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Forum for International Cooperation on Air Pollution

Third meeting of the Task Force for International Cooperation on Air Pollution (TFICAP) under the UNECE Convention on Long Range Transboundary Air Pollution (CLRTAP)
4th and 5th of November 2025

Day 1 - Tuesday 4th November (Afternoon) (14:00 – 17:00 CET) All times CET
14:00 – 14:45 Introductions and opening remarks
14:00 – 14:15 Opening Remarks (FICAP Co-chairs)
14:15 – 14:30 UNECE Air Convention Secretariat presentation – recent updates and negotiations
14:30 – 14:45 FICAP co-chair - recent activities of FICAP
Theme 1: Development and Capacity Building by Parties of the UNECE Air Convention (14:45 – 16:30)
14:45– 15:00 Germany – Advisory Assistance Programme
15:00 – 15:15 EU commission – presentation on outreach projects
15:15 – 15:30 UK – Presentation by FCDO
15:30 – 15:45 Türkiye – capacity building activities
15:45 – 16:00 Short Break
16:00 -16:30 Discussion time

Next Presentation:
UNECE Air Convention – recent updates and negotiations

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UNECE

Latest developments under the Convention

TFICAP meeting, 4 November 2025

I. Revision of the Gothenburg Protocol, as amended in 2012

Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg Protocol):

- Adopted in Gothenburg, Sweden in 1999. National emission ceilings for 2010 for Sulphur, nitrogen oxides, VOCs and ammonia.
- Amended in 2012: emission reduction commitments for 2020 and beyond, updated ELVs for key stationary and mobile sources. New pollutant: fine particulate matter ($PM_{2.5}$), black carbon as its component. Flexibilities for new Parties.
- December 2019: following the entry into force of the 2012 amendments, Parties launched the review of the Protocol

I. Revision of the Gothenburg Protocol, as amended in 2012

- December 2022: Parties adopted decision on the conclusion of the review of the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg Protocol), as amended in 2012, and the path forward;
- Comprehensive revision of the text and annexes, removing barriers to ratification and implementation and working to achieve further emission reductions;
- December 2023: Parties launched a process to revise the Gothenburg Protocol, as amended in 2012
- December 2024: Parties adopted the Plan for the revision of the Protocol.

I. Revision of the Gothenburg Protocol, as amended in 2012

44th session of the Executive Body

Geneva, 9-12 December 2024

- Acknowledgement of strong support for the inclusion of methane;
- Overarching collective health and biodiversity goals should be aspirational and for the ECE region as a whole. Ambition level and timeline doesn't need to be the same as those for emission reduction commitments (ERCs);
- ERCs – the core basic obligation that should be updated. Facilitate setting ERCs for non-Parties seen as a priority
- Options to revise the technical annexes to be worked on

I. Revision of the Gothenburg Protocol, as amended in 2012

63rd session of the Working Group on Strategies and Review (May 2025):

- Methane: Recommended expressing support for GMP; including methane in the Protocol; Encouraged delegations to provide views and proposals on how to include methane in the Protocol;
- TAs and flexibilities: Different views with respect to nature and content of TAs;

11th joint session of the EMEP Steering Body and the Working Group on Effects (September 2025):

- A policy note on ex-post analysis for policymakers would be prepared by the Bureau of WGE for the Executive Body;

Intersessional HoD meeting (October 2025):

Advancing discussions on black carbon, methane, ammonia and ERCs

II. Other updates under the Convention

Policy work:

- Revised guidance document on control techniques for emissions from stationary sources
- Revised guidance document on national nitrogen budgets
- Guidance document on non-technical measures

Reporting and scientific data:

- Revised Guidelines for reporting emissions and projections data
- Ad hoc group on open data
- Reporting on strategies and policies under the Convention and its protocols

Procedural issues:

- Adoption of the revised rules of procedure for sessions of the Executive Body
- Adoption of the revised mandate and operational rules for the Implementation Committee

UNECE

Thank you!

Alina Novikova
alina.novikova@un.org
UNECE

Next presentation:
FICAP co-chair – recent activities of FICAP

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UK Government

Recent activities of FICAP, 4th of November 2025

John Salter & Stefan Åström - Co-Chairs TFICAP

NATUR VÅRDS VERKET

SWEDISH ENVIRONMENTAL PROTECTION AGENCY

LRTAP/FICAP objectives for 2024-2026

UNECE

LRTAP
Long-range Transboundary Air Pollution

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- Revision of the Gothenburg Protocol including consideration of:
  - New emission reduction commitments for the pollutants currently covered. Special focus on ammonia emissions.
  - Update of the technical annexes
  - How to deliver further reductions of black carbon
  - Weather and how to address methane
  - New flexibilities and other approaches to facilitate ratification by current non-parties.
  - Further action on capacity building, awareness-raising and cooperation within and outside of the ECE region.
- Increase cooperation with other regions/countries.
- Organise link ups between regions and countries interested in using the Air Convention's experience to help set up local arrangements (regional, national, sub-national).
- Engage with other regional organisations and IOs to understand the needs and interests of regions and what further collaboration, cooperation and mutual learning could be achieved.
- Support international and global initiatives on air pollution management.
- Support the Gothenburg protocol revision.

Recent Updates:

- TFICAP and the UNECE Air Convention participated and delivered a session at the 2nd Global Conference on Air Pollution and Health hosted by the WHO and Government of Colombia this year.
- First meeting of the UNEP Global Network on Air Pollution held in the margins of the WHO Conference as well as a first meeting of the dedicated Africa Clean Air Programme
- The UK has taken up the Climate and Clean Air Coalition Co-Chairing under UNEP alongside Brazil
- Sweden has replaced the co-chair Anna Engleryd with an interim co-chair Stefan Åström,

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Recent Updates:

- TFICAP engages with the World Bank air pollution programme for the countries in the Indo-Gagnetic Plains and Himalayan Foothills (IGP-HF) airshed
  - European study tour arranged in November 2024,
  - Air Convention experiences presented to the IGP-HF Technical Committee Meeting of the Science Policy Finance Dialogue on Air Quality Management (Nepal, March 2025),
  - Written documentation of Air Convention experience to the World Bank solutions note,
- TFICAP joined the African Clean Air Forum and discussed capacity building and knowledge sharing (Nairobi, July 2025).
- TFICAP joined the Clean Air International Forum and discussed knowledge sharing (Seoul, Sept. 2025)

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Current and Future Updates:

- Continue to work with Climate and Clean Air Coalition on the building up of the online knowledge platform (AQMx).
- Continue to support the work of the CCAC Clean Air Flagship and join up on areas of capacity building by the CCAC.
- Continue to coordinate and share tasks with the UNEP Global Air Quality Cooperation Network
- This particular virtual TFICAP 3,
- COP30 UK, Brazil and China air pollution side event

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Common Themes – How can we best contribute?

Air Quality monitoring / inventories to achieve enough data to take action

a) Ground monitoring

b) Satellite monitoring

c) Emission inventories

d) Source identification

Impacts, modelling, and communication

a) Human health

b) Ecosystems

c) Communication to public

Cooperation on setting air quality standards and legislation (Ambient)

a) Setting standards and regulations

b) Integrated approach to climate change

c) Common approaches to emission reduction policies

d) Enforcement / sector-based policies

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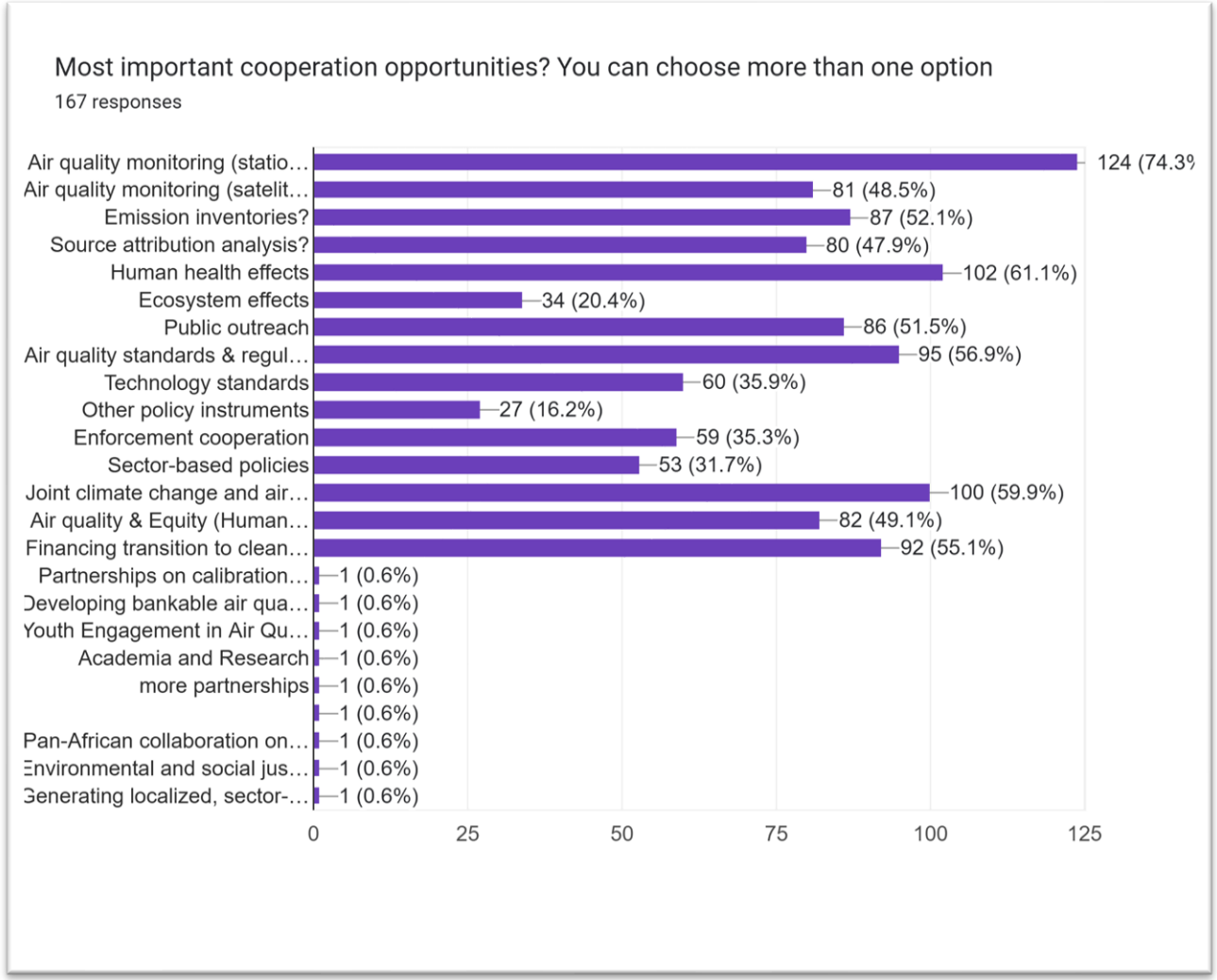
Stock-taking: Which cooperation opportunities might be most important?

167 answers from the Clean Air Forum in Nairobi, Kenya



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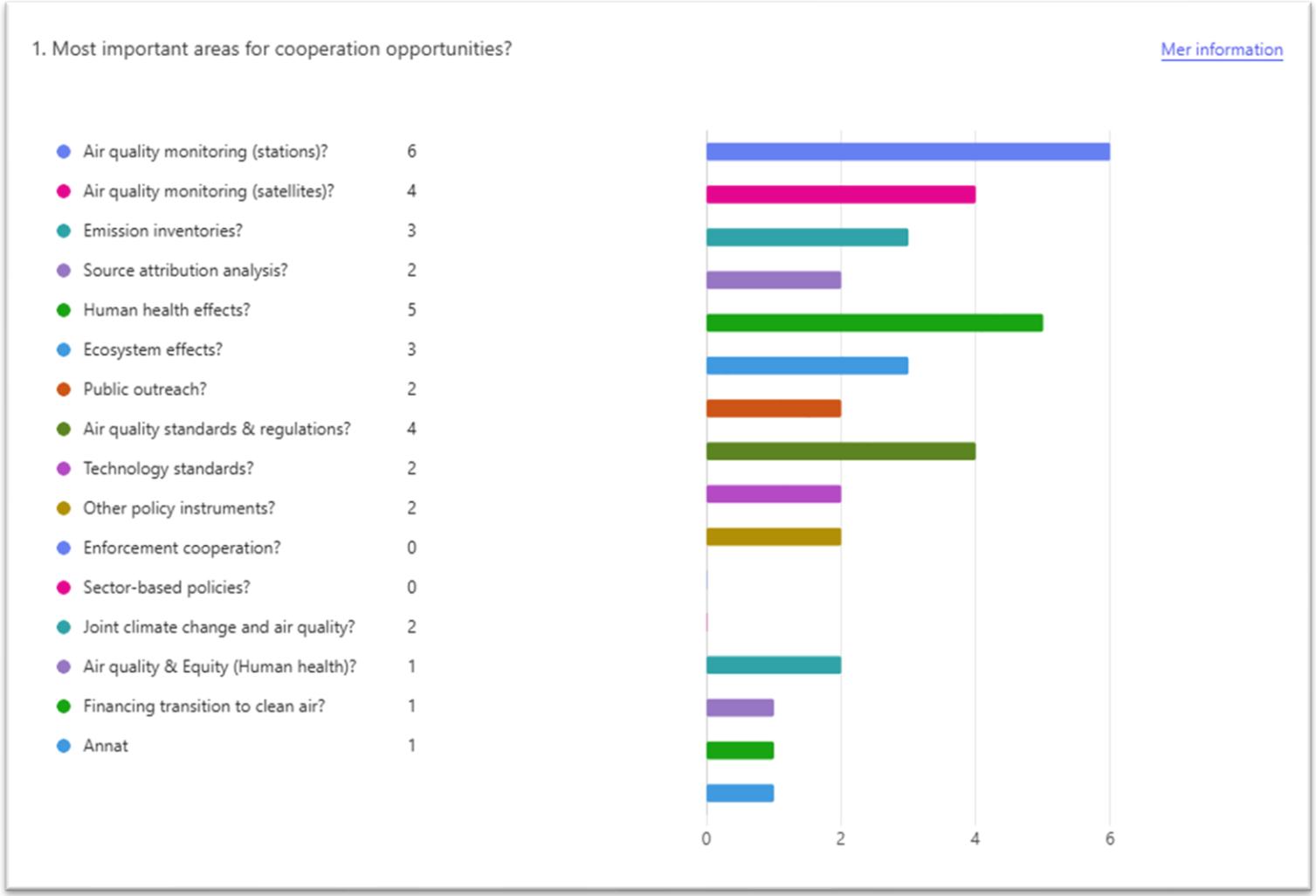
Stock-taking: Which cooperation opportunities might be most important?

