

Air quality management in Türkiye *Cases and solutions*

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6th EPCAC meeting, 18-19 November 2025



Institutional Structure

Short
Info for
Türkiye

783.562 km²
~83 million people

15 Big Sub-Regions
31 Small Sub-Regions

15

8 Geographical Regions;
Mediterranean,
Black Sea, Aegean,
Marmara, Inner Anatolian,
East Anatolian, South East
Anatolian

30

**Metropolitan
Municipalities**

1390

Municipalities

922

Districts

8

**Regional Clean Air
Centers**

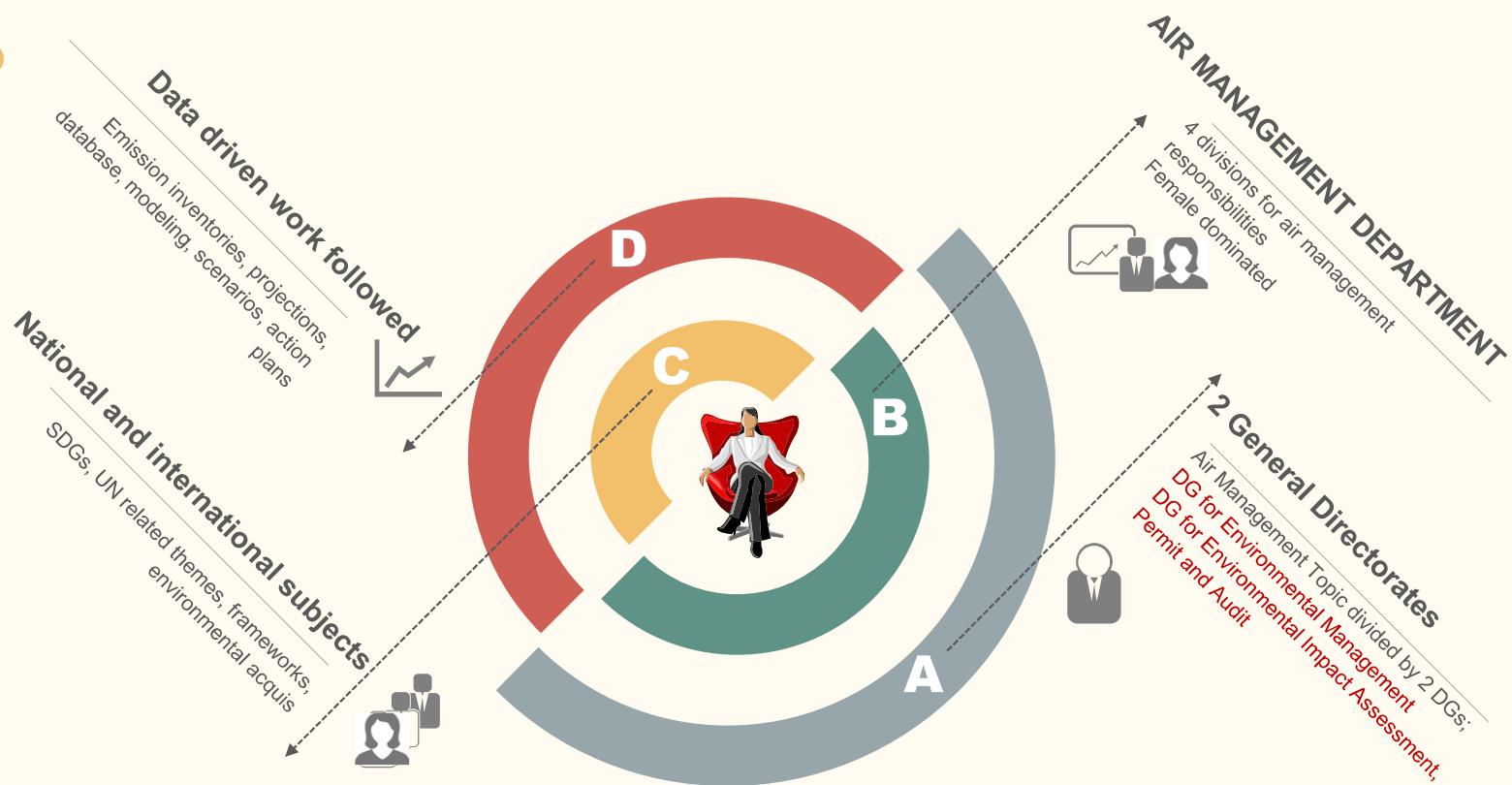
- ✓ SO₂ (324), PM₁₀ (359)
- ✓ CO(207), Nox(319), O₃(221)
- ✓ PM_{2,5} (189)

