

THE CONCEPT OF AIR QUALITY PLANNING

8 September 2021

Peter VAJDA, Senior Environmental Expert,
Energy Community Secretariat

THE ENERGY COMMUNITY AT A GLANCE

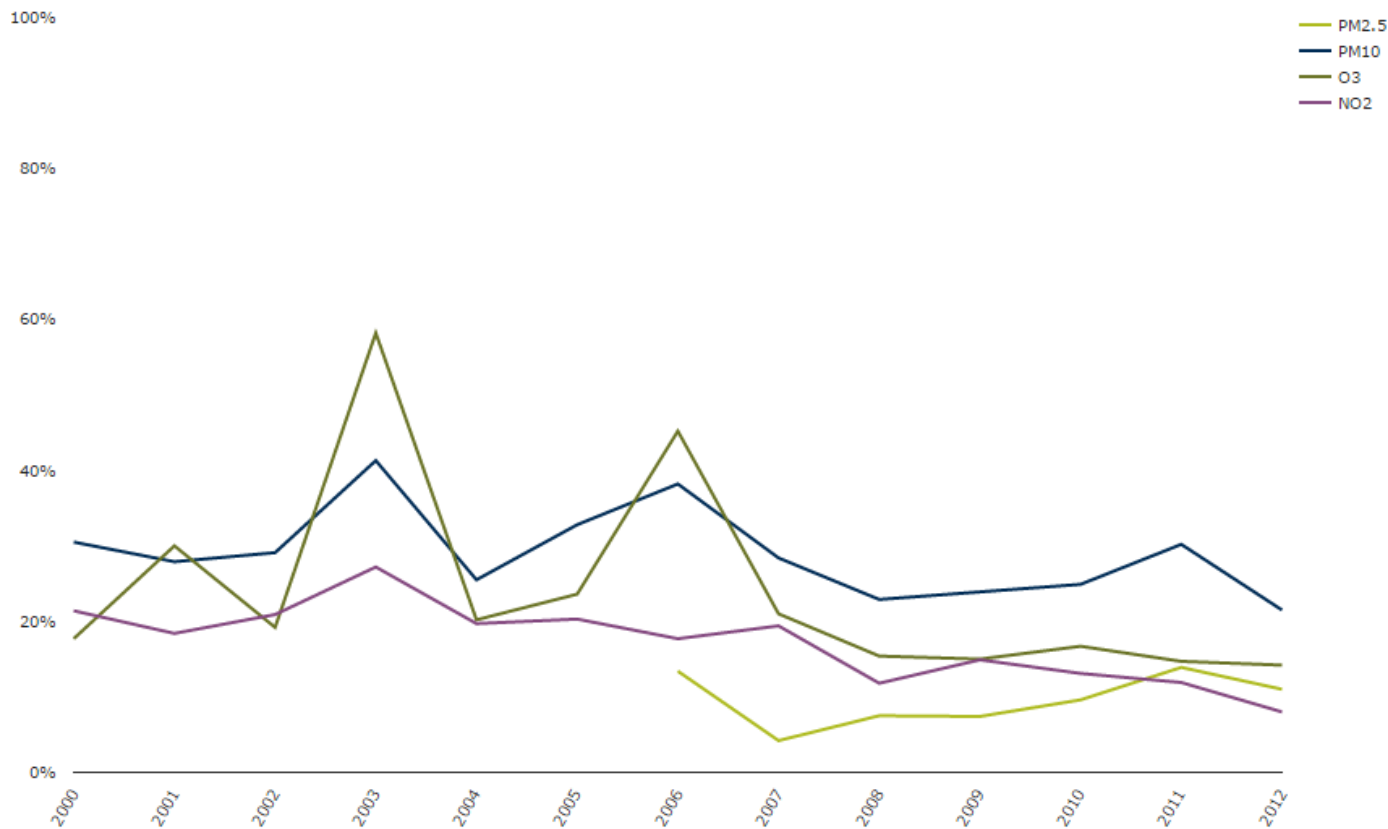
- ☀ International organization established in 2005 by the Treaty establishing the Energy Community;
- ☀ Extends the EU internal energy market to South East Europe and beyond to create a sustainable pan-European Energy Market;
- ☀ Instrument to assist countries in the EU's neighbourhood to reform their energy markets in line with EU law and principles;
- ☀ Treaty obligations are binding and backed up by a strong institutional setting and dispute settlement mechanism