16 answers from the Clean Air International Forum in Seoul, Korea



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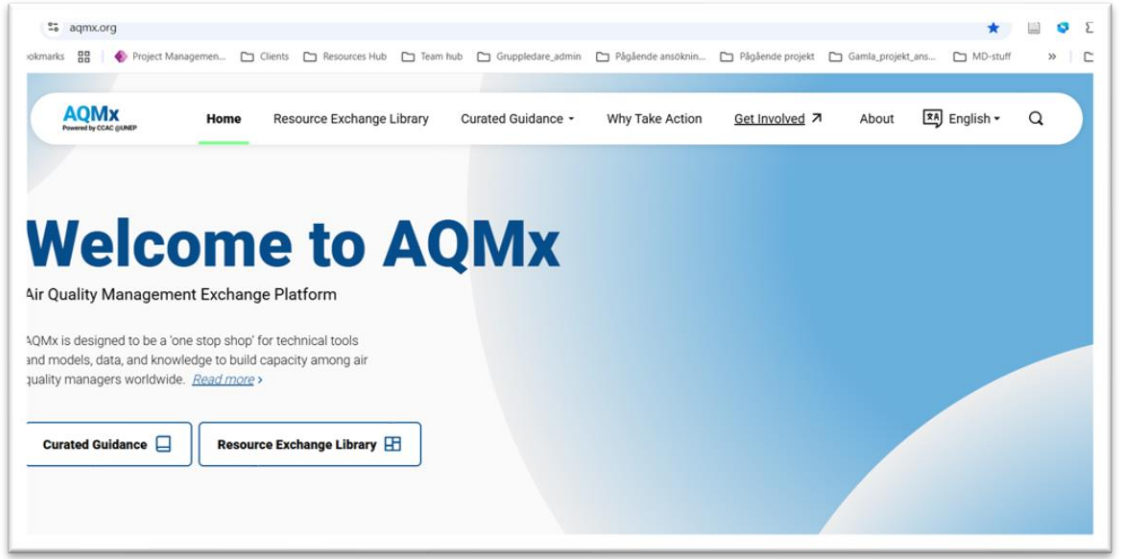
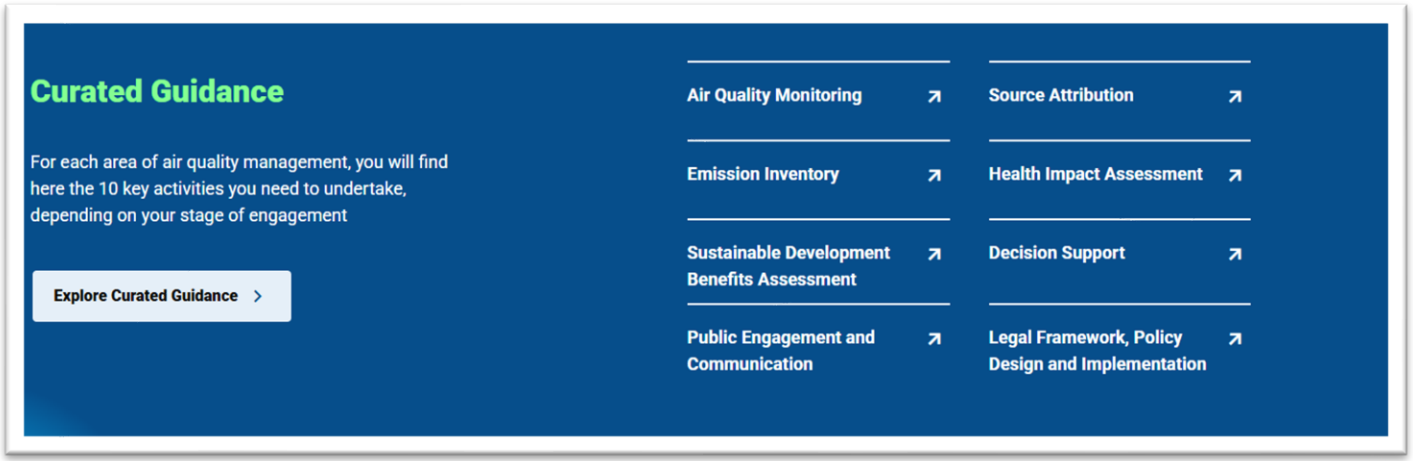
Knowledge-sharing? New developments of the AQMX?

All task forces have submitted data to AQMX, partly via TFICAP,

Since then, AQMX have developed a curated guidance for Air Quality Management

Are there new documents AQMZX should be knowledgeable about?





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Thanks for your attention

John Salter John.Salter@Defra.gov.uk

Stefan Åström Stefan.Astrom@anthesisgroup.com

FICAP Mailbox ficap@defra.gov.uk

Our website:

https://www.naturvardsverket.se/en/international/cooperation/multilateral/international-cooperation-on-air-pollution/

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Next Presentation:
Germany – Advisory Assistance Programme

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German Environment Agency

Umwelt Bundesamt

Task Force for International Cooperation on Air Pollution (TFICAP)

International UBA projects towards the implementation of CLRTAP

Almut Reichart
Division III 2.1 Cross-sectorial aspects, Chemical industry and Combustion plants;
Senior Expert for Pulp and Paper Sector

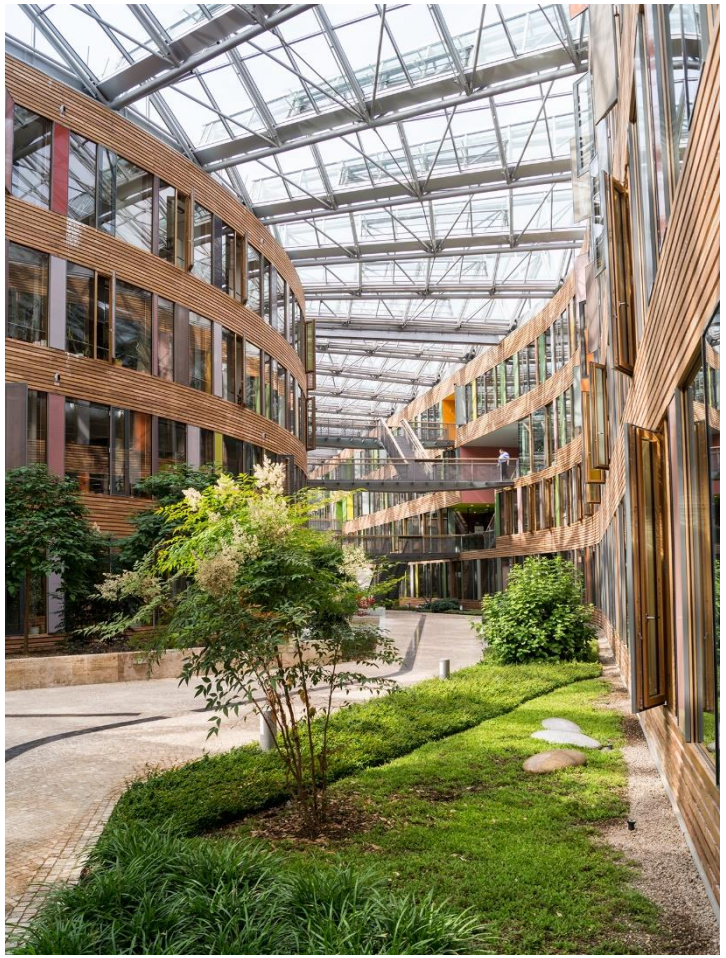
Hendrik Freitag
Division I 1.2 Capacity building, Sustainable resource use, Security;
Project Service Unit Advisory Assistance Programme

Outline

1. **Introducing the German Environment Agency (UBA)**

2. **Projects of Germany´s Advisory Assistance Programme (AAP)**

3. **Other international CLRTAP-relevant projects of the UBA on BAT**



Headquarter of the German Environment Agency in Dessau-Roßlau
Source: Martin Stallmann / Umweltbundesamt

Introducing the German Environment Agency (UBA)

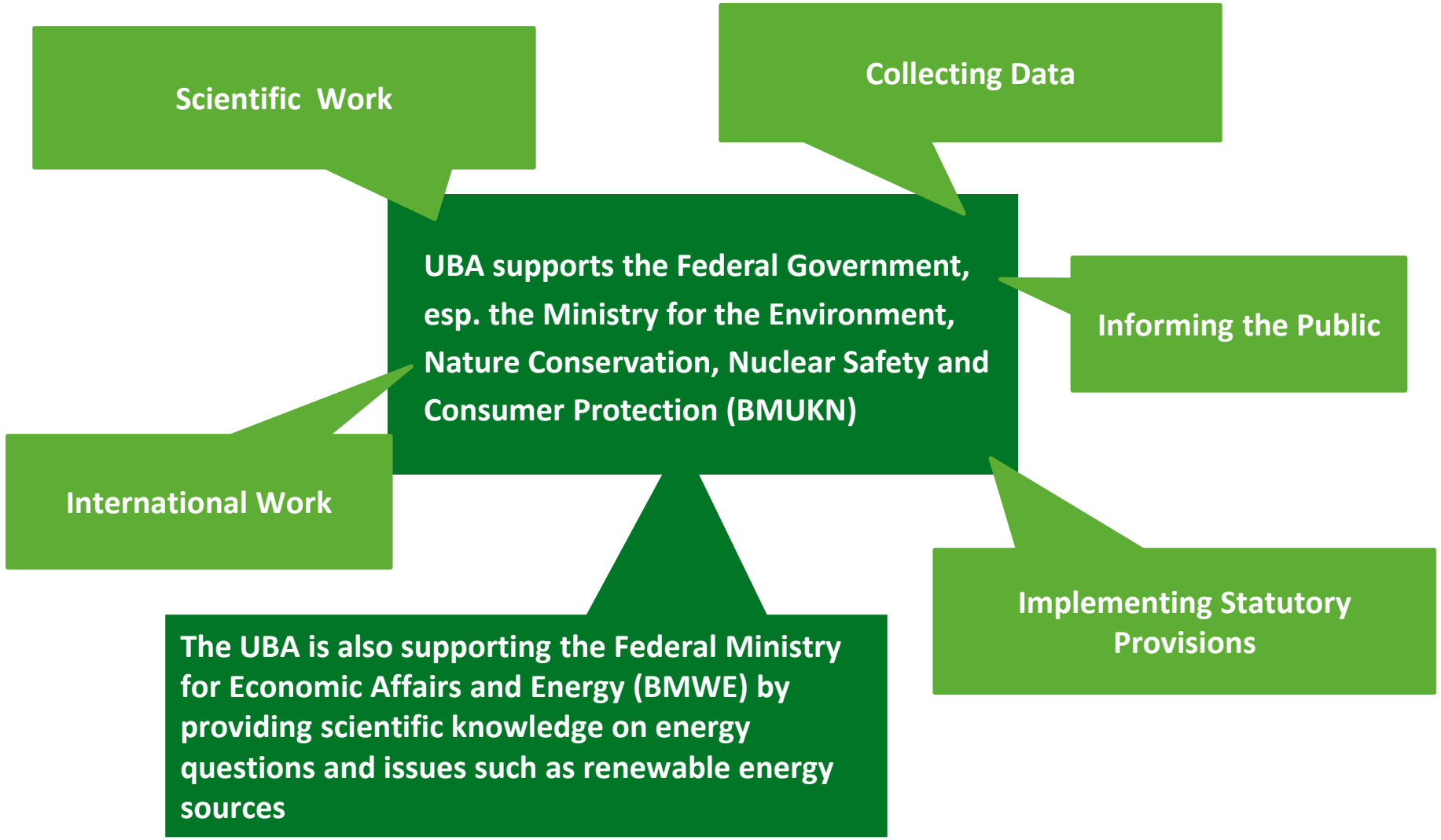
Headquarter of the German Environment Agency in Dessau-Roßlau
Source: Martin Stallmann / Umweltbundesamt

Federal Ministry
for the Environment, Nature Conservation,
Nuclear Safety and Consumer Protection

Key Data

- Largest scientific Environmental Agency on Federal Level
- Around 1.800 employees

UBA – Tasks


Scientific Work
Collecting Data
UBA supports the Federal Government, esp. the Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUKN)
Informing the Public
International Work
Implementing Statutory Provisions
The UBA is also supporting the Federal Ministry for Economic Affairs and Energy (BMWE) by providing scientific knowledge on energy questions and issues such as renewable energy sources

The Advisory Assistance Programme (AAP)

AAP
Advisory Assistance Programme

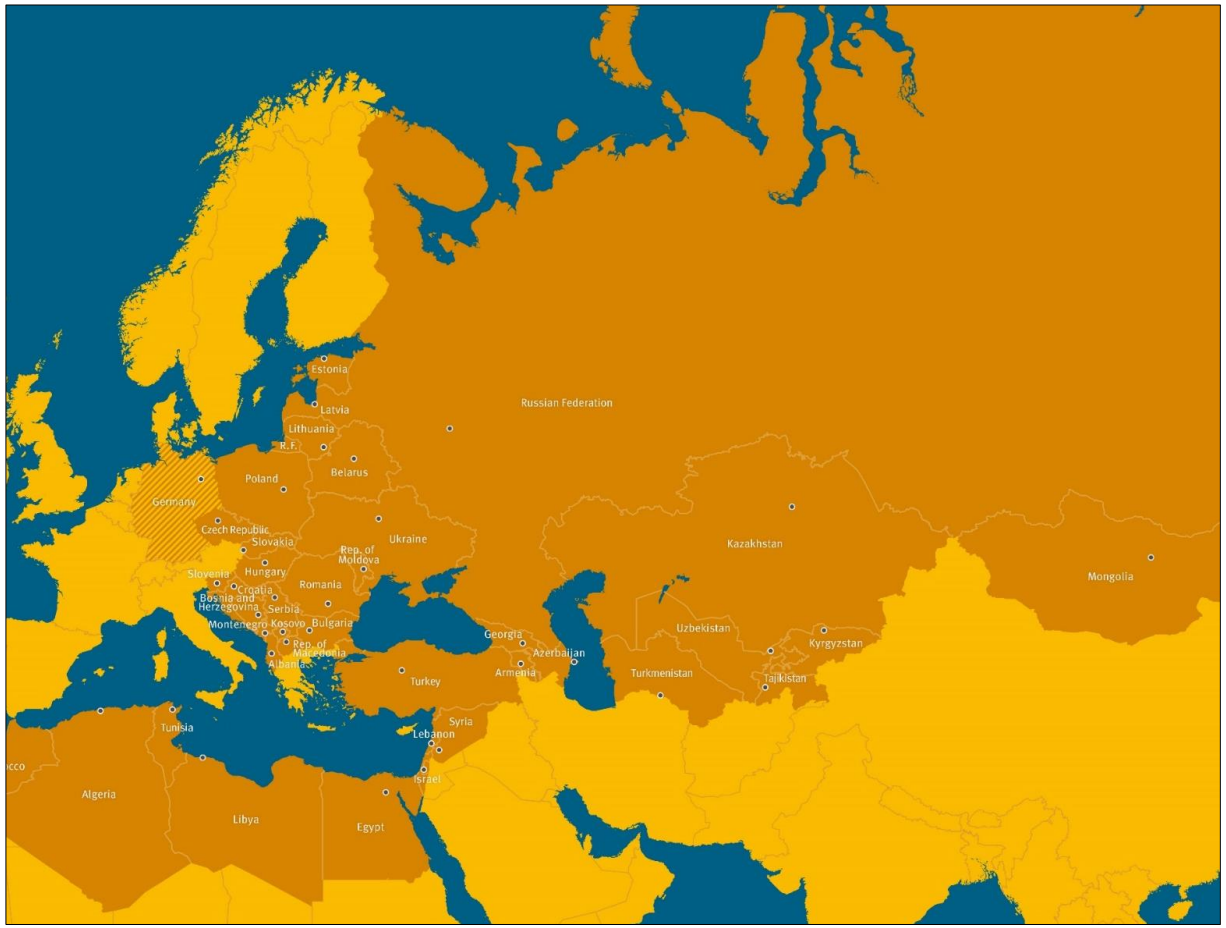
An instrument supporting bi- and multilateral international projects

