

Catalonia's strategy for improving air quality

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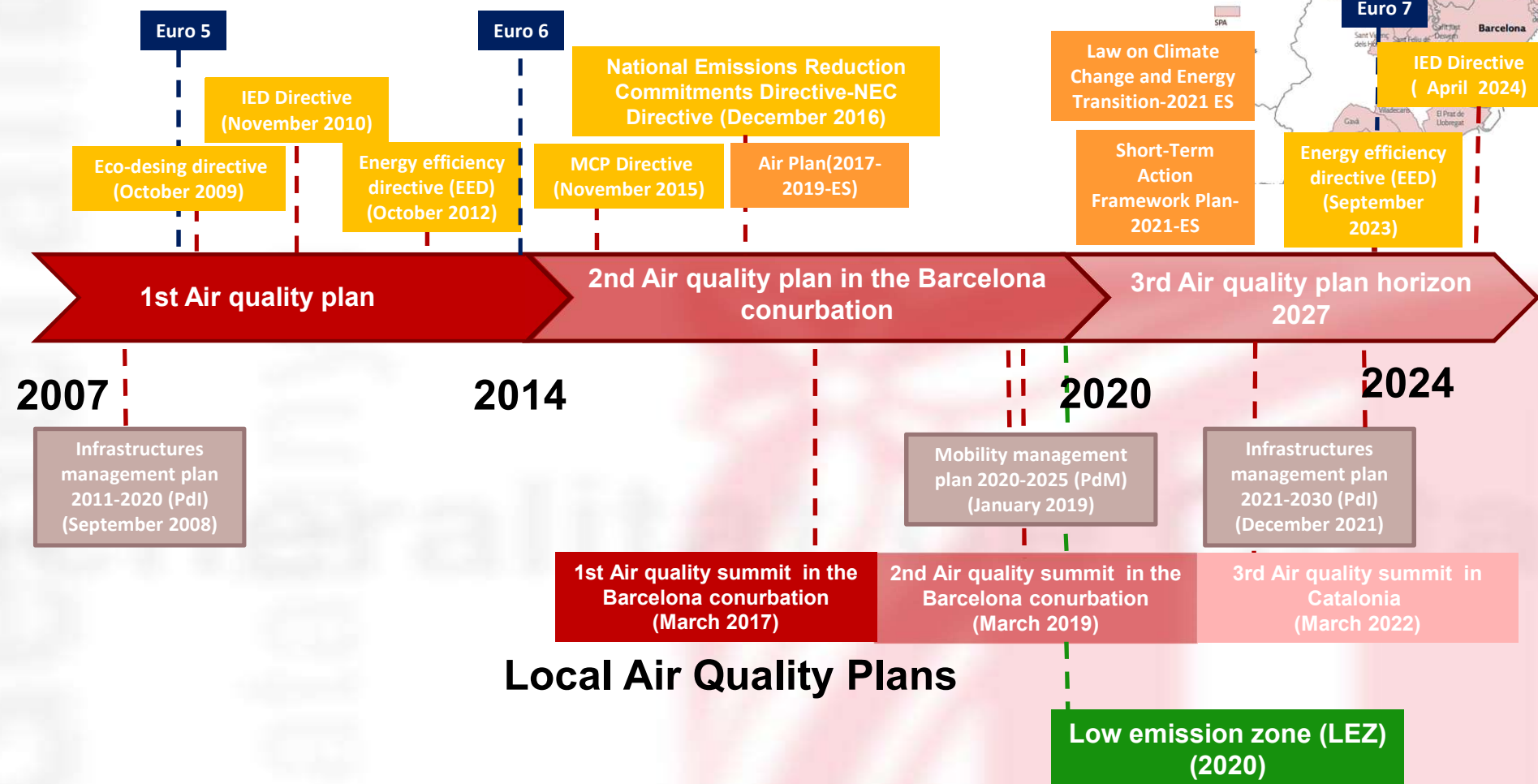
General-Directorate of Climate Change and Environmental Quality
Ministry of Territory, Housing and Ecological Transition