ENERGY COMMUNITY GOALS

- ✦ Establish a stable regulatory and market framework capable of attracting investment in power generation and networks;
- ✦ Create an integrated energy market allowing for cross-border energy trade and integration with the EU market;
- ✦ Enhance the security of supply to ensure stable and continuous energy supply that is essential for economic development and social stability;
- ✦ Improve the environmental situation in relation with energy supply in the region and foster the use of renewable energy and energy efficiency;
- ✦ Develop competition at regional level and exploit economies of scale.

AIR POLLUTION – A MAJOR CONCERN IN THE EU

Chart – Urban population exposed to air pollutant concentrations above selected limit and target values



Source: EEA

Emissions into air



HISTORY IN BRIEF

- ☀ **Air Quality Framework Directive (96/62/EC)** → basic principles as to how air quality should be assessed and managed in the Member States, list of pollutants
- ☀ **"First Daughter Directive" (1999/30/EC)** → limit values for SO₂, NO₂, NO_x, PM_{2.5}, PM₁₀ and lead
- ☀ **"Second Daughter Directive" (2000/69/EC)** → limit values for benzene and CO
- ☀ **"Third Daughter Directive" (2002/3/EC)** → ozone (secondary pollutant formed in the atmosphere by the chemical reaction of hydrocarbons and nitrogen oxides in the presence of sunlight). Also describes certain monitoring requirements relating to VOCs and NO_x in the air.
- ☀ **"Fourth Daughter Directive" (2004/107/EC)** → arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons (PAHs)

- ☀ **Council Decision 97/101/EC** → "Eol Decision"
- ☀ **Commission Decision 2004/461/EC** → questionnaire for annual reporting on ambient air quality assessment
- ☀ **AQD proposal adopted parallel to the Thematic Strategy on Air Pollution (2005)**
- ☀ **Adopted 21 May 2008 after 3-year long co-decision, 2 years for transposition**