Advisory Assistance Programme (AAP)

for environmental protection

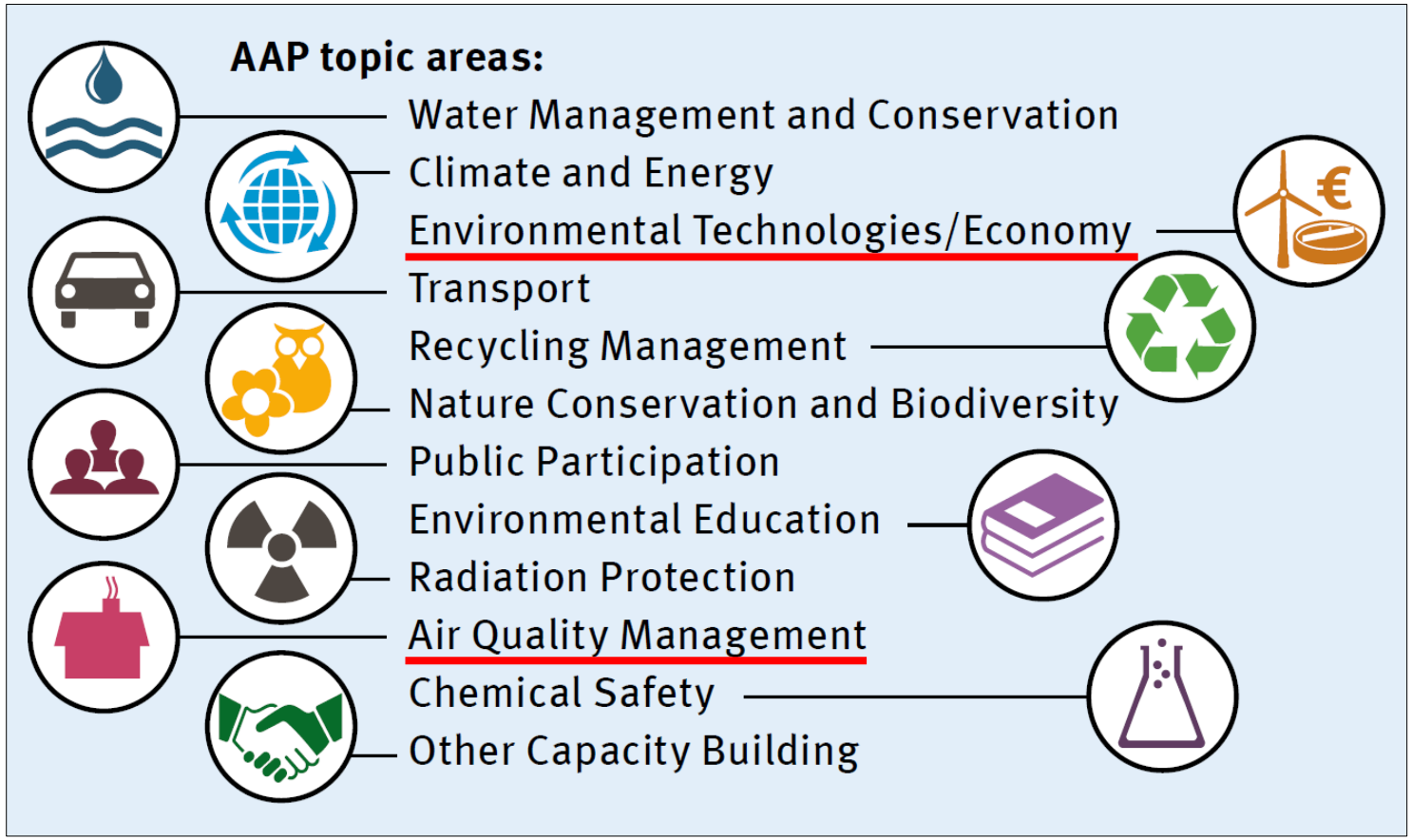
in the countries of Central and Eastern Europe, the Caucasus, Central Asia

and other countries neighbouring the European Union



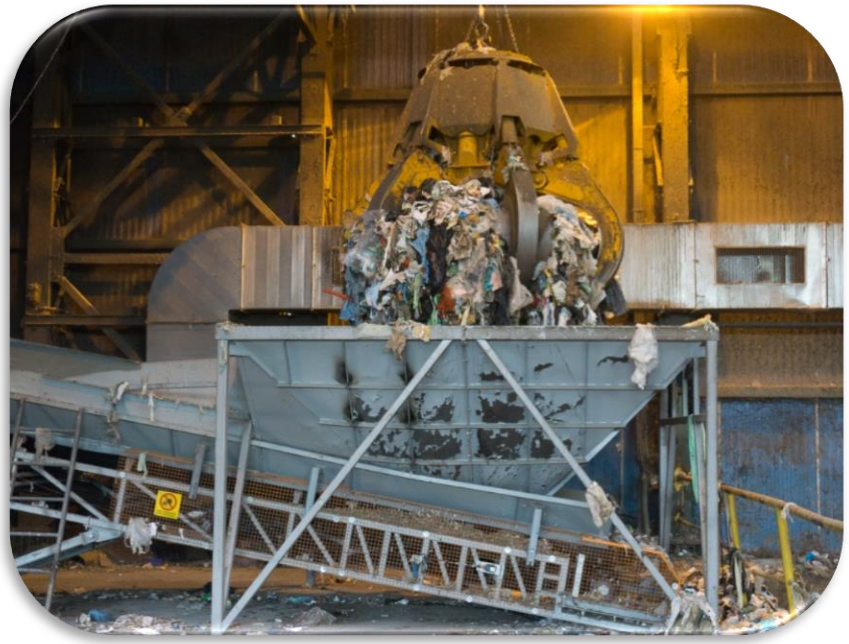
Programme region of the AAP

AAP – Topic areas



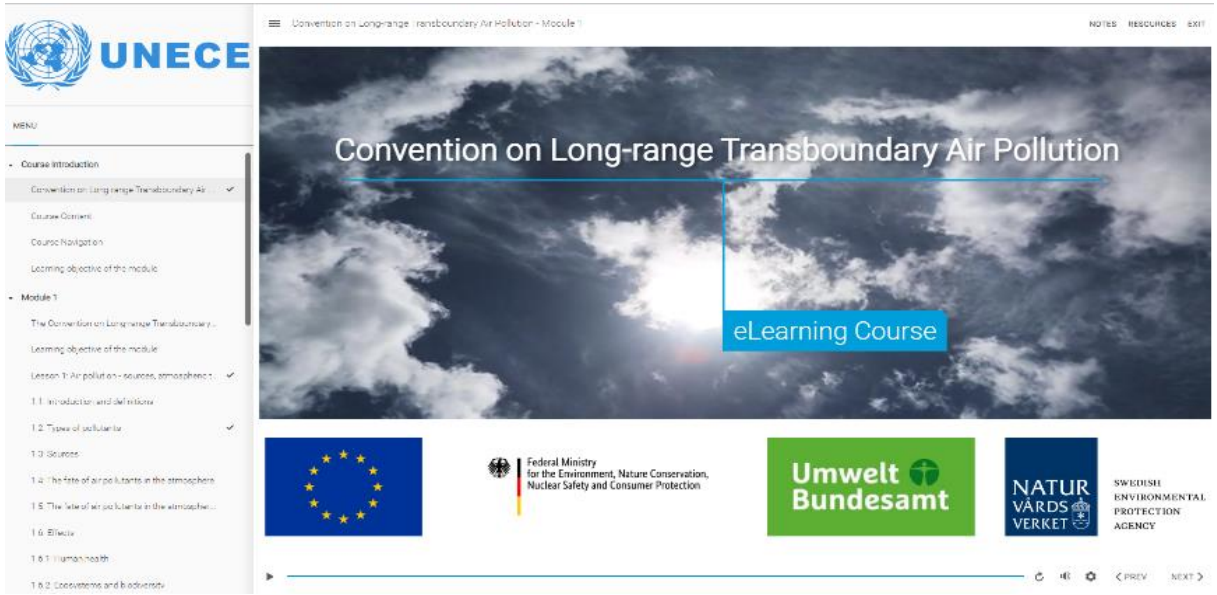
AAP – Principles

- **Knowledge exchange**
- **Ownership**
- **Impact orientation**



Waste management in Turkey, grab with mixed waste
Source: Oran Borhan

AAP projects: CLRTAP e-learning courses (UNECE)



Development of e-learning courses on the Geneva Convention (CLRTAP)

Knowledge transfer on the Convention and its protocols in preparation for accession

EASTERN EUROPE,
CAUCASUS, CENTRAL ASIA,
WESTERN BALKAN COUNTRIES

AAP projects: BAT & BREF for selected industry sectors in Kazakhstan & general BAT roadmaps in Central Asia

Project series with KAZ

“**Development of sector specific (“vertical”) Best Reference Document (BREF) for selected industry sectors in Kazakhstan**” and follow up

(2021-2022; CITEPA, Centre Interprofessionnel Technique d'Etudes de la Pollution Atmosphérique)

- **General BAT roadmap for KAZ**
- **BREF for cement industry**
- **BREF for large combustion plants (LCP)**

“**Strengthening Partnerships for Best Available Technologies with a Focus on Regional Engagement**” and follow up

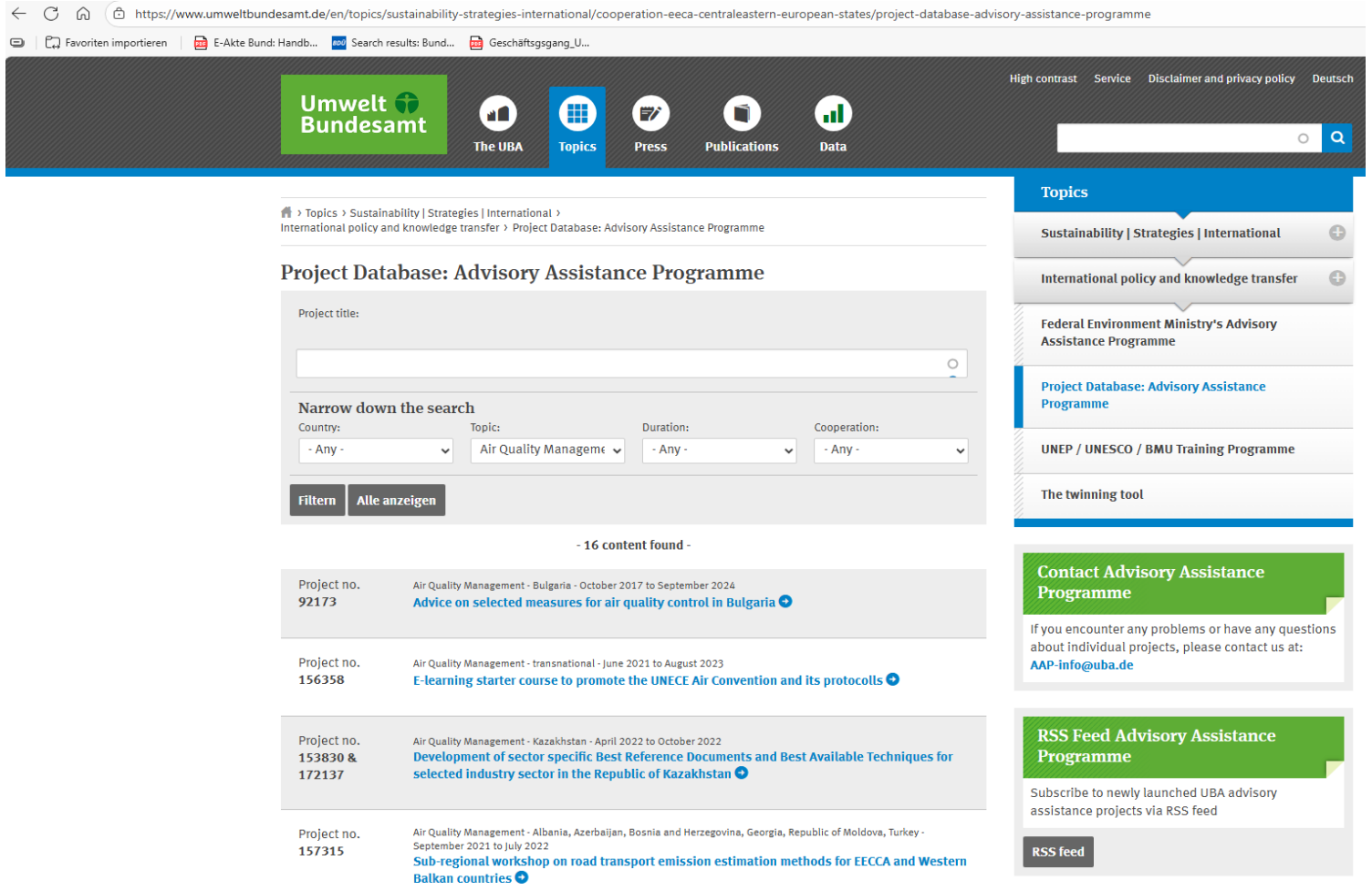
(2024-2025; CAREC, Regional Environmental Center for Central Asia)

- **Streamlining BAT in Central Asia**
- **BREF for large volume organic chemical production (LVOC)**
- **BREF for wastewater treatment**
- **BREF for waste management**

AAP – Project database

Website with more information and project results:

www.uba.de/en/project-database-advisory-assistance-programme



Cooperation between UBA/GIZ and India on BAT in selected industrial sectors (since 2013)

observations in India:

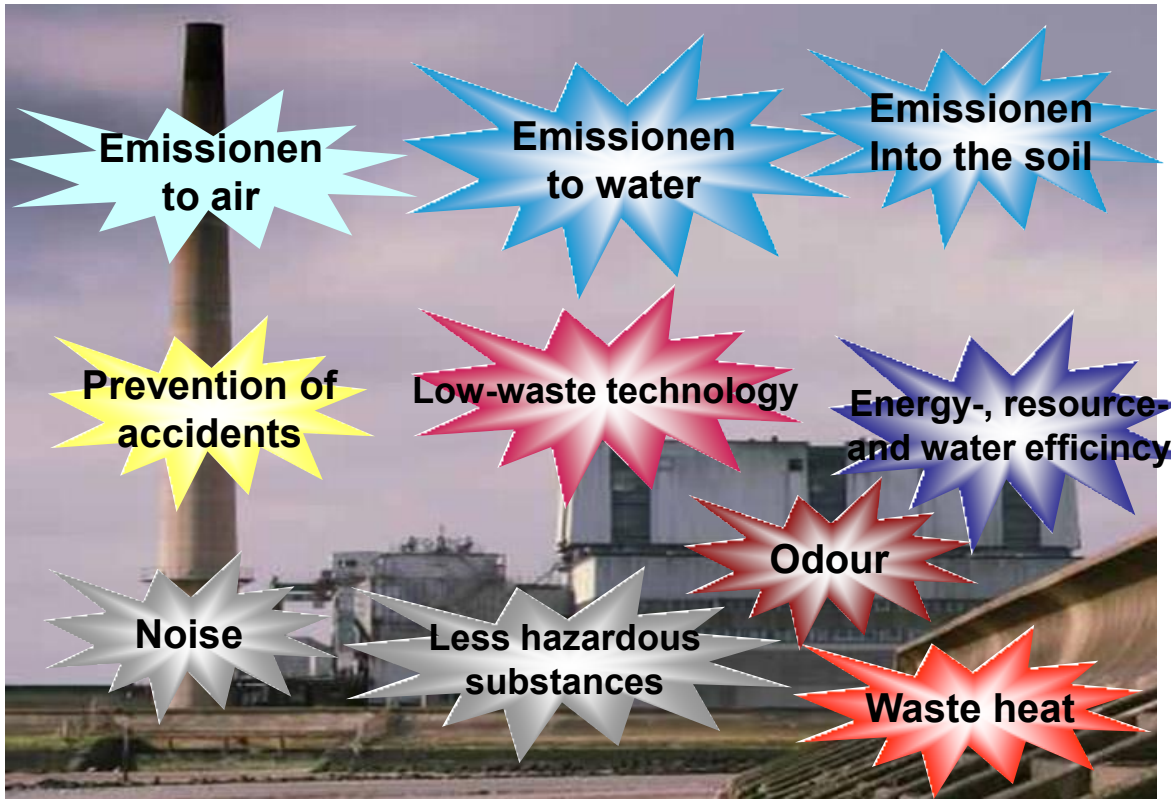
- … existing minimum general and specific environmental standards
- … existing technical guidance documents
- … some well performing installations, solutions are available within the industry
- …

Concerns and challenges:

- … lacking of implementation and enforcement of standards
- … still highly polluted industrial areas and environmental media
- … lack of information exchange between industry and competent authorities on problems and technical solution
- ….focus of authorities is only on end of pipe techniques

European Concept of standard setting based on Best Available Techniques
→ Valuable experience for India

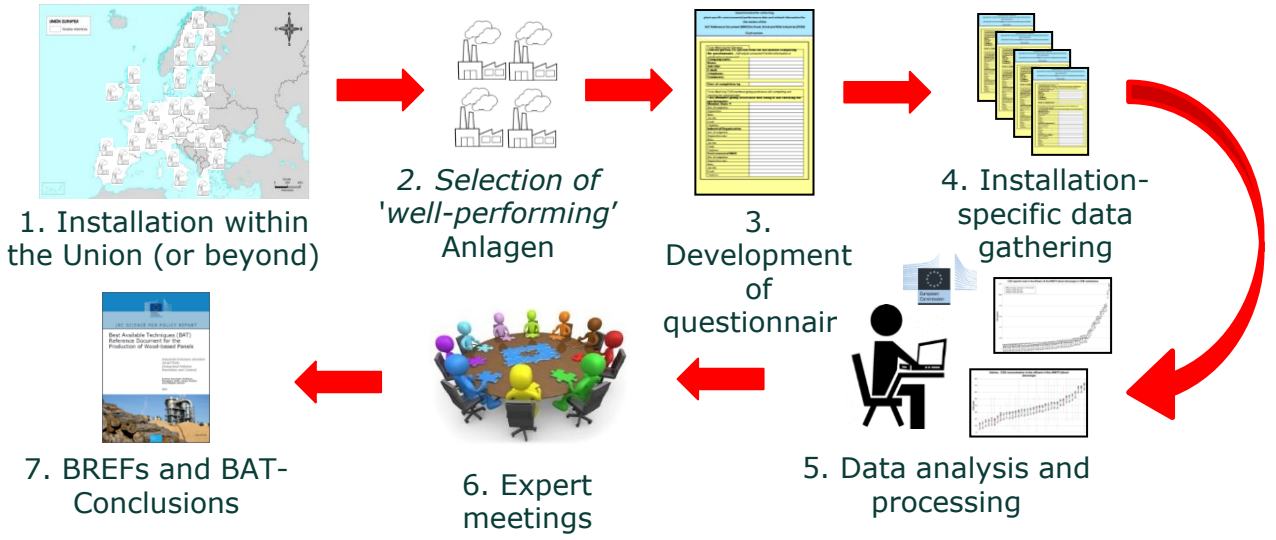
IED/BAT: Integrated, cross-media, more than emissions

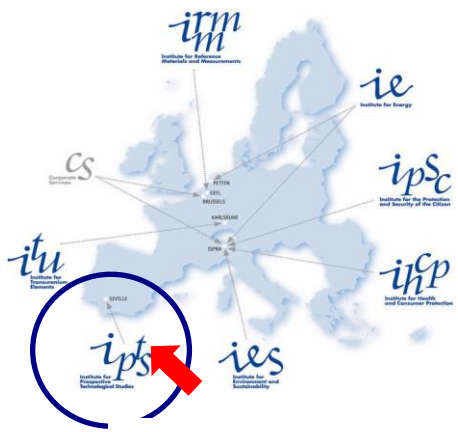


Definition BAT:

Best	most effective in achieving a high general level of protection of the environment as a whole
Available	means those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages
Techniques	includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned

BAT determination as an evidence-based, transparent process with participatory decision-making - Successful model of participatory governance





Sevilla-process

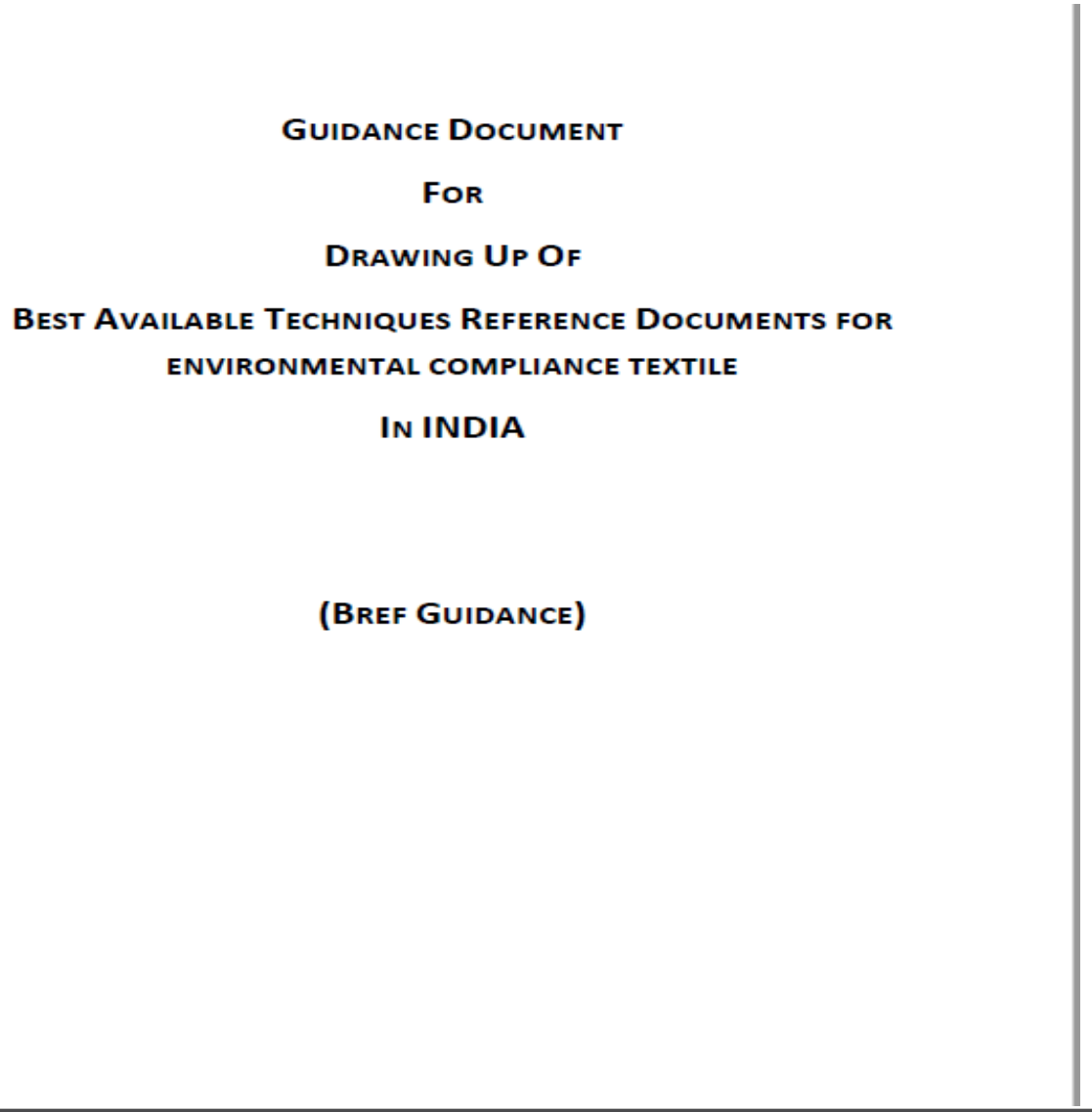
European IPPC-Bureau in Sevilla:
organises information exchange on BAT; part of the IPTS and the Joint Research Centre (JRC)

The Sevilla process: '*A complex consensus-building exchange of information with numerous stakeholders and underpinned by sound techno-economic information*'

Cooperation between UBA/GIZ and India on BAT
Joint Declaration of Intent – objectives

- Information exchange on the legal framework for integrated pollution prevention and control for industrial installations, including:
  - technically based standard setting and licencing procedures as well as
  - enforcement and monitoring provisions
- Development of a customised BREF for the textile industry in India
  - through a participatory procedure
  - as basis for deriving technically based environmental standards
- Training/ capacity building for selected staff of authorities, and other stakeholders on the preparation of BREF documents
  - Workshops in India
  - Study trips to case examples in Germany for industry, regulatory authorities and other stakeholders

Cooperation between UBA/GIZ and India on BAT
General Procedure for elaborating BREFs for different sectors



GUIDANCE DOCUMENT

FOR

DRAWING UP OF

BEST AVAILABLE TECHNIQUES REFERENCE DOCUMENTS FOR ENVIRONMENTAL COMPLIANCE TEXTILE

IN INDIA

(BREF GUIDANCE)

Participatory approach from the beginning
→ increased understanding, acceptance of BAT

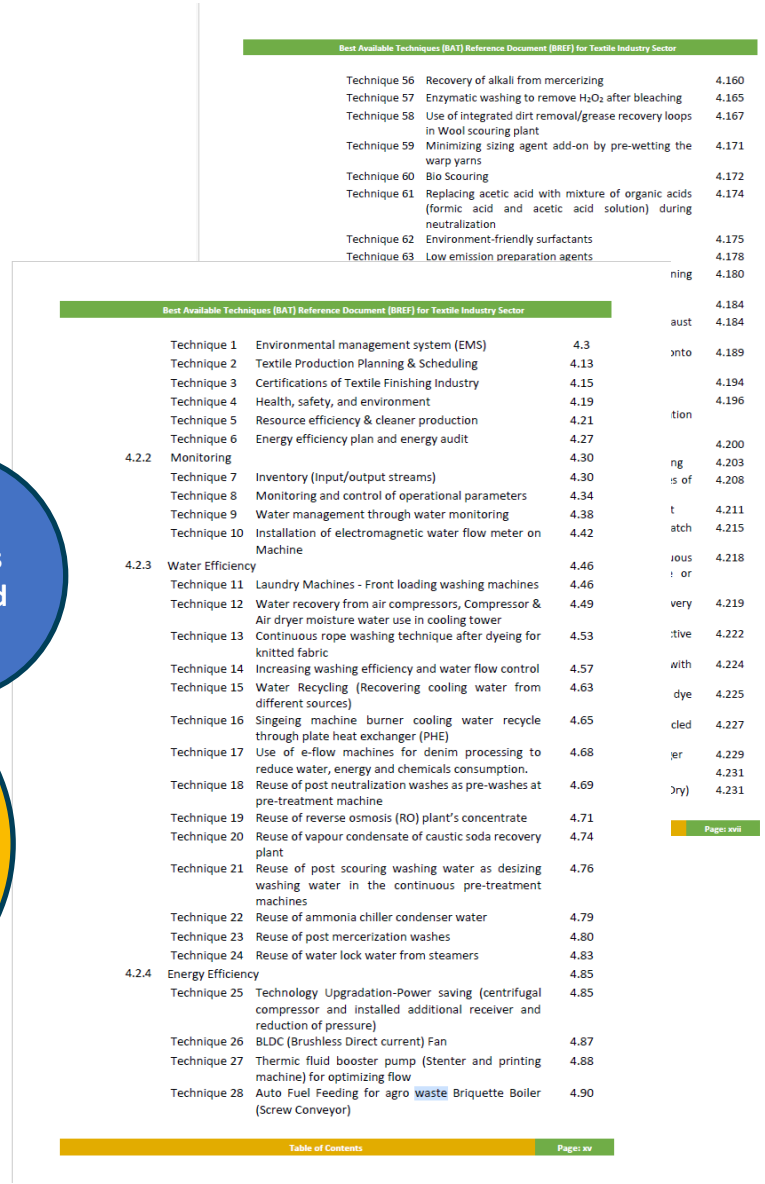
Outcome: Indian BREF/COINDs textiles

BREF document in its final stage

Final draft approved by CGE on 11 March 2025

104 BATs identified

Majority of BATs includes measures for reduction of waste (waste water, waste heat, waste sludge, waste raw material)