Barcelona Lens Creta Stakeholder Event
Polis Network

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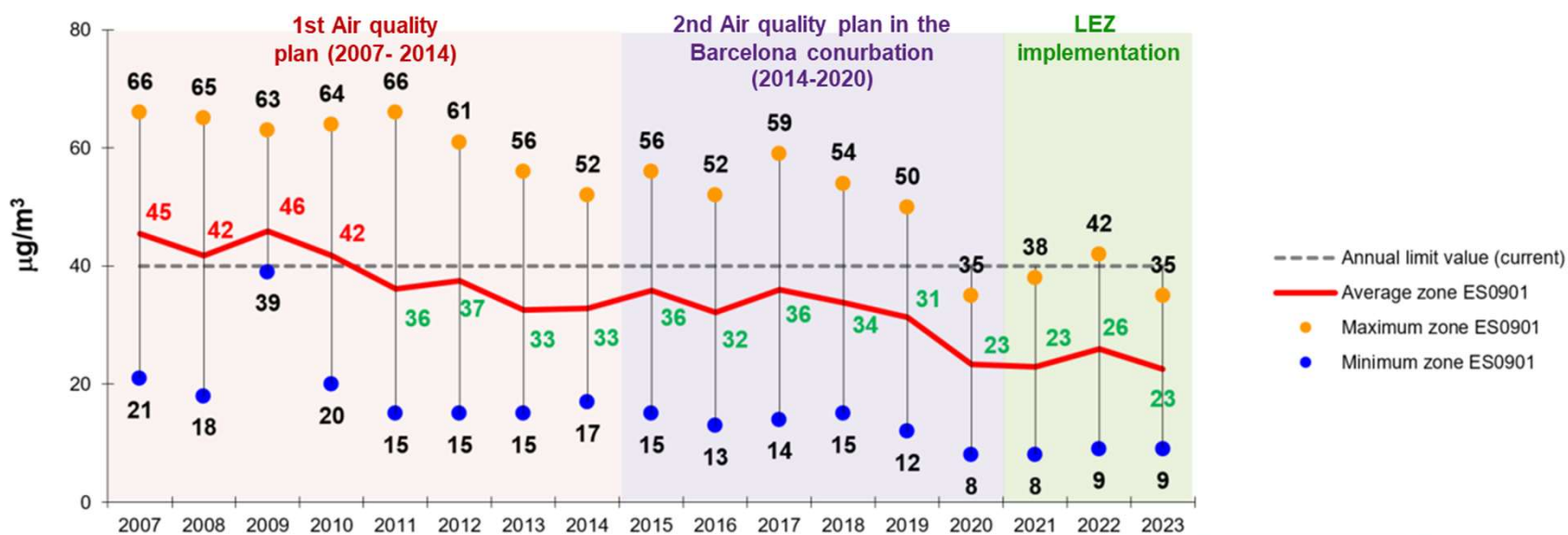
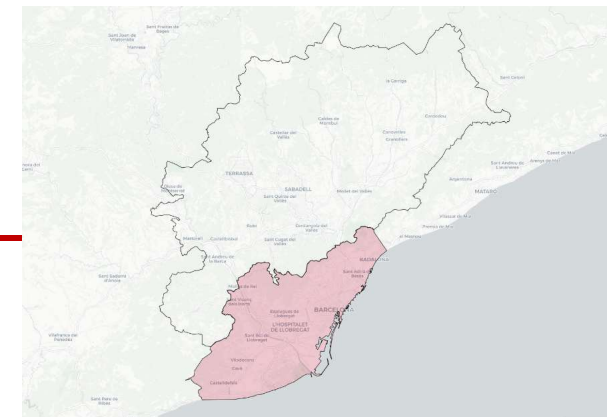
What we have done?