380

active monitoring stations

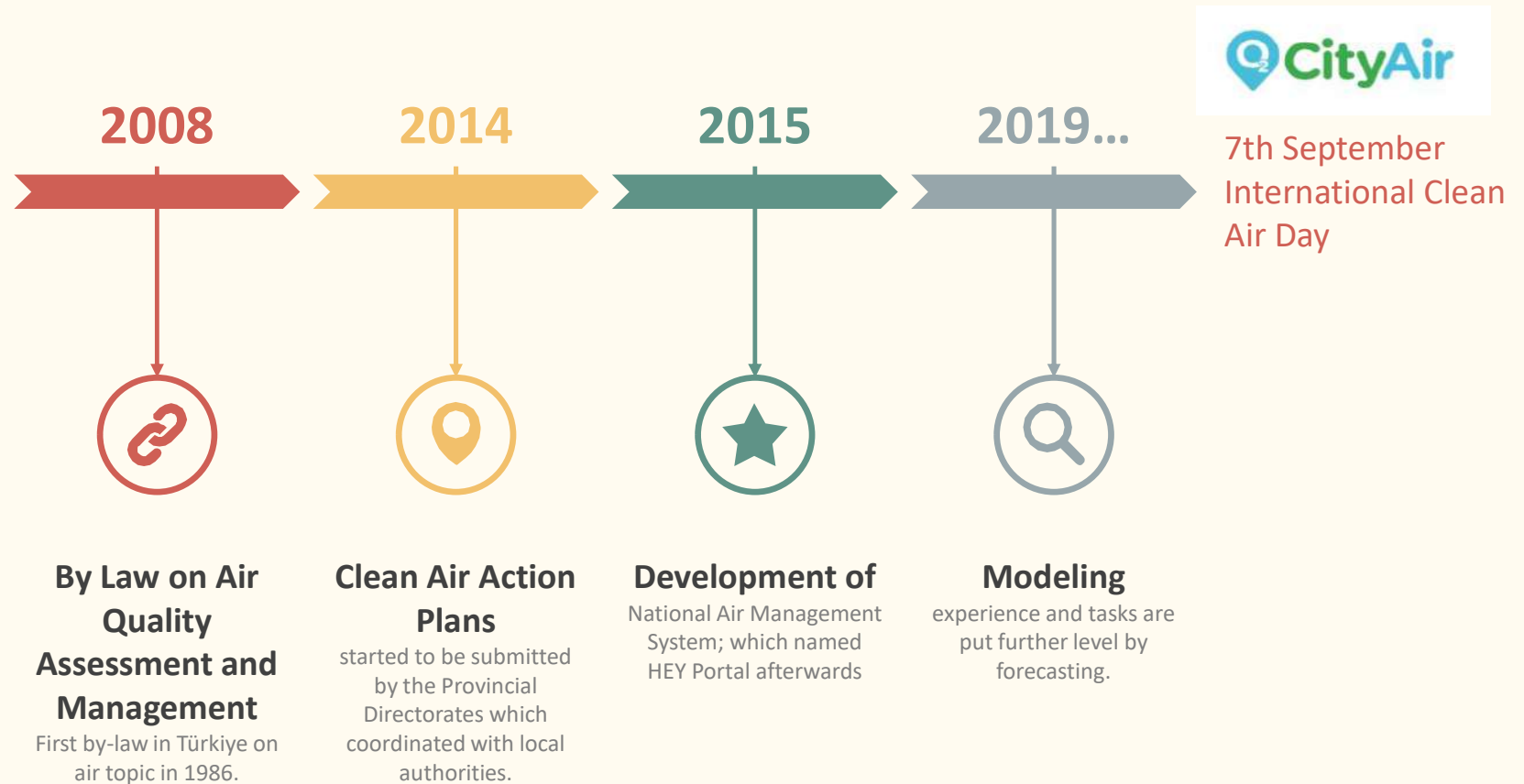
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Organisational Structure