Best Available Techniques (BAT) Reference Document (BREF) for Textile Industry Sector

Technique 56	Recovery of alkali from mercerizing	4.160
Technique 57	Enzymatic washing to remove H_2O_2 after bleaching	4.165
Technique 58	Use of integrated dirt removal/grease recovery loops in Wool scouring plant	4.167
Technique 59	Minimizing sizing agent add-on by pre-wetting the warp yarns	4.171
Technique 60	Bio Scouring	4.172
Technique 61	Replacing acetic acid with mixture of organic acids (formic acid and acetic acid solution) during neutralization	4.174
Technique 62	Environment-friendly surfactants	4.175
Technique 63	Low emission preparation agents	4.178

Best Available Techniques (BAT) Reference Document (BREF) for Textile Industry Sector

Technique 1	Environmental management system (EMS)	4.3
Technique 2	Textile Production Planning & Scheduling	4.13
Technique 3	Certifications of Textile Finishing Industry	4.15
Technique 4	Health, safety, and environment	4.19
Technique 5	Resource efficiency & cleaner production	4.21
Technique 6	Energy efficiency plan and energy audit	4.27
4.2.2	Monitoring	4.30
Technique 7	Inventory (Input/output streams)	4.30
Technique 8	Monitoring and control of operational parameters	4.34
Technique 9	Water management through water monitoring	4.38
Technique 10	Installation of electromagnetic water flow meter on Machine	4.42
4.2.3	Water Efficiency	4.46
Technique 11	Laundry Machines - Front loading washing machines	4.46
Technique 12	Water recovery from air compressors, Compressor & Air dryer moisture water use in cooling tower	4.49
Technique 13	Continuous rope washing technique after dyeing for knitted fabric	4.53
Technique 14	Increasing washing efficiency and water flow control	4.57
Technique 15	Water Recycling (Recovering cooling water from different sources)	4.63
Technique 16	Singeing machine burner cooling water recycle through plate heat exchanger (PHE)	4.65
Technique 17	Use of e-flow machines for denim processing to reduce water, energy and chemicals consumption.	4.68
Technique 18	Reuse of post neutralization washes as pre-washes at pre-treatment machine	4.69
Technique 19	Reuse of reverse osmosis (RO) plant's concentrate	4.71
Technique 20	Reuse of vapour condensate of caustic soda recovery plant	4.74
Technique 21	Reuse of post scouring washing water as desizing washing water in the continuous pre-treatment machines	4.76
Technique 22	Reuse of ammonia chiller condenser water	4.79
Technique 23	Reuse of post mercerization washes	4.80
Technique 24	Reuse of water lock water from steamers	4.83
4.2.4	Energy Efficiency	4.85
Technique 25	Technology Upgradation-Power saving (centrifugal compressor and installed additional receiver and reduction of pressure)	4.85
Technique 26	BLDC (Brushless Direct current) Fan	4.87
Technique 27	Thermic fluid booster pump (Stenter and printing machine) for optimizing flow	4.88
Technique 28	Auto Fuel Feeding for agro waste Briquette Boiler (Screw Conveyor)	4.90

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Pilot BREF in India: Textile BREF for Gujarat

64
BATs identified

Launched during the Vibrant Gujarat Global Summit 2024

In the presence of high-ranking political representatives

Widely televised

12 January 2024

Scaling up the BREF Process for the Recycled Paper Sector in Gujarat

OECD Expert Group on BAT

Established in 2015 – 155 members from 40+ countries and organisations to help governments prevent and control industrial pollution

© Photo credit: Oleksandra Klestova/Shutterstock.com

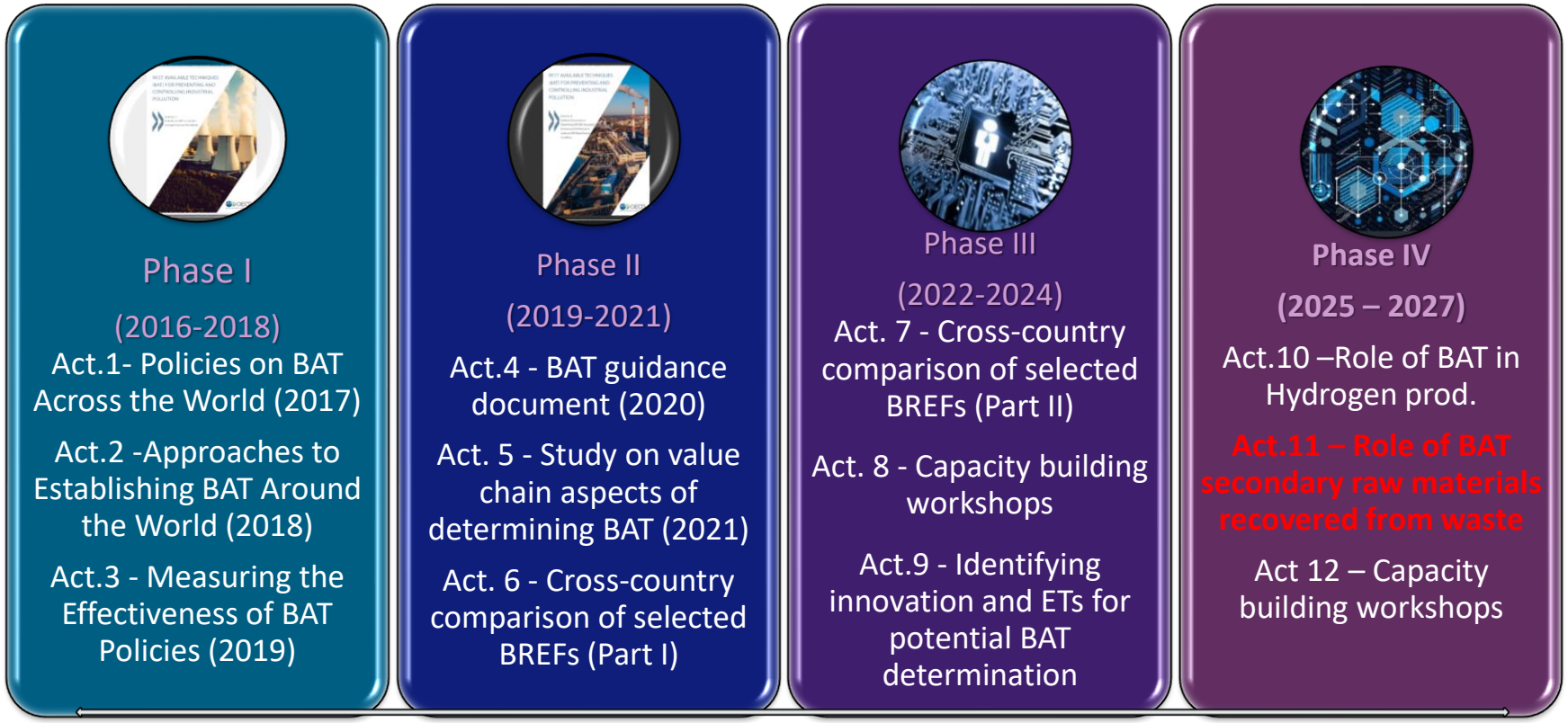
aims to:

- identify and exchange best practices amongst countries with a BAT-based policy
- assist those countries considering adopting a BAT approach for the first time

- One face-to-face meeting and one interim virtual meeting per year, plus frequent exchanges by email/phone

  - **10th meeting of the Expert Group on BAT in November 2025 in Seoul, Korea**

Deliverables of the OECD's BAT project (2016-2027)



If you are interested to participate in the working group please contact:
Berrak ERYASA: berrak.eryasa@oecd.org (cc: Almut.Reichart@uba.de)

All reports available free of charge: oe.cd/bat

Thank you.

Project service unit AAP

Dr. Hendrik Freitag (Programme coordinator)

AAP-info@uba.de

https://www.uba.de/en/advisory-assistance-programme

Next Presentation:
EU Commission – outreach projects

FICAP

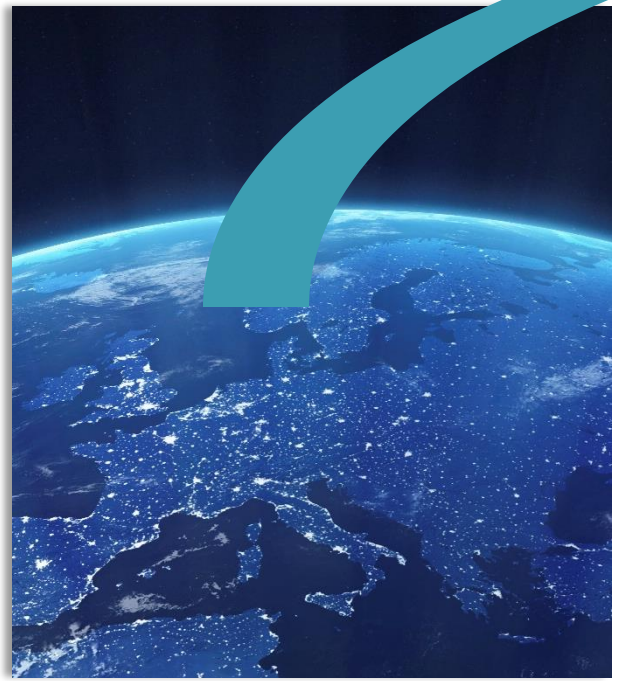
Forum for International Cooperation on Air Pollution

The role of the EU in international outreach on air pollution

P. Dilara, F. Norlen, DG ENV

TFICAP annual meeting
4-5 November 2025

Outreach support instruments in the EU

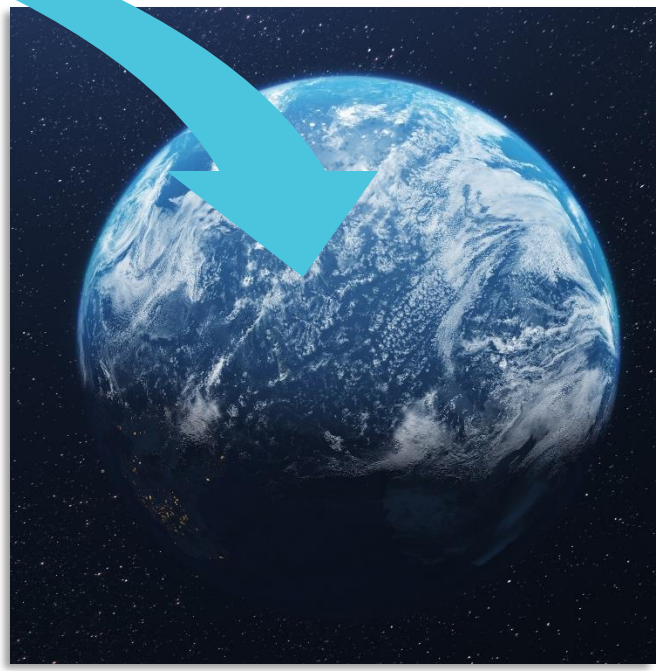


EU Grants to UNECE and UNEP

- To fund training, outreach
- Specific projects in areas not covered by UNECE

TAIEX support, Twinning projects

- On dedicated subjects
- In collaboration with EU and its MS



Support to UN bodies

European Commission

EU Grants and projects-UNECE

- Action for Enhancing international action and cooperation to tackle air pollution worldwide through support to the implementation and promotion of the UNECE Air Convention
- Continuous EU funding of the UNECE secretariat with more than €260.000 per year
- Covers Clean Air dialogues, e-learning course, outreach events, travel support, subregional and national workshops, etc.

EU Grants and projects-UNEP

- Support via recurring grants to UNEP on Air pollution
- Current project *(Strengthening Air Pollution Action to Reduce Health, Economic, and Environmental Impact, €650.000 for 3 years)* covers
  - A pilot project in Kenya (focused on waste management in hospitals including hospital waste incineration emissions)
  - A pilot project in Cambodia focused on the agricultural waste burning
- Both projects will feed into the sectoral guidance under the 2nd phase of AQMx development

Direct Country support

European Commission

Twinning

- Since 1998, supports the transposition, implementation and enforcement of the EU body of legislation (the Union acquis)
- Supporting the EU accession process and **preparing candidate countries for EU Membership**, it builds up capacities of beneficiary countries' public administrations
- Since 2004, assists the **EU's southern and eastern neighbours**. Helps upgrade administrative capacities of partner countries through the on-the-job training of its civil servants and support to institutional modernisation and reorganisation
- It also assists in the approximation of national laws, regulations and quality standards to those of EU Member States in the framework of cooperation or association agreements signed with the EU

Twinning

- Since 2020, Twinning is also available to **partner countries and territories covered by the EU's international partnership and development policy (INTPA)**.
- Supports the implementation of national development strategies in line with EU standards, contributing to the Global Gateway strategy, the achievement of the United Nations' Agenda 2030 and the Sustainable Development Goals.
- Twinning - Enlargement and Eastern Neighbourhood - European Commission

TAIEX

- TAIEX extends its **expertise, support, and cooperation** across a diverse network of beneficiaries, strengthening public administrations and fostering international partnerships.
  - **EU Neighbourhood and Enlargement Partners**
  - **Global Development and International Partnerships** – Assisting partner countries and territories in advancing key reforms
  - **North Africa and Middle East partners:** Strengthening governance, stability, and sectoral cooperation in the region
  - …
  - TAIEX - Enlargement and Eastern Neighbourhood - European Commission

European Commission

Apply for TAIEX Assistance: Strengthen Public Administration

- TAIEX provides **targeted, rapid, and practical support** to **public servants working in national administrations and public bodies**, helping them align with EU standards, implement reforms, and enhance governance.
- **Who Can Apply?**
  - **National administrations and public bodies** in eligible countries.
  - **EU institutions and services** requesting support for public sector cooperation.
- **TAIEX does not provide direct support** to civil society organisations, private citizens, or companies.