Local Air Quality Plans

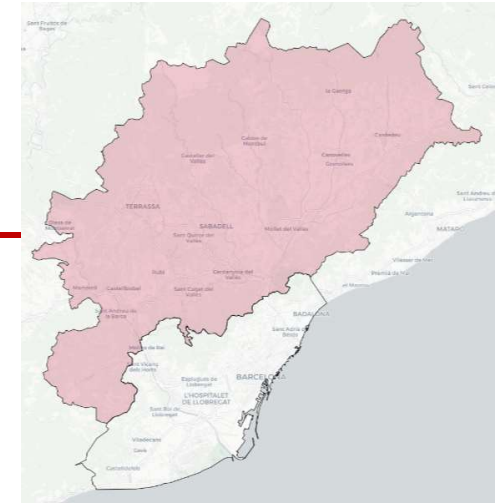
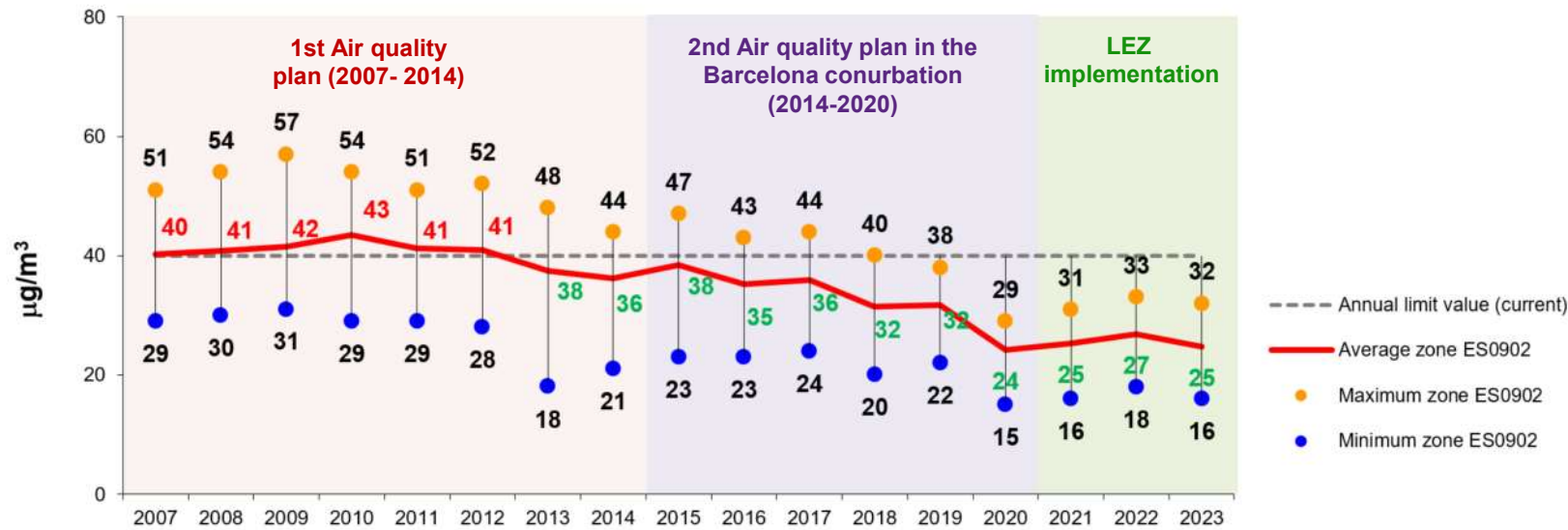
What we have achieved (1/2)

Nitrogen dioxide air quality levels in ES0901-Barcelona Area



What we have achieved (2/2)

Nitrogen dioxide air quality levels in ES0902-Vallès-Baix Llobregat



What are the actions we are taking to improve Air Quality in Catalonia? (1/4)

Clean Air Policies Catalonia-Barcelona

- Air Quality Improvement Plan, Horizon 2027. It has been approved on July 30 2024 by government decree.
- Air Quality Short Term Action Plan. It has been approved on July 30 2024 by government decree.