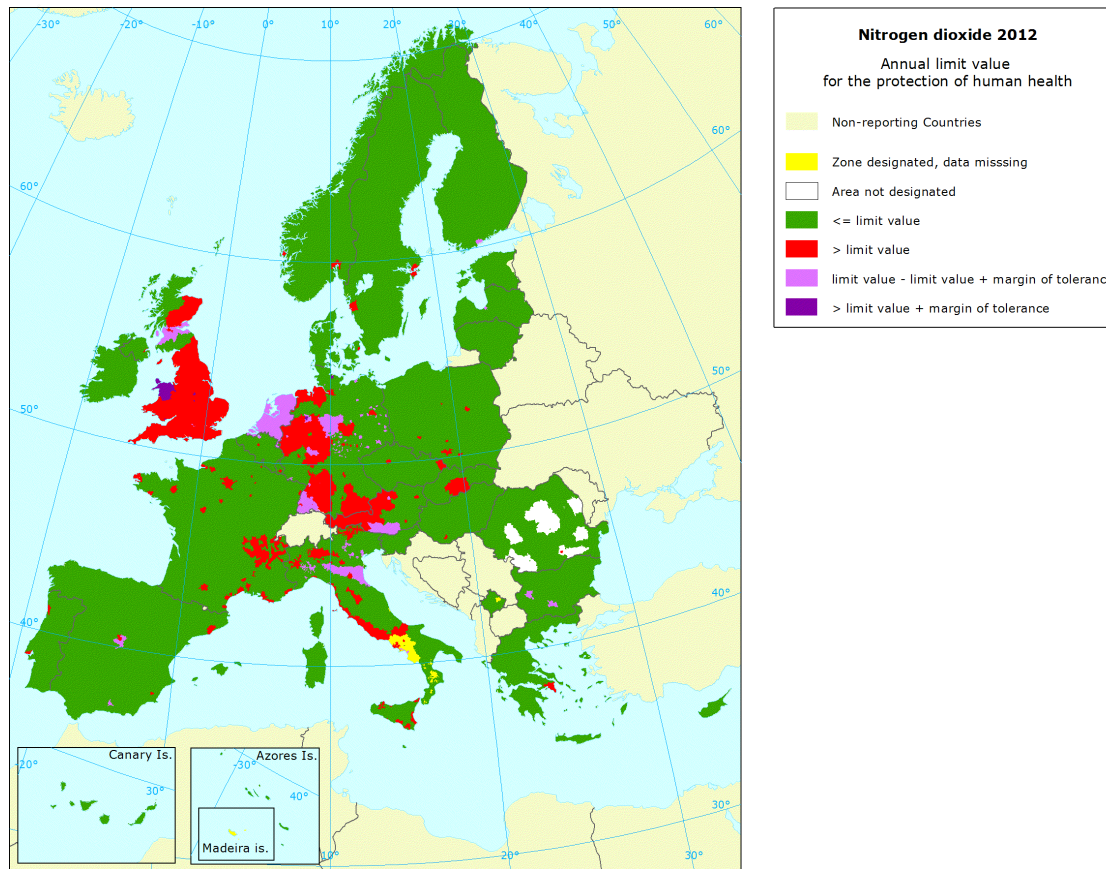
KEY ELEMENTS

- ☀ Merging most of existing legislation into a single directive (except for the fourth daughter directive) with no change to existing air quality objectives
- ☀ New air quality objectives for PM_{2.5} (fine particles) including the limit value and exposure-related objectives
- ☀ The possibility to discount natural sources of pollution when assessing compliance against limit values
- ☀ The possibility for time extensions of three years (PM₁₀, up to 2013) or up to five years (NO₂, benzene, up to 2015) for complying with limit values, based on conditions and the assessment by the COM
- ☀ Where limit values and target values are exceeded → air quality plans

TARGET VALUES AND LIMIT VALUES

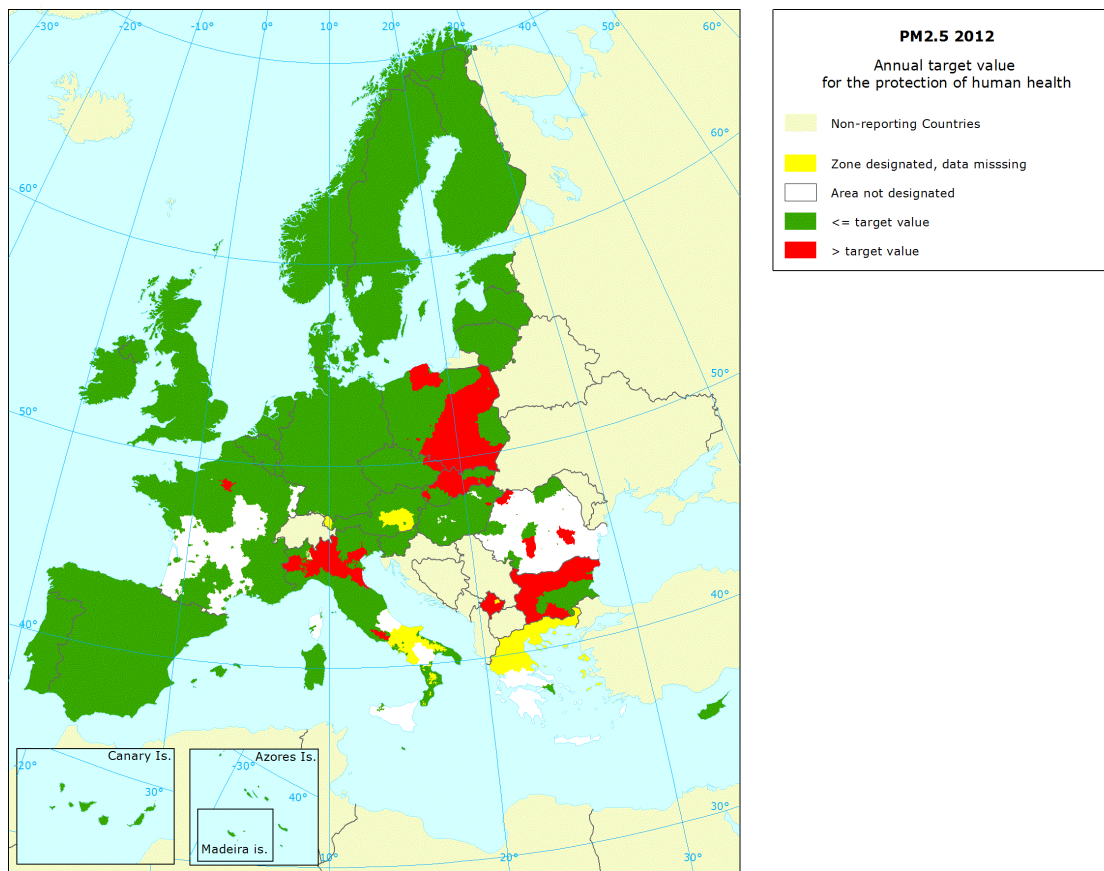
- 'target value' shall mean a level fixed with the aim of avoiding, preventing or reducing harmful effects on human health and/or the environment as a whole, to be attained where possible over a given period; (Art. 2(9) AQD)
- 'limit value' shall mean a level fixed on the basis of scientific knowledge, with the aim of avoiding, preventing or reducing harmful effects on human health and/or the environment as a whole, to be attained within a given period and not to be exceeded once attained; (Art. 2(5) AQD)
- Illustrative examples on non-compliance with target/limit values
- Several EU MSs under infringement for non-compliance with limit values, ECJ rulings (DE, FR, IT, HU, RO, UK)