2

Year by year; improvements



3 Environmental Legislative situation in Türkiye

1986; first thematic by-law

2008; BAQAM; CAFE Directive Harmonisation

2009; EU Environment Chapter in Türkiye

The process accelerated by the chapter opening and big in number, specified projects were conducted.

2025; IED harmonised into national legislation



Regulation on the Management of Industrial Emissions

The Framework Regulation was published and 33 Sectoral Communiqués will be published by 1 December 2025.

- **For all facilities, it will enter inforce on 01/12/2025.**
- **They will be required to reach at least an F level by December 31, 2028, and at least a D level by December 31, 2030, as part of a phased transition.**

- According to the Regulation, the green transition in industry certificate will be issued for existing and new facilities based on the implementation of BATs associated with the activity. The certificate will be graded according to the adoption of BATs and BAT-AELs (limit values).
- There are a total of 102 BAT Checklists scores based on BAT Reference Documents and BAT Conclusion Documents.

Category	BAT&BAT-AEL Compliance Status
A	100
B	90-99
C	80-89
D	70-79
E	60-69
F	50-59



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Technical Structure; started by defining the needs



Follow-up

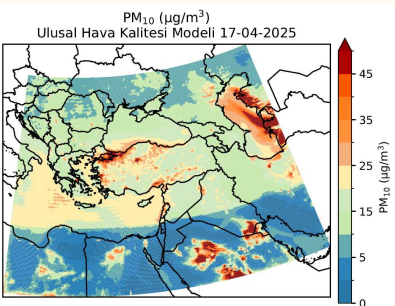
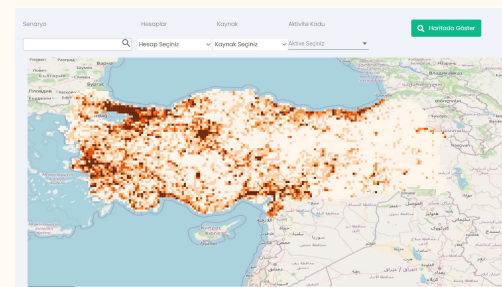
Presidency's Performance Tracking System, Strategy Scoring

Data compilation

Layer by layer gap analysis and data collection, GIS based structure

Data analysis

Emission scenarios, projections, gridding, smart data collection

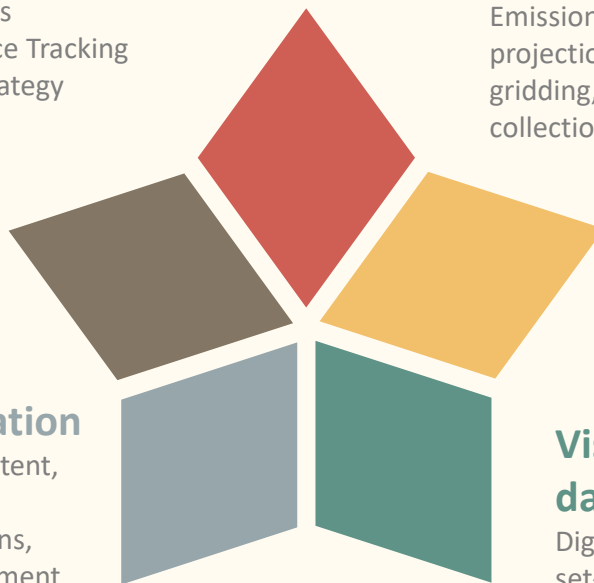


Implementation

Action plans' content, city emission management plans, sectoral improvement plans, performance scoring