European Commission

Example: TAIEX Workshop on Emission Inventories and IAM

- **Regional Workshop on Emission Inventories and Integrated Assessment Modelling** focused on candidate countries in Vienna, 31 March - 02 April 2025
- More than 50 participants from Albania, Armenia, Bosnia and Herzegovina, Georgia, Kosovo*, Moldova, Montenegro, North Macedonia, Serbia, Türkiye, Ukraine, Kazakhstan, Kyrgyzstan
- 1.5 days on emission inventories
- 1.5 days on integrated assessment modelling

*This designation is without prejudice to positions on status and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

TAIEX
MOVING FORWARD TOG
WITH EU EXPERTISE

EUROPEAN UNION

Thank you

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European Commission

Next Presentation:
UK –FCDO Air Quality Management Capacity Building

FICAP

Forum for International Cooperation on Air Pollution

Foreign, Commonwealth & Development Office

UK FCDO Air Quality Management Capacity Building

David Foster, Air Quality Policy Adviser

04/11/2025

UNEA Resolution:

United Nations Environment Assembly
of the United Nations Environment Programme
Sixth session
Nairobi, 26 February–1 March 2024

Resolution adopted by the United Nations Environment Assembly on 1 March 2024

6/10. Promoting regional cooperation on air pollution to improve air quality globally

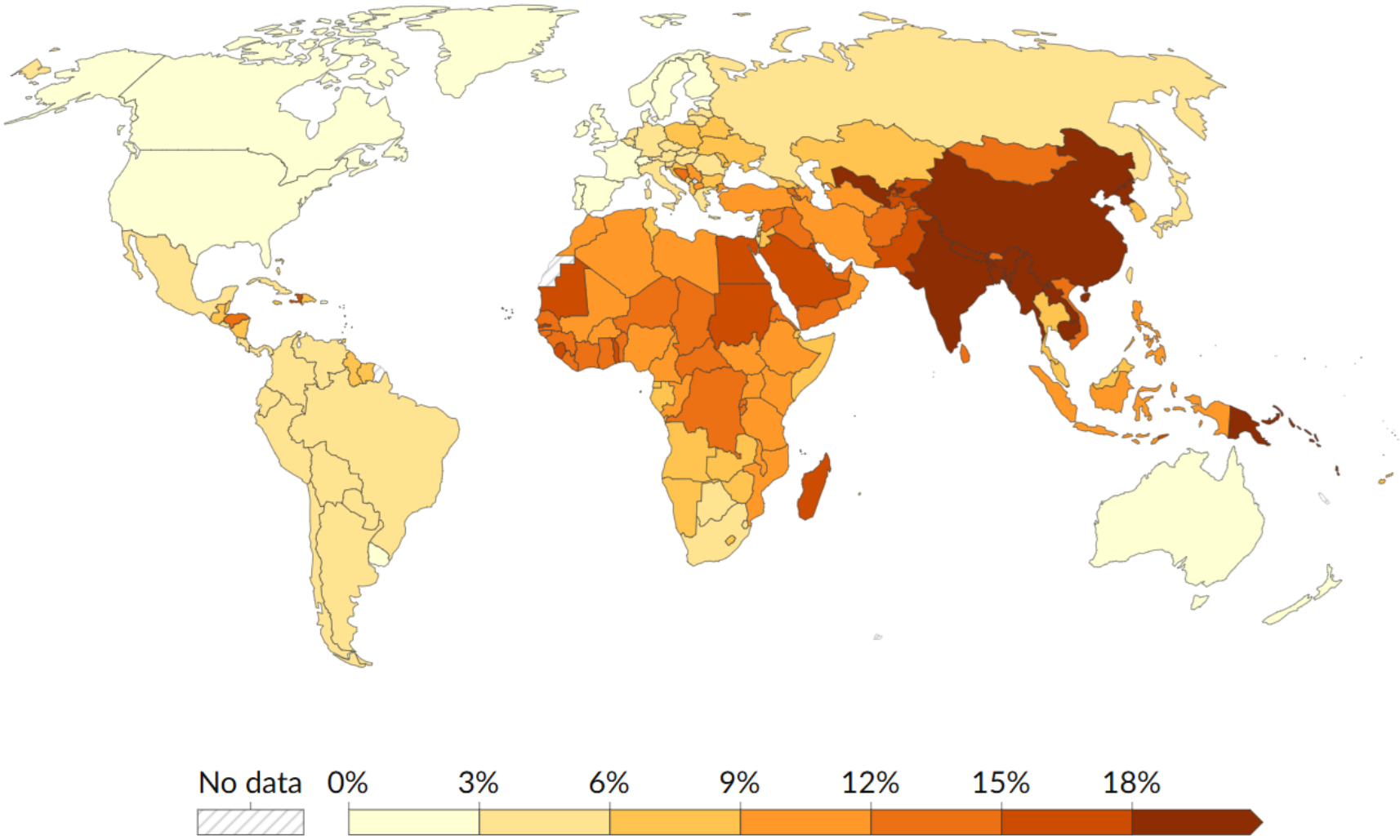
The United Nations Environment Assembly,

Recalling its resolution 1/7 of 27 June 2014 on strengthening the role of the United Nations Environment Programme in promoting air quality and its resolution 3/8 of 6 December 2017 on preventing and reducing air pollution to improve air quality globally, and noting World Health Assembly resolution WHA68.8 of 26 May 2015, entitled "Health and the environment: addressing the health impact of air pollution", and General Assembly resolution 74/212 of 19 December 2019 on the International Day of Clean Air for Blue Skies,

Recognizing that air pollution, including fine particulate matter and tropospheric ozone and their precursors, is one of the greatest environmental risks to health and that populations living in vulnerable situations are disproportionately exposed to air pollution and have a higher risk of associated negative health impacts and premature death,[1]

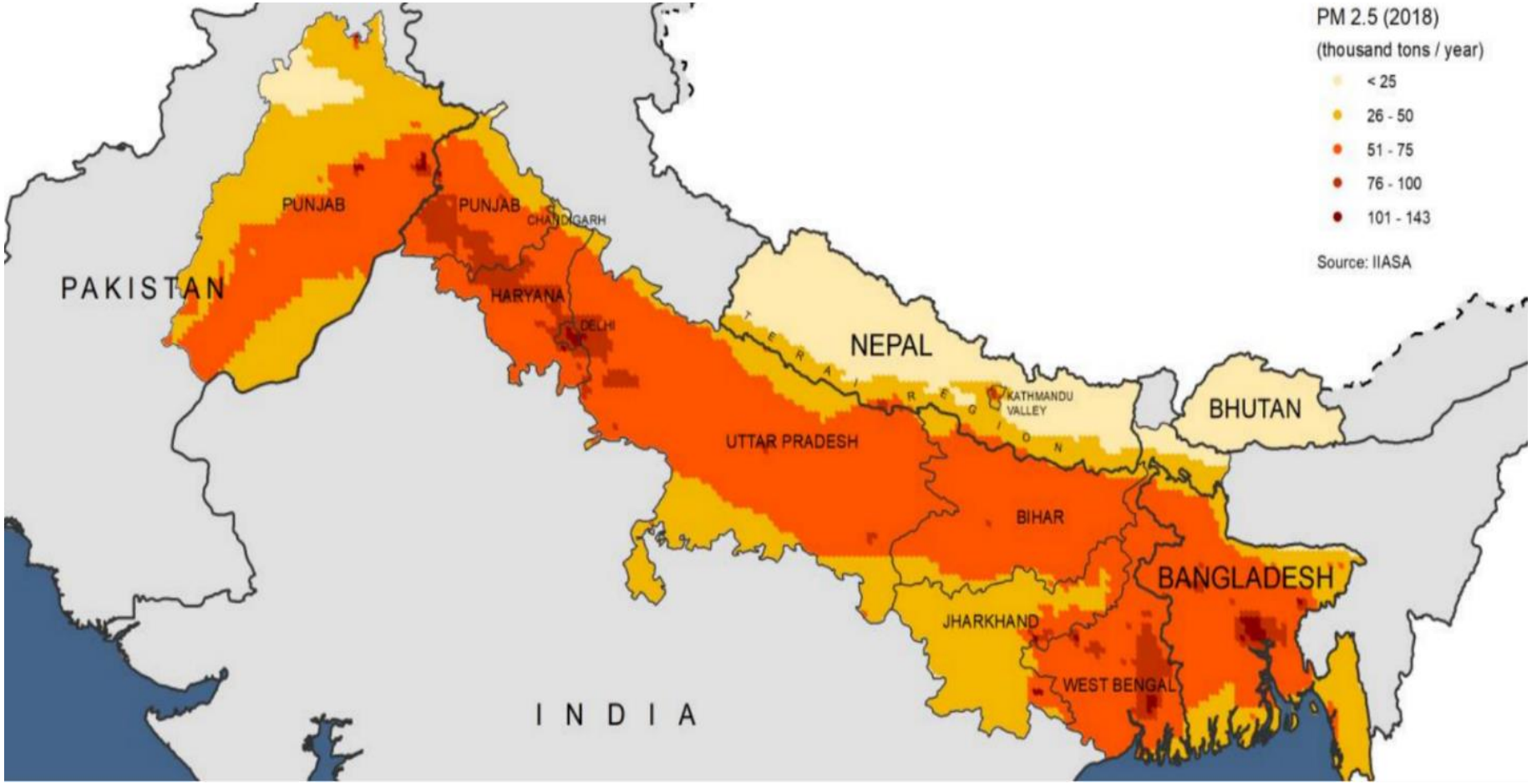
Underscoring the need to elevate efforts at all levels of government, by environmental and health organizations and by the private sector to collaborate on addressing the significant impacts of air pollution, in accordance with the Sustainable Development Goals,

Geographical Priorities:



Source – Global Burden of Disease 2024

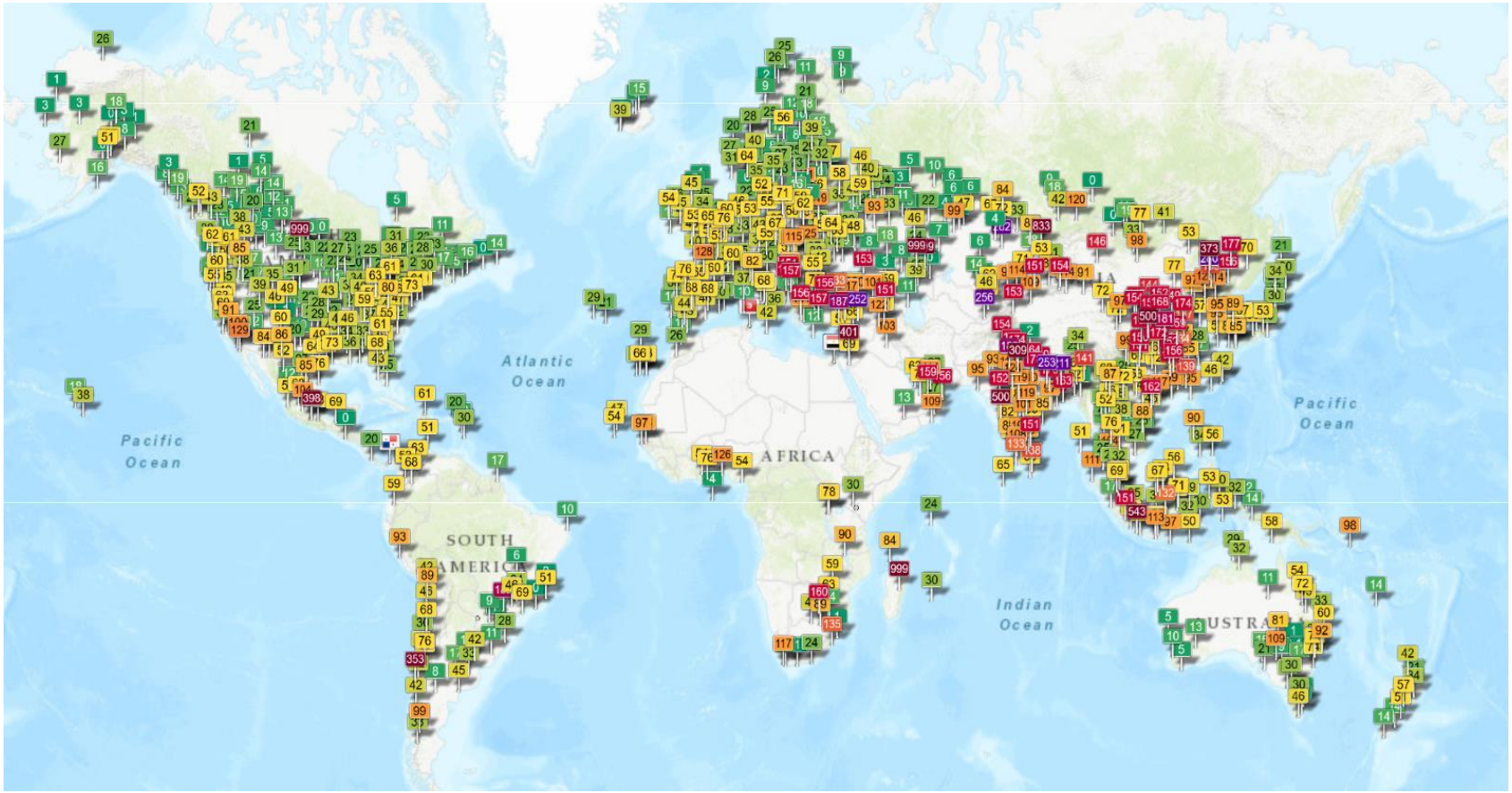
Regional Cooperation in South Asia:



ICIMOD Model for Effective Regional Cooperation:

Source – ICIMOD

Regional Cooperation in Africa:



Source – World Air Quality Index

Building the case for action:

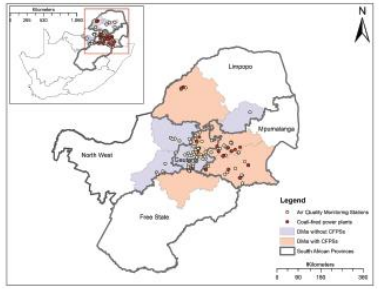
DOES LIVING IN A DISTRICT MUNICIPALITY WITH COAL-FIRED POWER STATIONS AFFECT SOUTH AFRICANS' HEALTH?

FACTS:

8 MILLION LIVES
The annual global estimated number of lives lost due to air pollution.

98% OF SOUTH AFRICANS
are exposed to dangerous particle pollution.

PROXIMITY MATTERS
Living closer to CFPSs are associated with increased odds of negative health outcomes. Retirement of CFPSs decrease premature mortality.



Location of the air quality monitoring stations, the coal-fired power stations, and the district municipalities with and without coal-fired power stations.

RESULTS:

Deaths in District Municipalities with CFPSs were significantly higher compared to municipalities without CFPSs

6% Higher chance of dying when living in a district municipality with CFPSs

Cleft lip anomalies are higher in districts with CFPS, showing significant air pollution health risks for babies.

Pneumonia case fatality rates in children under 5 years of age were greater
Did not reach statistical significance.

RECOMMENDATIONS:

CFPSs should be decomissioned.

People living in proximity to CFPSs should be made aware of the health threats.

Stricter air quality standards are needed to reduce deaths in CFPS districts.

Health data access needed to track air pollution impacts in CFPS districts.

Air quality management in Air Pollution Priority Areas should be scaled up.

Scale up health surveillance in CFPS district municipalities to track impacts.

More studies on the health and environmental impact are required, especially in LMICs.

Children are most vulnerable to the health effects of living near CFPSs.

All stakeholders should be engaged.

