### EEA Türkiye Visit

Air Quality Management in Türkiye and Cooperational Topics

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### Content

- Existing Situation on air quality
- Developments in the area by MOEUCC
- Related tasks and studies under EEA Air Quality
- Further steps for continuous improvement and cooperation

### Existing Situation on air quality

- EU IPA Programmes and Chapter No.27 for Türkiye
  - Project collaboration
    - Related with all of the directives under Air Quality Topic
      - Ongoing; DIES, industrial emissions, connected with EU Green Deal and IPPC framework, BATs' implementation process to be scheduled
      - Completed projects related with NEC Directive, CAFE Directive, VOC emissions, Environmental Noise
    - Regarding Management for Air Quality
      - Marmara Region AQ Project in 2008; Strategy Paper on Air Quality Management, Regional Clean Air Centers' activation, cooperation with DGs
      - First IIR and emission inventory reporting; 2012
      - 3 in-depth reviews of LRTAP inventory + PM condensables review
    - Regarding Reporting on Air Pollutants
      - Improving Emissions Control Project; Technical detailed work on inventory, scenario and projections
      - First IIR and emission inventory reporting; 2012
      - 3 in-depth reviews of LRTAP inventory + PM condensables review

## Existing Situation on air quality; Policies and strategy

- Transition period in all main sources of air pollution
  - · Main sources; industry, residential heating, road transport
  - Presidential Action Plan on noise barriers, green streets and walking pathways



- Strategy Paper on Residential Heating
- National Strategy for Industrial Emissions





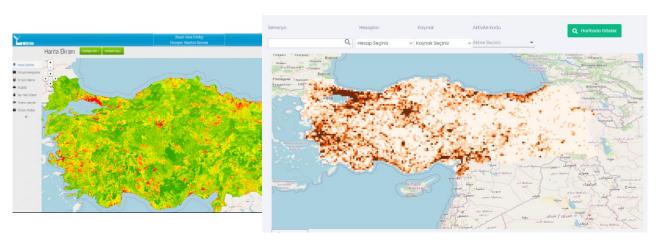


# Existing Situation and developments in air quality; Policies and strategy

- Mobility prioritization in urban areas and cities
- Online monitoring and inspection of exhaust emissions from vehicles
- Alternative fuel transformations; National incentives directly from MOEUCC; Urban AQ Improvements in cities; Konya, Düzce; Malatya; Gaziantep; Kayseri
- Funding research and proposals on the way with World Bank, EBRD and where applicable
- Close cooperation and desk studies with related institutions monthly
- Contact with local authorities

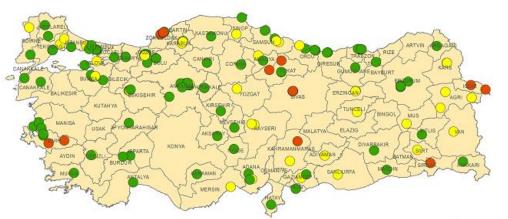
# Existing Situation and developments in air quality; Emission Inventory

- HEY Air Emission Management Portal
  - 2013-2017; 2018-2021; 2022- ongoing
  - National air quality maps
  - Electronical inventory database for pollutants and the activity data
    - 22.000 stacks and 9.000 facilities' data saved
    - Solid fuel distribution cycle is maintained
    - More than 3.000 users related with solid fuel sales and distribution
    - Official letters integrated for firms
  - Main sources; industry, residential heating, road transport;
    - agriculture; on the way
  - CLRTAP Reporting Template executed by HEY Portal



### Existing Situation on air quality; Measurements



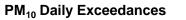


### 360 fixed measurement stations

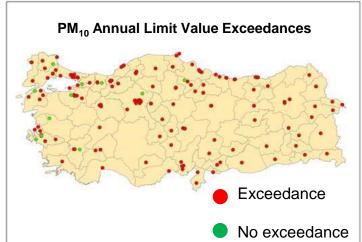
Most of these stations are equipped to measure  $SO_2$  (305) and  $PM_{10}$  (340)

CO(190), Nox(302),  $O_3(206)$ ,  $PM_{2,5}$  and meteorological parameters.