Visualisation and databases

Digital archiving, electrical set-up for extension for required data topics



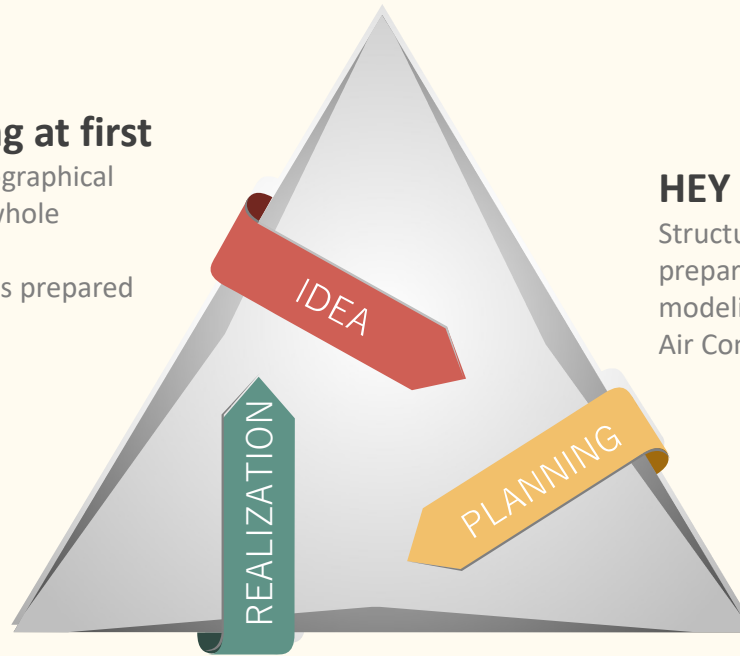
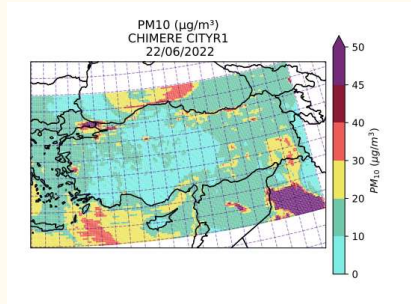


AIR QUALITY MODELING

MODELING Activities

Regional Planning at first

Started by Marmara geographical region, extend to the whole country
Türkiye's air quality maps prepared

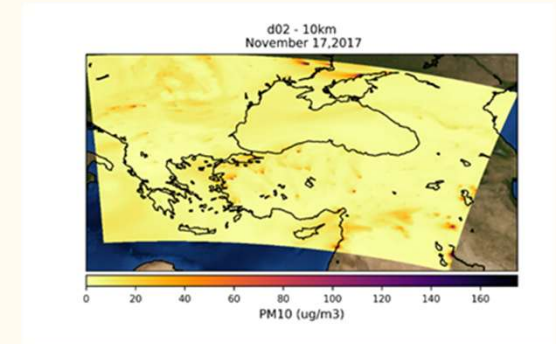


Cities' needs to be planned

Emission inventories, management plans, consultations by directorates, municipalities