UK International Development
Partnership | Progress | Prosperity

saMRC advancinglife

Foreign, Commonwealth & Development Office

Thank you

Q&A

Next Presentation:
Türkiye – capacity building activities

FICAP
Forum for International Cooperation on Air Pollution

REPUBLIC OF TÜRKİYE
MINISTRY OF ENVIRONMENT,
URBANIZATION AND CLIMATE CHANGE

Capacity Building Activities in Air Quality Management

DG for Environmental Management
Ministry of Environment, Urbanization and Climate Change

Canan Esin KÖKSAL
Environmental Expert (MSc)

MODELLING and MAPPING DIVISION

- Air Emission Management (HEY) Portal
- NEFES software 81 provincial centers and their districts
- Clean Air Action Plans increased from **64** to **81**
- Noise Action Plans
- Revision of Air Quality Assessment and Management Regulation

SUSTAINABILITY STRATEGY and ZERO POLLUTION DIVISION

- Regulation on Management of Industrial Emissions
- Sectoral Communiqué Studies
- Certification of environmental performance of at least 6,000 facilities

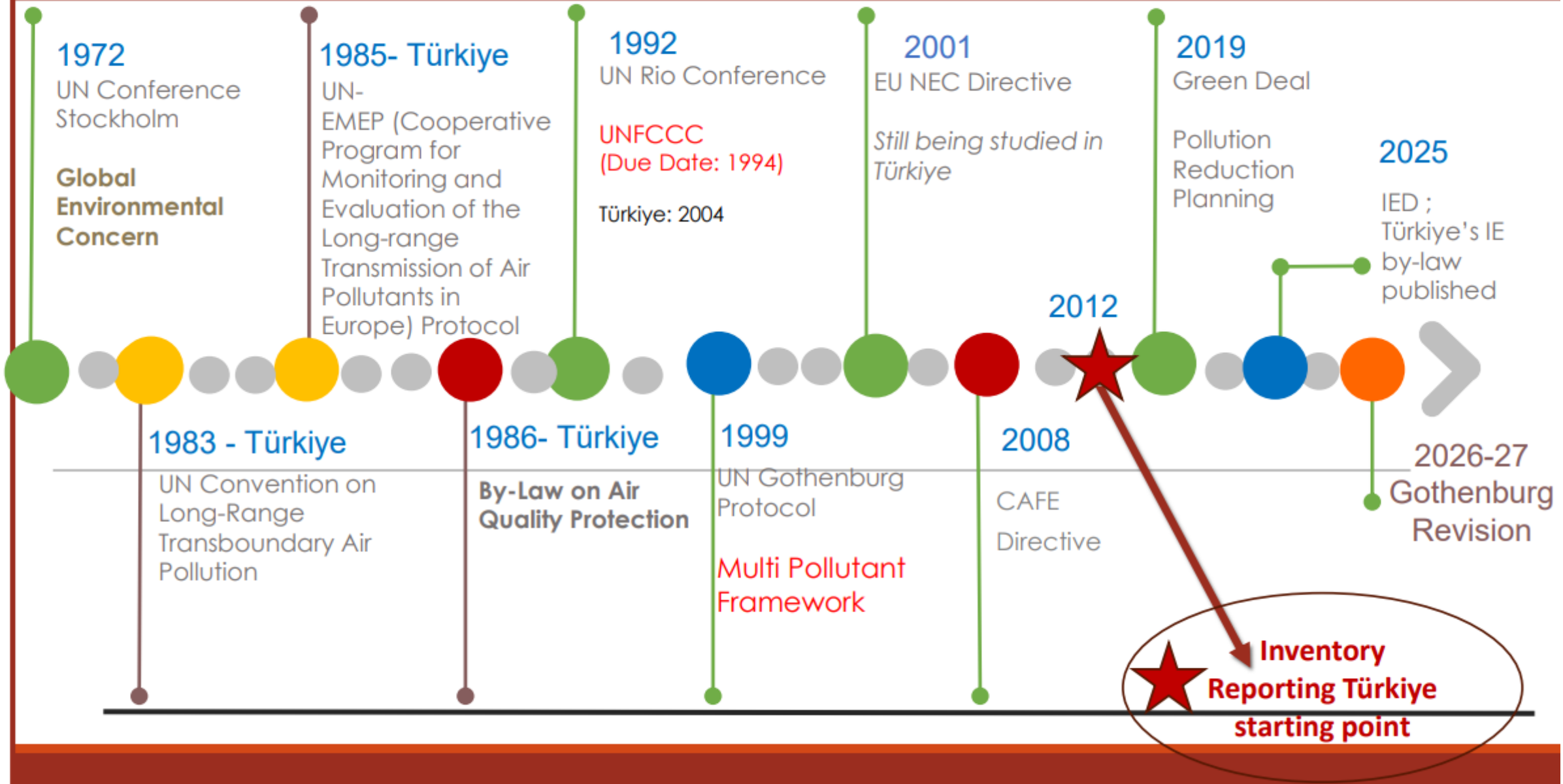
TRANSPORTATION and MOBILTY DIVISION

- **10,500,000** vehicle exhaust emission measurements
- **27,000** vehicle queries**/1400** detections with **EGEDES**
- **300 km** of bicycle paths, reaching a total of **2000 km** by 2024

EMISSION MANAGEMENT POLICY DIVISION

- **Emission Management in Industry and Heating**
- Solid fuel certificates **~ 60000** electronically through the Solid Fuel Module
- Use of cleaner and greener fuels for heating

Legislative Action for AQ Management



International Linkage

DG for Environmental Management

United Nations Economic Commission for Europe (UNECE)
(Convention on Long Range Transboundary Air Pollution – CLRTAP) and EMEP Protocol

Gothenburg Protocol Evaluation Studies and connections

United Nations (UNECE) **Convention on Long-Range Transboundary Air Pollution** (CLRTAP) (1983)

EMEP (Cooperative Program for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe) **Protocol** (1985) has been approved.

The National Air Pollutants **Emission Inventory and Informative Inventory Report** are prepared and reported through the European Environment Agency Information and Observation Network (EIONET) in cooperation with the UNECE Secretariat annually.

National Air Pollutants Emission Inventory and Informative Inventory Report Submission

International Linkage

DG for Environmental Management

United Nations Economic Commission for Europe (UNECE)
(Convention on Long Range Transboundary Air Pollution – CLRTAP) and EMEP Protocol

Clean Air 40

Protecting the air we breathe:

~SDGs interlinkages

Attendance at the meetings of Executive Body and Task Forces

Preparation and Reporting of inventory and Informative Inventory Report-IIR on National Air Pollutants, UNFCCC connection

7th September International Clean Air Day CITYAIR Project

CityAir

Framework under MEAs
MARPOL Annex 6; Air pollution from ships, SECA , NECA

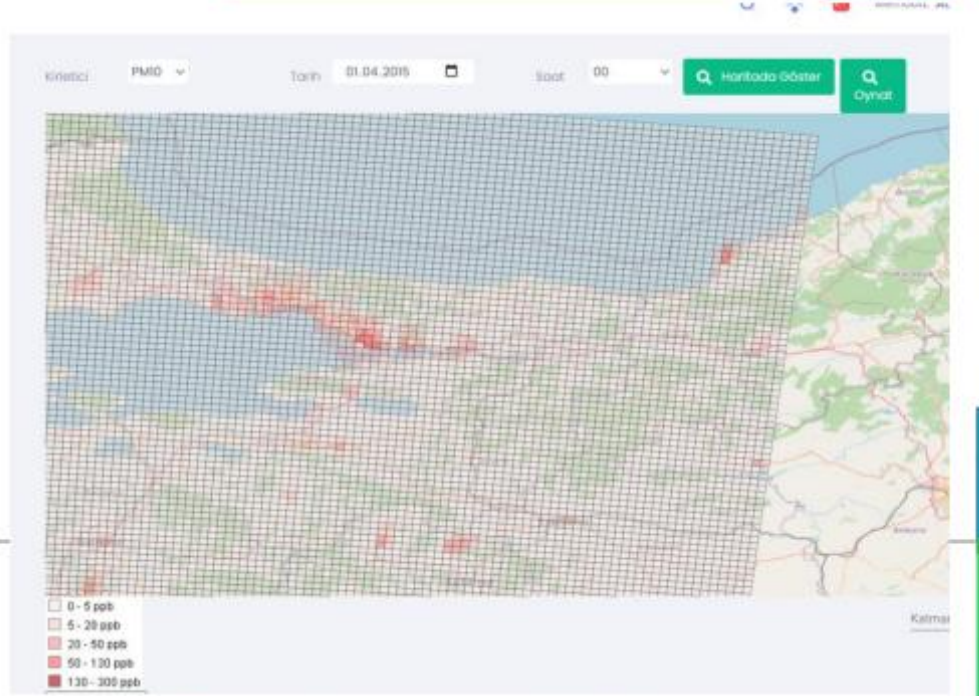
UNESCAP
Cooperation on Air Related İssues

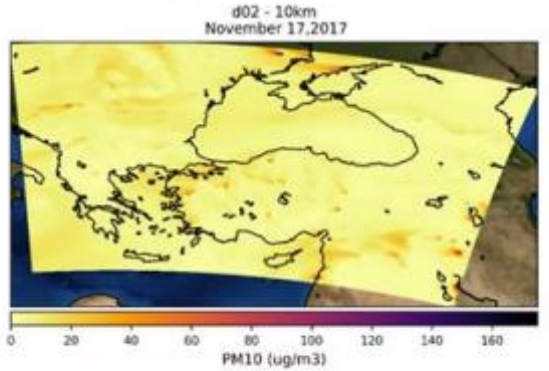
Gothenburg Protocol Evaluation Studies and connections

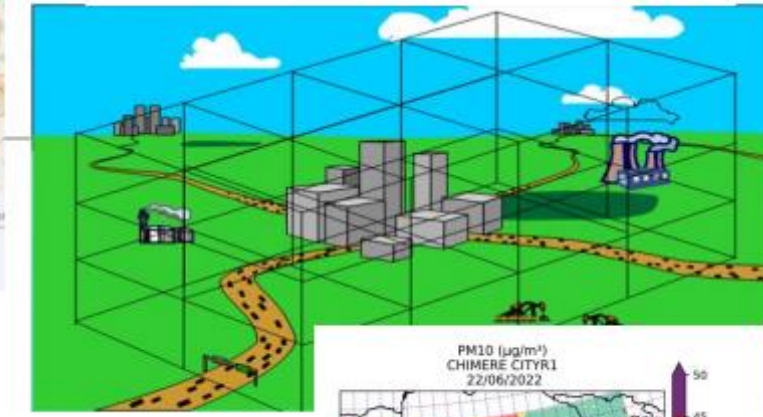
Nitrogen Management and Net Zero Emission Strategies linkages

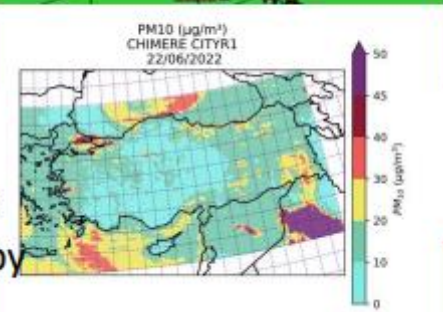
Data Technologies for AQ Management

DG for Environmental Management









3 different domain considering long range transportation of air pollutants,

150 different air pollutants

Meteorological and air quality models are run on «4kmx4km» grids.

Servers and all necessary hardware needed to run models are provided by the Ministry.

Digital Tools For AQ Management / Türkiye

DG for Environmental Management

HEY
HAVA EMİSYON YÖNETİM PORTALI

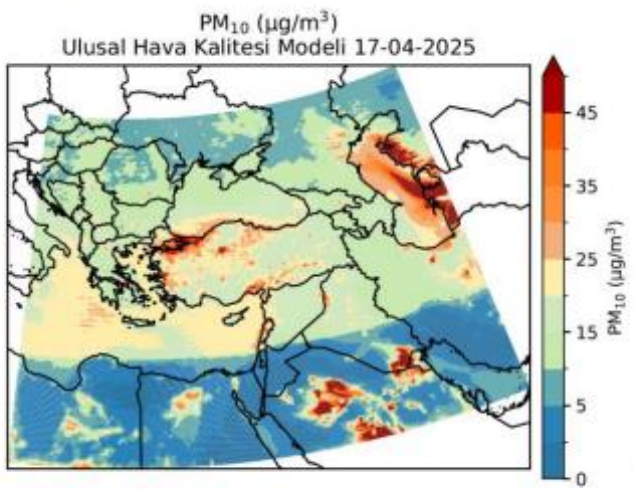
AIR EMISSIONS MANAGEMENT PORTAL

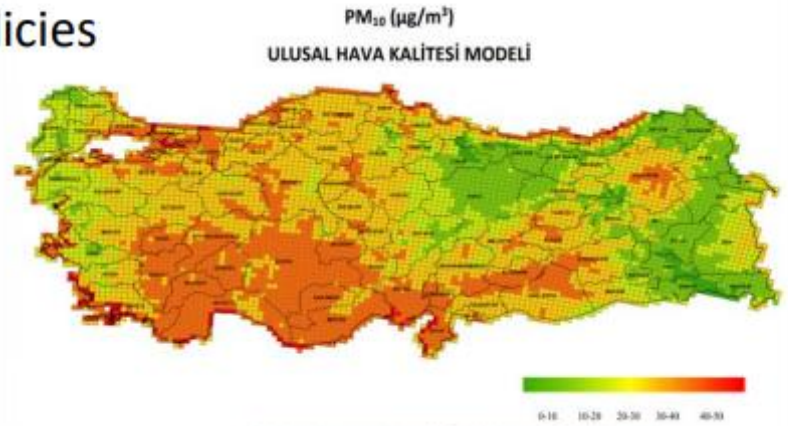
(HEY PORTAL)

Strategical air quality mapping by running meteorological and air quality models.