What are the actions we are taking to improve Air Quality in Catalonia? Air Quality Plan Horizon 2027 (2/4)

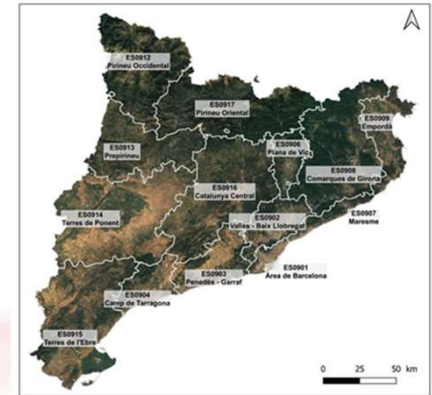
Territorial Scope: Catalonia

Regulated Pollutants: NO₂, NO_x, PM₁₀, PM_{2.5}, BaP, and O₃

Application Period: 2023-2027

Sectors that are addressed: Land transport and mobility; industrial and energy; domestic, institutional, and commercial; livestock and agriculture; actions for prevention in territorial and urban planning; maritime transport; air transport; communication, research, and investigation.

Measures: 84 containing 374 actions.



What are the actions we are taking to improve Air Quality in Catalonia? - Air Quality Plan Horizon 2027 (3/4)

Key emissions reduction measures

Mobility Sector

- **Implementation of LEZs** for municipalities with more than **50,000 inhabitants** and for municipalities with more than **20,000 inhabitants** that have recorded an exceedance. **72% of the population** of Catalonia will be living in municipalities with LEZs.
- **Barcelona LEZs RingRoads.** In 2021 the implementation of the LEZs reduced NO₂ levels by 11%. For 2024, a 25% reduction is expected.
- **Mobility Plans for Companies.**

What are the actions we are taking to improve Air Quality in Catalonia? - Air Quality Plan Horizon 2027 (4/4)

Key emissions reduction measures

Industrial sector, energy and potentially polluting activities

- Reduction of VOCs, PM and NOx emission limits in the industrial sector.

Domestic, institutional and commercial sector

- Measures to reduce emissions from biomass combustion sources.

What will the Air Quality Plan Horizon 2017 achieve?

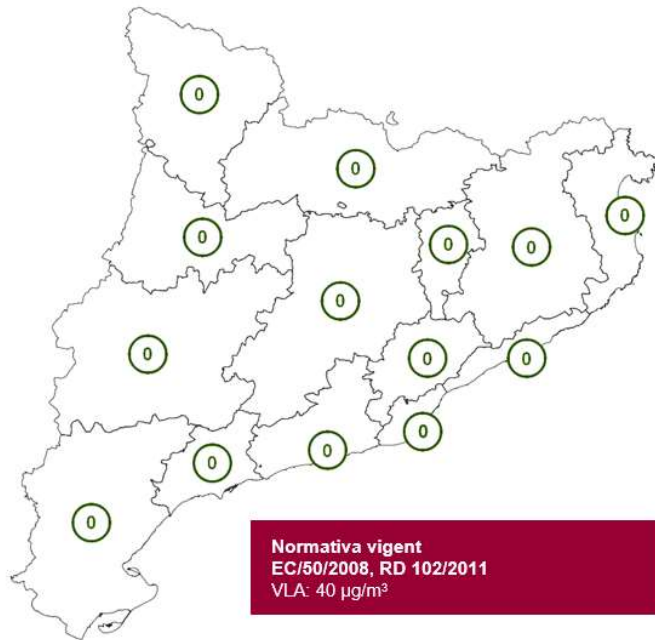
Air Quality Plan Horizon 2027 - Air Quality Objectives												
Pollutant	NO ₂ (µg/m ³)			PM10 (µg/m ³)		PM2.5 (µg/m ³)		BaP (ng/m ³)	O ₃ (µg/m ³)			
Year	1 hour	1 day	Annual	1 day	Calendar year	1 day	Annual	Calendar year	Maximum daily 8-hour mean (1)	May to July (calculate from 1-hour values)	1-hour	hourly (3 consecutive hours)
2025	200 not to be exceeded more than 12 times per calendar year	50 not to be exceeded more than 30 times per calendar year	30	45 not to be exceeded more than 30 times per calendar year	30	25 not to be exceeded more than 30 times per calendar year	15	1	120 not to be exceeded on more than 22 days per calendar year, averaged over 3 years	AOT40 18.000 µg/m ³ × h over 5 years	180	240
2027	200 not to be exceeded more than 6 times per calendar year	50 not to be exceeded more than 24 times per calendar year	25	45 not to be exceeded more than 24 times per calendar year	25	25 not to be exceeded more than 24 times per calendar year	12.5	1	120 not to be exceeded on more than 20 days per calendar year, averaged over 3 years	AOT40 18.000 µg/m ³ × h over 5 years	180	240