HEY Portal

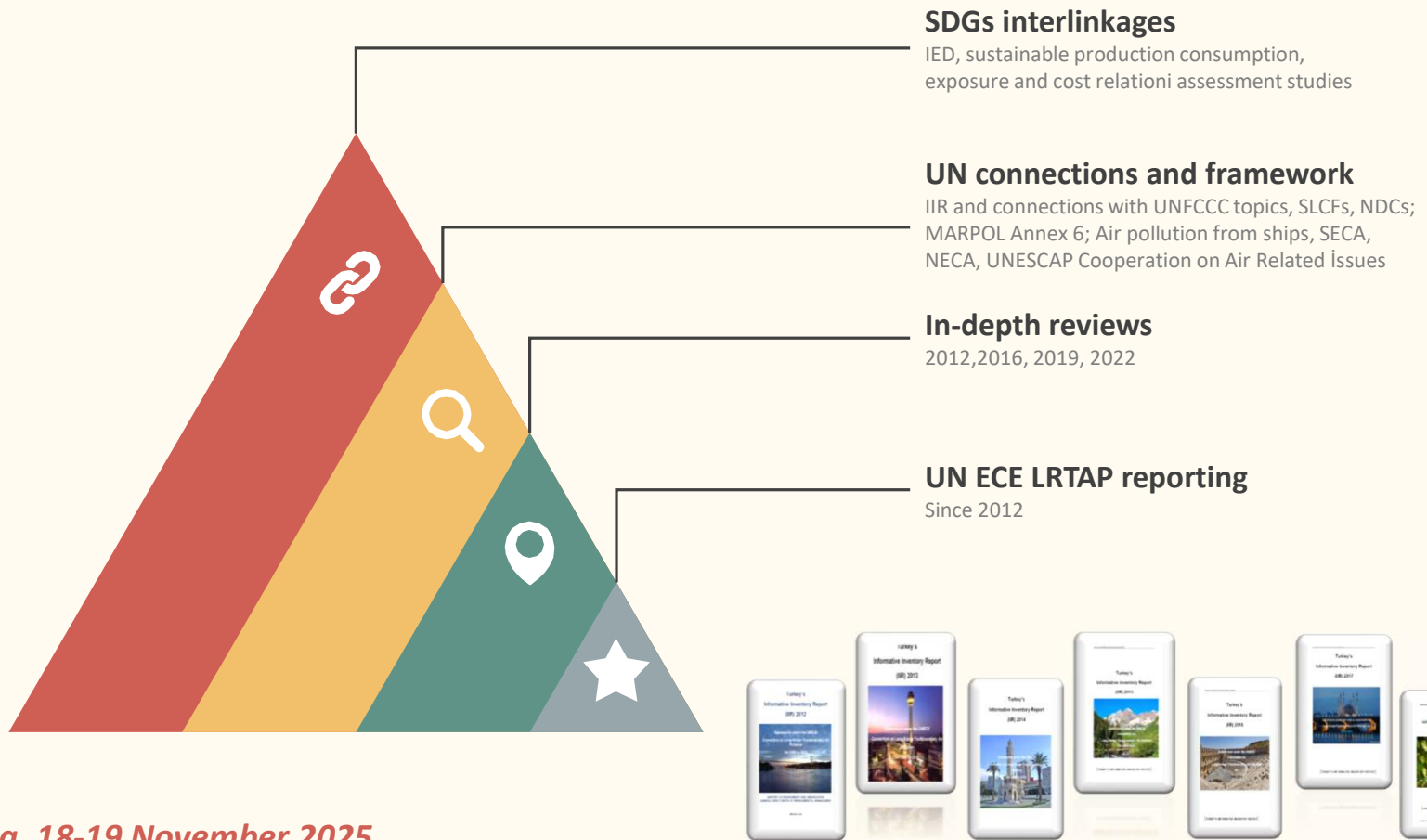
Structure defined, modules prepared, source categories, modeling, calculation criteria, UN Air Convention