NON-COMPLIANT ZONES – NO2



Source: EEA

NON-COMPLIANT ZONES – PM2.5



Source: EEA

AIR QUALITY PLANS – THE OBJECTIVE

- ☀ AQD, Recital 18:

Air quality plans should be developed for zones and agglomerations within which concentrations of pollutants in ambient air exceed the relevant air quality target values or limit values, plus any temporary margins of tolerance, where applicable. Air pollutants are emitted from many different sources and activities.

- ☀ To ensure coherence between different policies, such air quality plans should where feasible be consistent, and integrated with plans and programmes prepared pursuant to

Directive 2001/80/EC (LCP)
Directive 2001/81/EC (NEC) and
Directive 2002/49/EC (END)

AIR QUALITY PLANS – DEFINITION

- ☀ 'air quality plans' shall mean plans that set out measures in order to attain the limit values or target values; (Art. 2(8) AQD)
- ☀ In some MSs: part of land-use planning (<http://www.iagn.co.uk/text/guidance/air-quality-planning-guidance.pdf>)
- ☀ Link to exceedence of limit values or target values (Annexes XI and XIV)
- ☀ Relevant margins of tolerance to be observed
- ☀ Purpose of the plan → to achieve the limit value or the target value set out in AQD Annexes
- ☀ If there are exceedences for which the attainment deadline has already expired → *appropriate* measures are to be established (case-by-case examination needed) and *specific* measures for sensitive groups
- ☀ Minimum criteria on the content of the plans (other presentation)
- ☀ Information exchange at EU level
- ☀ When several exceedences are observed → plan shall cover all pollutants

MARGINS OF TOLERANCE



- ☀ SO₂ (hourly) → 150 µg/m³ (43% of the 350 µg/m³ limit value)
- ☀ CO (daily) → 6 mg/m³ (60% of the 10 mg/m³ limit value)
- ☀ Lead (yearly) → 0.5 µg/m³ (100% of the 0.5 µg/m³ limit value)
- ☀ PM₁₀ (daily) → 25 µg/m³ (50% of the 50 µg/m³ limit value)
- ☀ PM₁₀ (yearly) → 8 µg/m³ (20% of the 40 µg/m³ limit value)
- ☀ NO₂ and benzene → phased out



THANK YOU FOR YOUR ATTENTION

peter.vajda@energy.community.org

GET IN TOUCH

-  www.energy-community.org
-  [Ener_Community](https://twitter.com/Ener_Community)
-  [/company/energy-community](https://www.linkedin.com/company/energy-community)
-  [/Ener.Community](https://www.facebook.com/Ener.Community)
-  [/EnergyCommunityTV](https://www.youtube.com/channel/UC...)