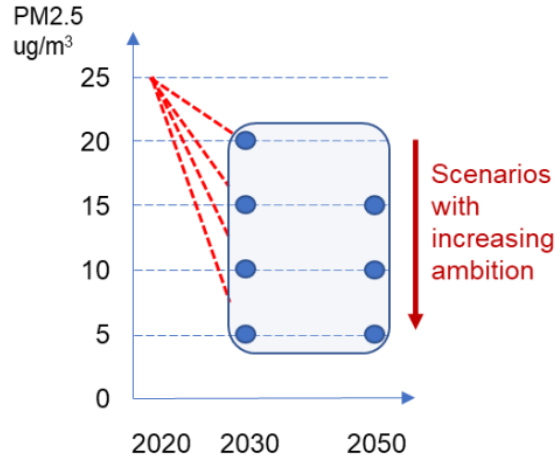
- [WHO air quality guidelines - executive summary](#)
- [WHO air quality guidelines](#)

Tack för uppmärksamheten!



Method/Approach

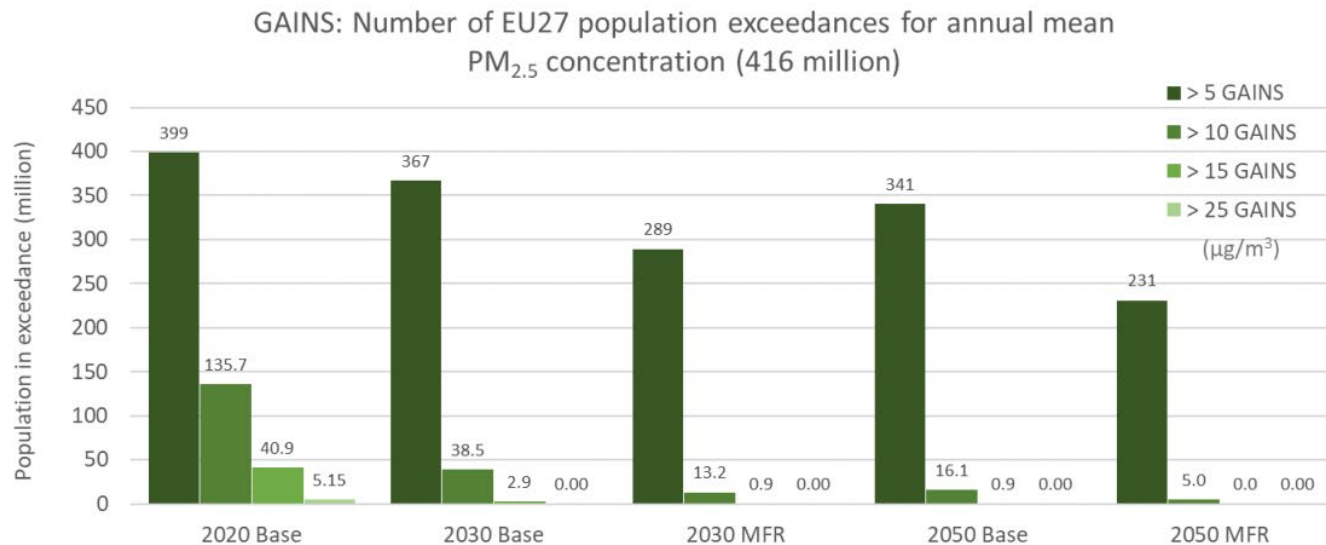
Develop several cost-effective policy scenarios with different ambition levels
(considering both concentration level and time of attainment)



- Key tools/models: GAINS, EMEP, uEMEP
- GAINS check feasibility at background locations and provide quantification of emissions and costs at MS level
- GAINS emissions used in EMEP/uEMEP models to estimate concentration of all pollutants
- When attainment not feasible, additional analysis with GAINS and uEMEP to identify local source contributions

PM_{2.5} Population exposure - Summary of preliminary scenario calculations using the existing GAINS methodology

Preparatory analysis



Policy area 2 – possible policy interventions

Directive 2004/107

Directive 2008/50

A - Adding an explicit mechanism for adjusting EU air quality standards to evolving knowledge 8 32	B - Further defining air quality standards (average exposure indicators) and exceedances actions 2 3 2 12-16 Annex	C - Expanding actions required to address exceedances (air quality plans / short-term action plans) 3 17 18 19 23 24	D - Specifying provisions to guide the development of air quality plans, incl on governance 23 Annex	E - Expanding the provision on sanctions and penalties 9 30 Annex	F - Expanding the requirements on the provision of information 7 26 27
<p>A1. Mechanism to adjust air quality standards to new WHO guidelines / latest scientific advice;</p>	<p>B1. Introduce 'limit values' for all air pollutants, replacing 'target values';</p>	<p>C1. Further specify the obligation for measures to keep exceedance period as short as possible;</p>	<p>D1. Guidance on the information to be included in air quality plans;</p>	<p>E1. Introduction of minimum penalty levels;</p>	<p>F1. Standardisation of necessary health related air quality information provisions</p>
<p>A2. Allow EU MS to adopt more stringent standards reflecting technical and scientific progress + notify EC</p>	<p>B2. Add short-term standards for all air pollutants with currently only long-term standards, e.g. PM2.5;</p>	<p>C2. Introduce obligation for effective short-term action plans to prevent / tackle air pollution events;</p>	<p>D2. Define requirements in terms of air quality plans vs air quality zones to ensure harmonisation;</p>	<p>E2. Create a fund from penalties and use proceeds to compensate for damages / fund AQ measures;</p>	<p>F2. Standardisation of air quality indices, timelines, or air pollutant alert thresholds.</p>
<p>A3. Require the priority air pollutant list to be updated periodically and add emerging pollutants to it.</p>	<p>B3. Require Member States to take short-term action plans in case of exceedances of short-term standards.</p>	<p>C3. Clearer coordination between short-term action plans and air quality plans.</p>	<p>D3. Introduce legislative instruments for clear responsibilities between different levels of MS governance.</p>	<p>E3. 'Access to justice' clause in the AAQD</p>	

Policy area 3 – possible policy interventions

G - Augment assessment regime rules 4 5-11	H - # / type of sampling points Annex Annex	I - Continuity / discontinuation / relocation of sampling points Annex	J - Micro and macro-scale siting of sampling points Annex Annex	K - Data quality Annex Annex	L - Which pollutants to measure and how Annex Annex	M - Assessment of natural / winter sanding / transboundary 20 21	N - Requirements around developed AQ plans Annex
G1. Address ambiguity around indicative measurements	H1. Redefine requirements on # sampling points	I1. Requirements on monitoring for x years after compliance	J2. Spatial representativeness to define locations	K1. Incorporate FAIRMODE Modelling Quality Objective	L1. Increased monitoring of ozone and VOCs. Changes to HM and b requirements.	M1. Clearer rules guidance on estimating contribution from winter sanding/salting	<i>N1. Guidance on: Source apportionment</i>
G2. Clarify use of models	H2. Clarify % split sampling point type		J3. Further define micro siting criteria	K2. Define how Quality Objective is applied in practice	L2. Mandatory urban supersites	M2. Clearer rules and guidance on estimating contribution from natural sources	<i>N2. Guidance on: Developing AQ plans</i>
G3. Clarify role of industrial point source monitoring	H3. Clarify use of indicative monitoring			K3. Protocol when data capture <90%	L3. Monitoring standards for emerging pollutants	M3. Mandatory estimation of transboundary contribution	<i>N3. Guidance on: Cost benefit analysis</i>