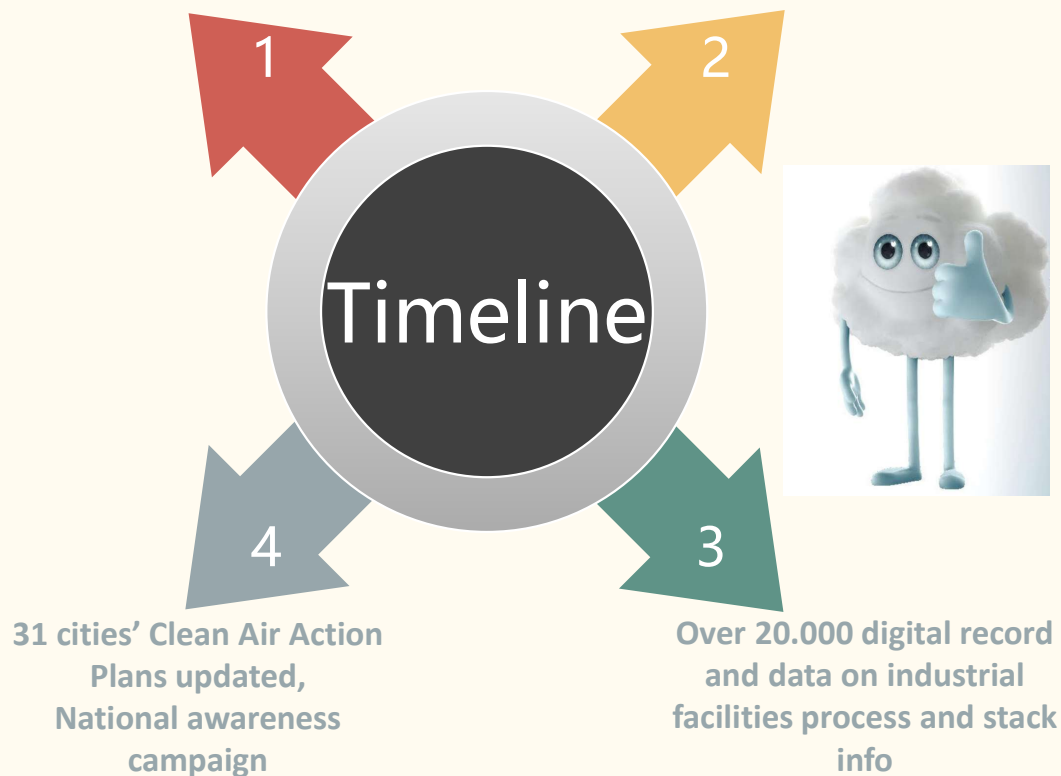
CASES and SOLUTIONS

Framework Connections



6th EPCAC meeting, 18-19 November 2025

Cases and Practices, Solutions and Strategies



Case #1: Konya, 2010

IKONAIR Project, Konya Clean Air Action plan
Preparation, emission inventory, capacity raising

Case #2: Erzurum, Adana, Samsun, Ankara, Gaziantep, Mersin; 2011

Regional air emission inventory, first GIS Based mapping experience, air quality assessment reports

Case #3: HEY Portal Development Project, 2013

National emission factors' pilot Project, regional air quality maps' preparation, GIS based data, air quality modeling

Case #4: CITYAIR Project, IPA funding, 2019

International collaboration on air management agenda, inventory compilation, local air quality mapping, modeling, assessment, air quality forecast, integrated implementation

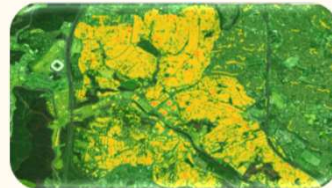
Cases and Practices, Solutions and Strategies



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6



Case #5: 3D mapping exercise project

Started with 5 pilot cities, district level data collection, data mining exercise and practise, advanced level smart data to be produced, algorithm planned to have health effect integrated, extended with follow-up projects

Case #6: Emission mapping modeling, follow-up

Pilot projects were extended to cover the whole country step by step

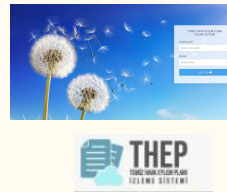
Timeline



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Case #7: Clean Air Action Plan (CAAP) Monitoring

5 years' period, provincial directorates submission to MOEUCC, mapping modeling outputs were integrated, MOEUCC software to follow the track of the CAAPs

Case #8: Legislative action

National Circular level, by-law level, international legislative texts to be evaluated, EU acquis followed

IED is harmonised through the national legislation, entry into force 1/12/2025

Air Pollution Mitigation/Management Activities At a Glance

- **Limit values** for main pollutants aligned with EU standards
- Local Clean Air Action Plans (**64 cities raised to 81**)
- Local measures for cities with air quality modeling, mapping, inventories
- E-scooter and e-mobility alternatives
- **AQ Forecast, modeling**

- Source-based control for air pollution; industrial, residential and transport related emissions together with legislative and **digital tools**
- Online monitoring
- **8 Regional Clean Air Centers**
- Reporting of National Air Emission Inventory since 2012