Challenges of the new Directive for Catalonia and its Metropolitan Region Area. (1/5)

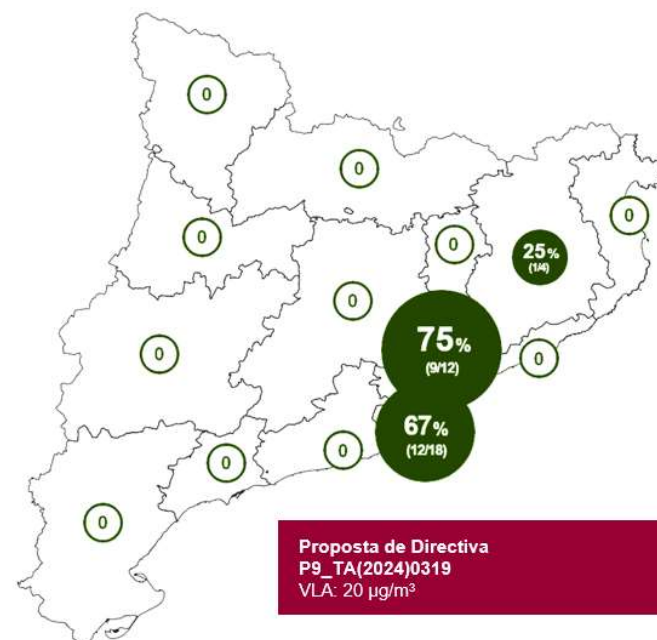
- 1. It will be challenging for us to meet the new air quality standards defined in the new directive at all the sampling points for NO₂, PM₁₀, O₃ and PM_{2.5}. Therefore, the Air Quality Plan Horizon 2027 includes a review in 2027, and if necessary, new measures will be defined to achieve the new standards.**
- 2. For the other pollutants, the limit values established in the new directive are met.**
- 3. The Air Quality Plan Horizon 2027 aims to comply with the standards and align with WHO directives.**

Challenges of the new Directive for Catalonia and its Metropolitan Region Area. New Air Quality Directive into Perspective (2/5)