173 stations for PM<sub>2.5</sub>

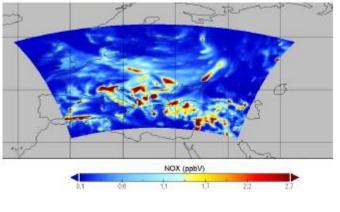


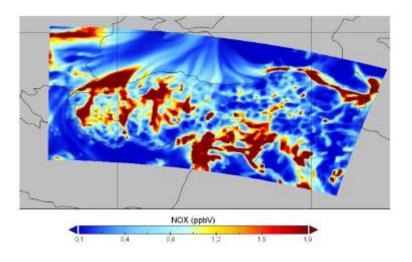




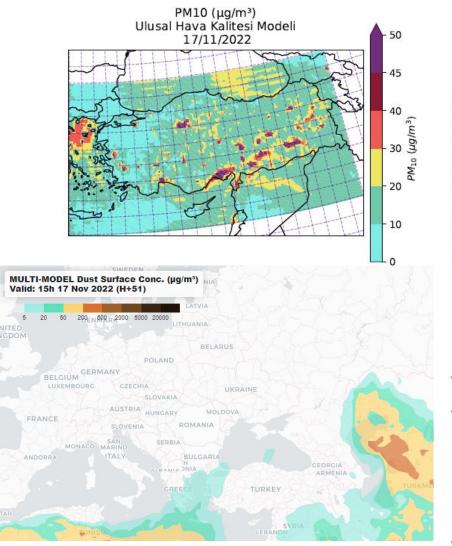
## Existing Situation and developments in air quality; AQ modeling

- 2018-2021; 2022 onging studies
- Air quality maps at regional and nation
- CMAQ; atmospheric chemistry dimensions
- Domain; 36-12-4 km
- Proxies learnt and increased
  - from EDGAR workshops
  - Gridded emissions 1x1 km;
     under preparation



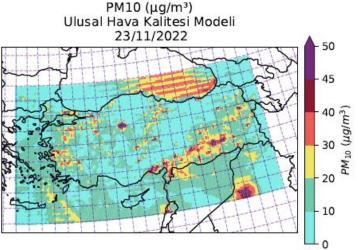


### Existing Situation and developments in air quality; AQ modeling









**QCityAir** 

- Air quality forecast
- Project collaboration under IPA II Programme; CITYAIR
  - INERIS , CITEPA experience and knowledge sharing, very effective tasks completed
  - Emission management and modeling/forecast
- TNO database
  - national inventory integration is under process

# Existing Situation and developments in air quality; AQ modelingmapping



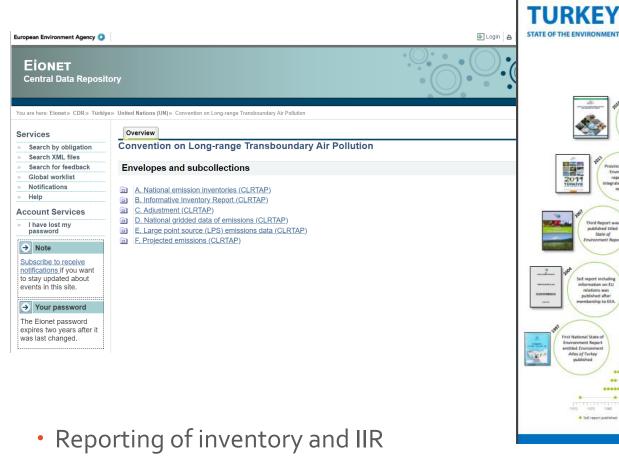
- Street level mapping
- Decision making tool
- 25 cities completed, remaining under process
- GIS and 3D available info is searched and integrated
- Downscaling from the HEY maps

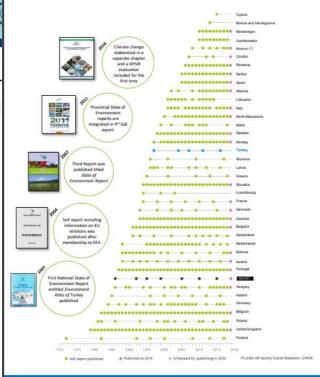
- National brand software «NEFES»
- New Emission Forecast and Evaluation System



- Introduced and shared in UNESCAP workshops/webinars, shared in EEA workshops,
- Macedonia mentioned their interest

### Related Tasks under EEA

























### Further steps

- Türkiye's improvement on key areas
- Options for country cooperation and extending network
- EU Green Deal
- UNFCCC and UNECE related connected analysis,
- NDC projections, Net Zero Emission Target for Türkiye-2053
- NEC D. and Gothenburg Protocol requirements
- Minamata Convention; new process will be on the way
- Possible tasks or Projects to be discussed to search the available alternative ways of cooperation

### Further steps

- 1. Networking and communication with EEA countries through EIONET network on air quality and health index (i.e. Macedonia air quality and health experts after EIONET Human Health and Environment Webinar on 3 Dec 2021)
- 2.Data acquisition/completion and knowledge sharing on methodological studies
- 3. Türkiye's position (not only as «data provider» but also «project partner»)
- 4. Bilateral cooperation and collaboration via TAIEX and other EU instruments and with JRCs
- 5. Membership of Türkiye to the EPA Network through Türkiye Environmental Agency (TÜÇA)
- 6. Building capacity on development of air quality indicators for Türkiye
- 7. Knowledge sharing through regular webinars with ETC&EEA colleagues at country level

Thank you for your attention cesin.koksal@csb.gov.tr