- Exhaust Gas Electronic Monitoring System for vehicle emissions (EGEDES)
- Strategic Noise Maps; provinces, airports, roads...
- **Sustainable production and consumption; BATs** for industrial processes
- **By-law on Industrial Emissions' Schedule**
- **Smart solutions for cities**

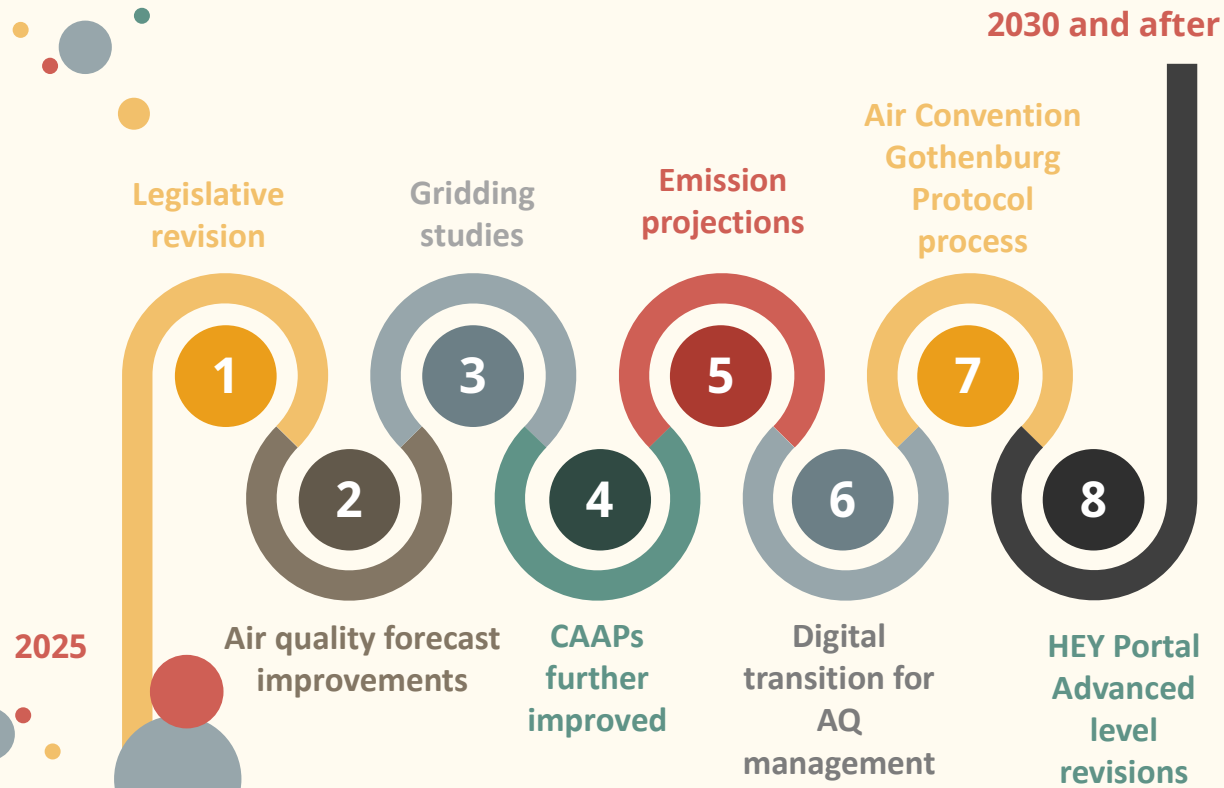
- **European Green Deal Action Plan**
- Sectoral and Practise Guidance Documents prepared.
- Residential Transformation for AQ Implementation Projects
- Legislative tools for implementation – **<HAP> Incentives**
- Green transition studies with local authorities
- Local Environment Boards to discuss local and provincial issues





Further steps...


Next Steps



By-law on Industrial Emissions,
Performance scoring, certificate
criteria, Green Transition in Industry



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**THANK
YOU**