NO2 Assessment Current Directive-2023

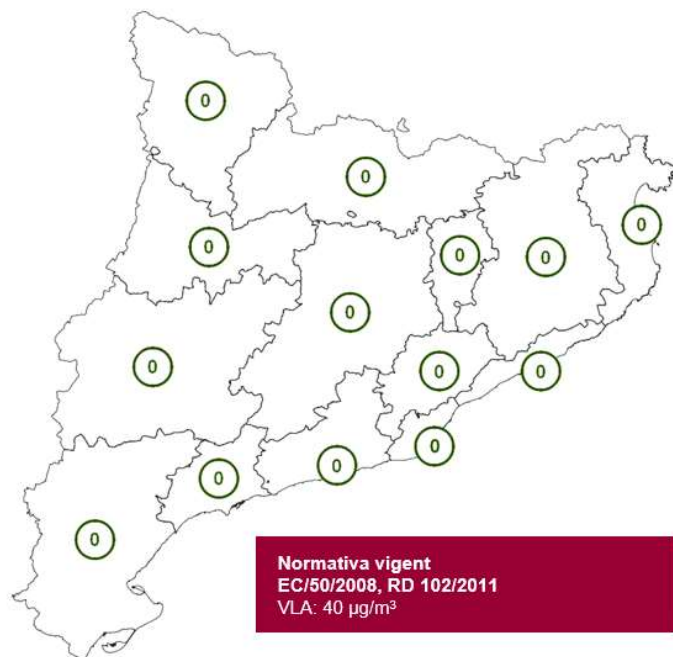


NO2 Assessment Proposal for a Directive-2023

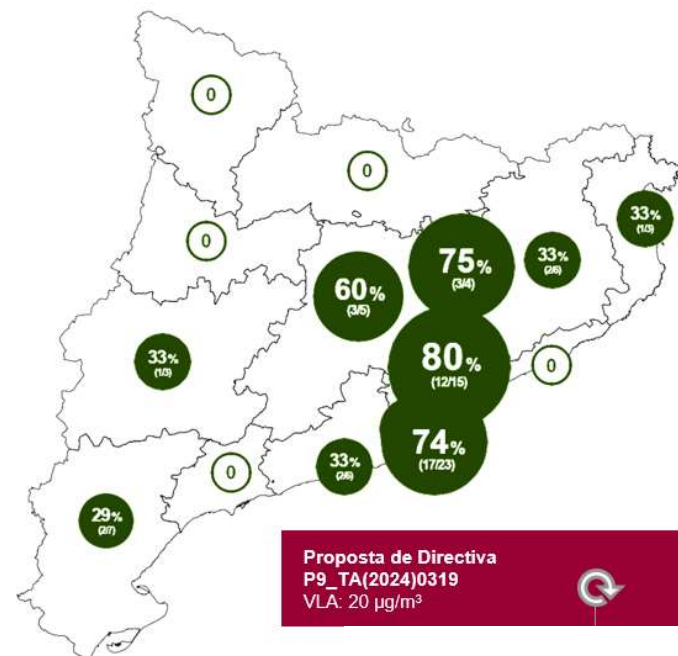


Challenges of the new Directive for Catalonia and its Metropolitan Region Area. New Air Quality Directive into Perspective (3/5)

PM10 Assessment Current Directive-2023

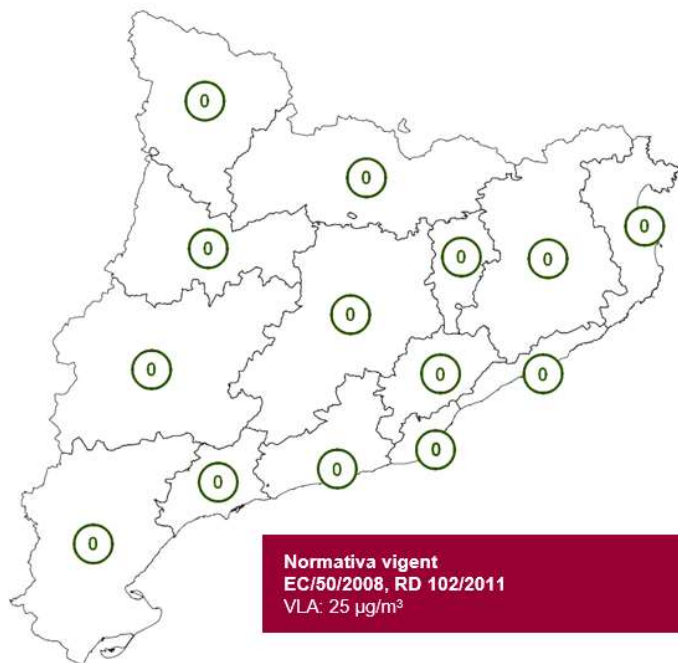


PM10 Assessment Proposal for a Directive-20232

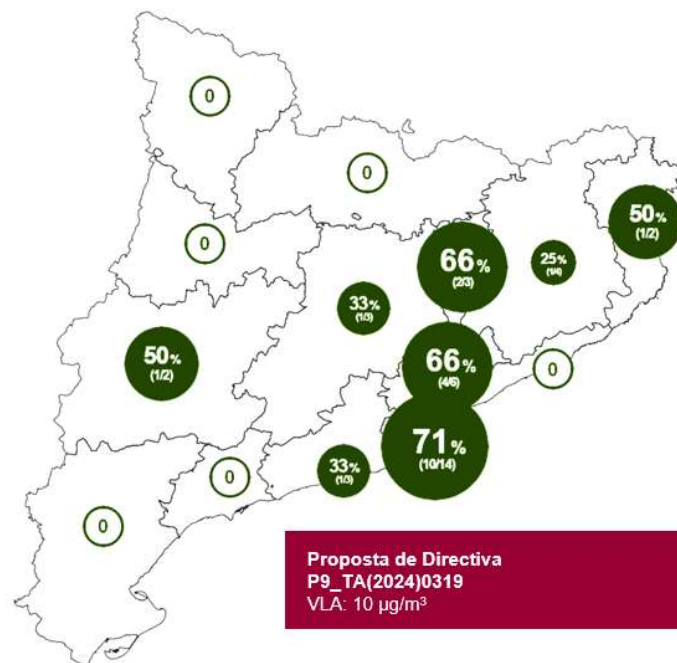


Challenges of the new Directive for Catalonia and its Metropolitan Region Area. New Air Quality Directive into Perspective (4/5)

PM2,5 Assessment Current Directive-2023

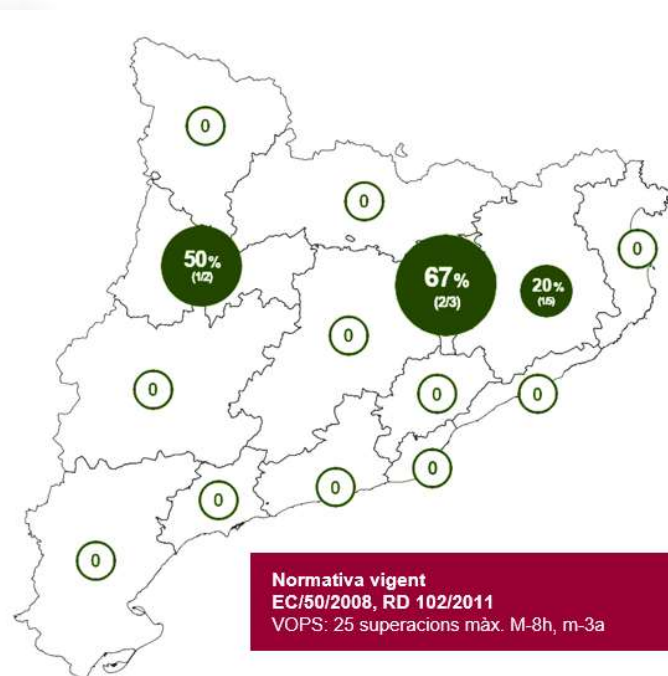


PM2,5 Assessment Proposal for a Directive-2023

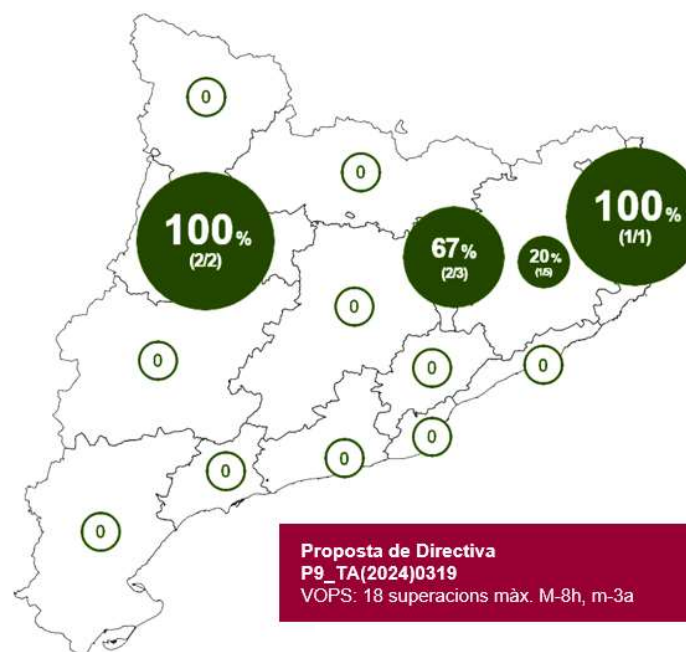


Challenges of the new Directive for Catalonia and its Metropolitan Region Area. New Air Quality Directive into Perspective (5/5)

O3 Assessment Current Directive-2023



O3 Assessment Proposal for a Directive-2023



Thank you for your attention!