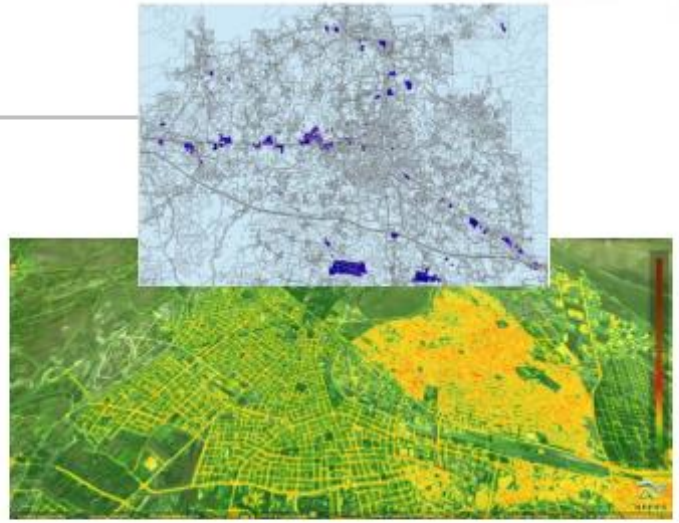
Air Quality Forecast;

National level map production; CHIMERE based results; Used and integrated for implementation/policies

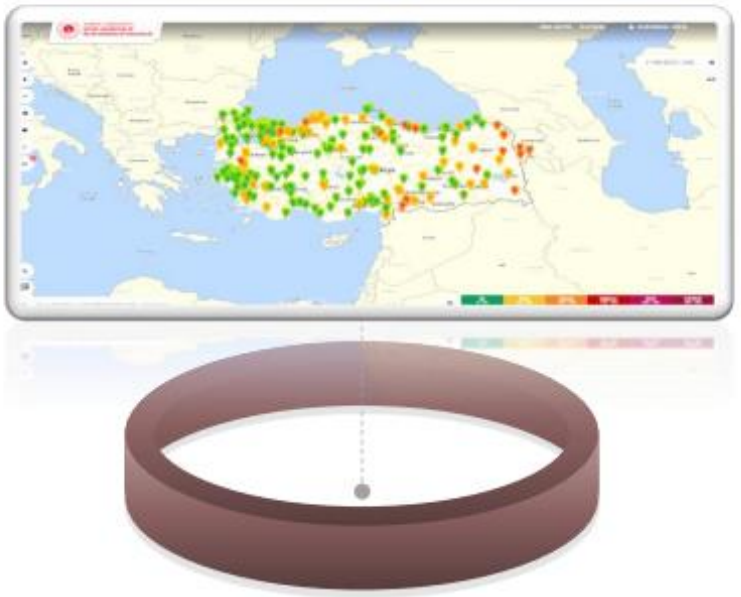




NEFES
NEW EMISSION FORECAST & EVALUATION SYSTEM



Air Quality Monitoring



DISSEMINATED WITHIN WHOLE COUNTRY

National Air Quality Monitoring Network in 81 provinces

ONLINE AVAILABLE

Measurement results are online at http://sim.csb.gov.tr/ website.

- 380 active monitoring stations

MEASUREMENT CONTENT

- All of these stations are equipped to measure SO_2 and PM_{10} and other selected pollutants
- No. of stations by pollutants:
  - ✓ SO_2 (324), PM_{10} (359)
  - ✓ CO(207), Nox(319), O_3(221)
  - ✓ $PM_{2,5}$ (189)

Air Pollution Mitigation Activities

DG for Environmental Management

BETTER AIR QUALITY

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

EMISSION INVENTORY &MONITORING

- Source-based control for air pollution; industrial, residential and transport together with legislative and electronic tools
- Online monitoring
- 8 Regional Clean Air Centers
- Reporting of National Air Emission Inventory since 2011

EMISSION REDUCTION STRATEGIES

- Exhaust Gas Electronic Monitoring System for vehicle emissions (EGEDES)
- Strategical Noise Maps; provinces, airports, roads…
- Sustainable production and consumption; Best Available Techniques for industrial processes
- 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

International Cooperation Activities

DG for Environmental Management

Capacity Building Training with Pakistan and North Macedonia

2025; 4 th September

Air Quality Management Topics and Digital tools were introduced

Priority Actions for Collaboration

Continuous follow on the UNEA and UN related international meetings; CLRTAP Convention Involvement in EMEP Steering Body Vice Chair position; Mrs İrde ÇETİNTÜRK GÜRTEPE

Task Force and Working Group related expert inclusion

Emission inventory progress

DG for Environmental Management

Thank you for your attention on behalf of the whole team under Air Management Department

Canan Esin KÖKSAL
Environmental Expert
cesin.koksal@csb.gov.tr

Break – back for 16:00 CET

FICAP

Forum for International Cooperation on Air Pollution

Discussion Points

- Discuss best practices and how to coordinate efforts by Parties in different regions.
- Discuss what gaps exist and whether Parties to the Convention could help fill these.

Outcome:

- An understanding of capacity building activities by Parties to the convention both within our region and outside of our region and potentially where there are gaps, overlaps, and complementarities exist between activities.

End of day 1 – see you tomorrow!

FICAP

Forum for International Cooperation on Air Pollution

FICAP

Forum for International Cooperation on Air Pollution

Third meeting of the Task Force for International Cooperation on Air Pollution (TFICAP) under the UNECE Convention on Long Range Transboundary Air Pollution (CLRTAP)

4th and 5th of November 2025

Day 2 - Wednesday 5th November Afternoon Session (14:00 – 17:00 CET) *(08:00 – 11:00 Canada / 1600 – 19:00 Georgia) All times CET
Introduction to day 2 14:00 – 14:15
• Co-chairs re-cap of Day 1 and introduction to Day 2
Theme 2: UNECE Air Convention cooperation with International and Global Initiatives (14:15 – 16:30) *(Short break between presentations and discussion)*
14:15 – 14:30 UNECE presentation on overview of capacity building and outreach
14:30 – 14:45 UNEP and CCAC joint presentation – UNECE contribution to AQMx,
14:45– 15:00 WHO presentation – updates on WHO latest work
15:00 – 15:15 AirQo presentation – recent activity
15:15 – 15:30 AfriCAN - Africa Clean Air Network
Short Break 15:30 – 15:45
Discussion 15:45 – 16:30

Next Presentation:
UNECE – overview of capacity building and outreach

FICAP
Forum for International Cooperation on Air Pollution

UNECE

45 YEARS 1979-2024 AIR CONVENTION

Capacity-building, awareness-raising, outreach and cooperation

TFICAP meeting, 5 November 2025

UNECE Twitter Facebook YouTube

Capacity-building and awareness-raising

Activities:

- National legislation analysis and development of NAP;
- Workshops on the implementation and use of BATs;
- Technical support on emission data reporting;
- Support to raise awareness and information sharing within the region (e.g. regular meetings in Geneva).

Results:

- Progress in emissions reporting and improved quality and completeness of reporting,
- Transposition of some provisions of the Protocols to domestic laws in some countries

Capacity-building and awareness-raising and outreach 2025/2026

2025

- National clean air dialogue in AM
- Air pollutant and GHG emission inventory workshops in UZ and KG

Ongoing:

- Air quality assessment studies and NAPs (AM, AZ, GE, MD, UA)
- BAT feasibility studies (GE: cement, metallurgy; AM: waste incineration)
- BAT incentives study for GE
- Country survey analysis on progress and needs
- Webinar on progress in beneficiary countries

2026 (funded activities)

- Subregional workshop on BATs for EECCA and WB countries
- Study tour on BATs (AM, AZ, GE, MD, UA)
- National workshop on BAT (GE)
- Study tour on BATs (GE)
- Elearning on BATs for GE
- Emission inventory workshops
- Clean Air Dialogue at global level

Photo credits: Ministry of Environment, Armenia

E-learning course on the Air Convention and its protocols

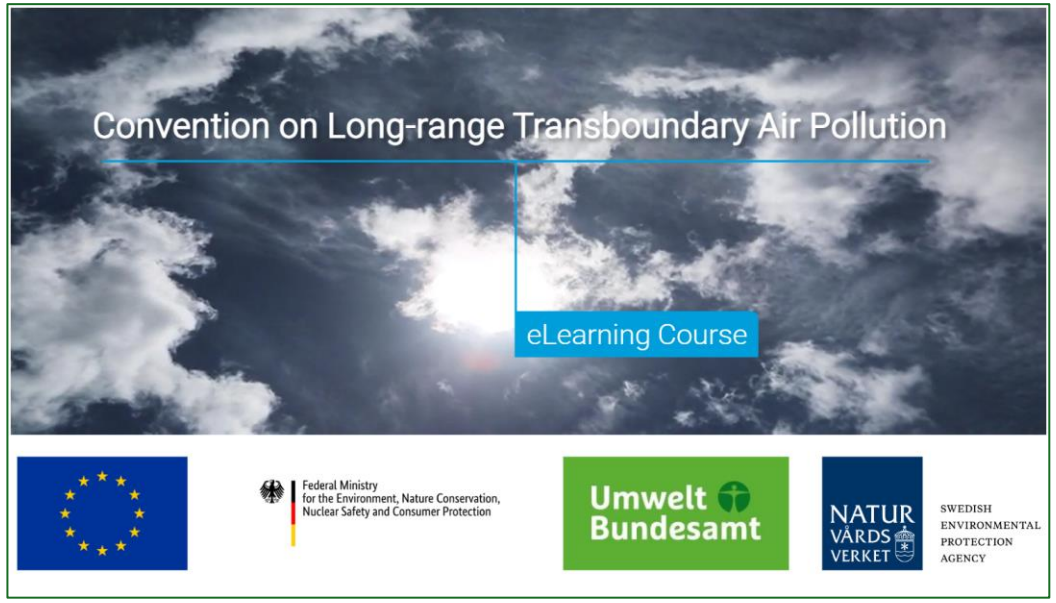
UN CC:e-Learn

Module 1: The Air Convention

Module 2: The Gothenburg Protocol

Module 3: The Protocol on Heavy Metals

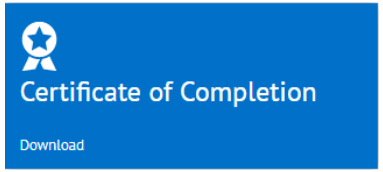
Module 4: The Protocol on POPs



Self-paced course

3.5 hours

English and Russian, soon in French and Spanish



Aim of the course

- Assist countries in addressing air pollution
- Improve air quality management
- Raise awareness on air pollution and its effects
- Improve learners' understanding of ways to prevent and reduce harmful emissions
- Promote Convention and its protocols as an international framework for cooperation on cleaner air

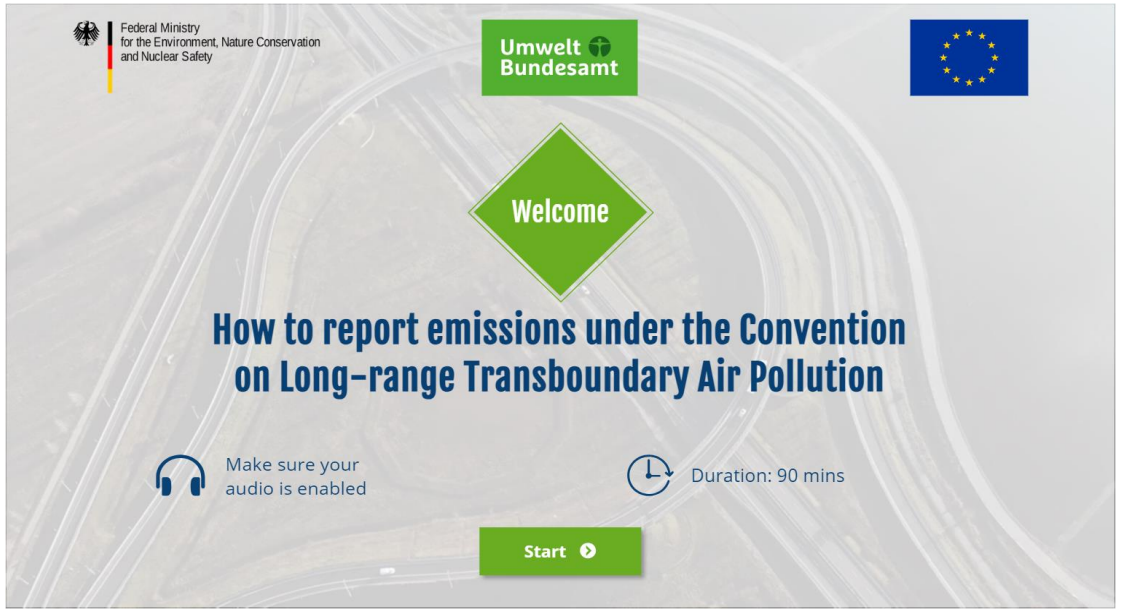
E-learning course on how to report emissions under the Air Convention

UN CC:e-Learn

Module 1: Purpose and scope of emission inventories

Module 2: Reporting process and templates

Module 3: Emission estimation methods



Self-paced course

1.5 hours

English and Russian

Certificate of Completion

Download

Aim of the course

- Assist countries in addressing air pollution and develop emission inventories
- Explain the importance of emission inventories for clean air policy development
- Explain the reporting process and requirements
- Explain methods for emission estimation

E-learning course monitoring air pollution effects under the Convention

UN CC:e-Learn

Module 1: Major effects of air pollution

Module 2: Effects-related work under the Convention

Module 3: Methodologies to monitor effects

Module 4: Use in policy-making

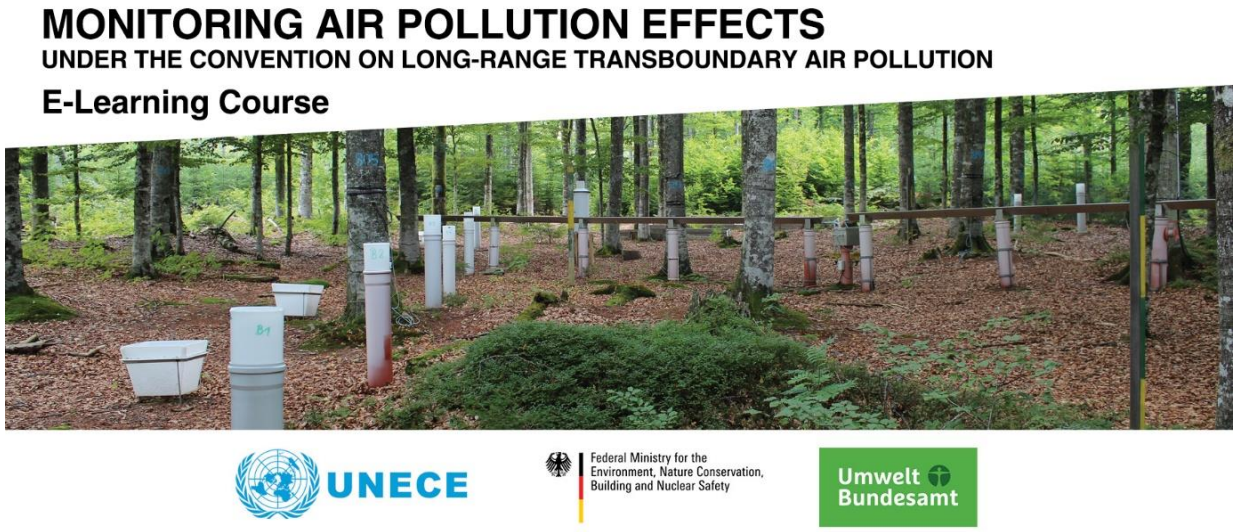
Self-paced course

1.5 hours

English

Certificate of Completion

Download



Aim of the course

- Assist countries in identifying the main effects of air pollution
- Outline the objectives of the effects-related work under the Convention
- Describe methods to monitor air pollution effects
- Outline how effects assessments can support policy-making

Thank you!

Carolin Sanz Noriega

UNECE

05 | 11 | 2025

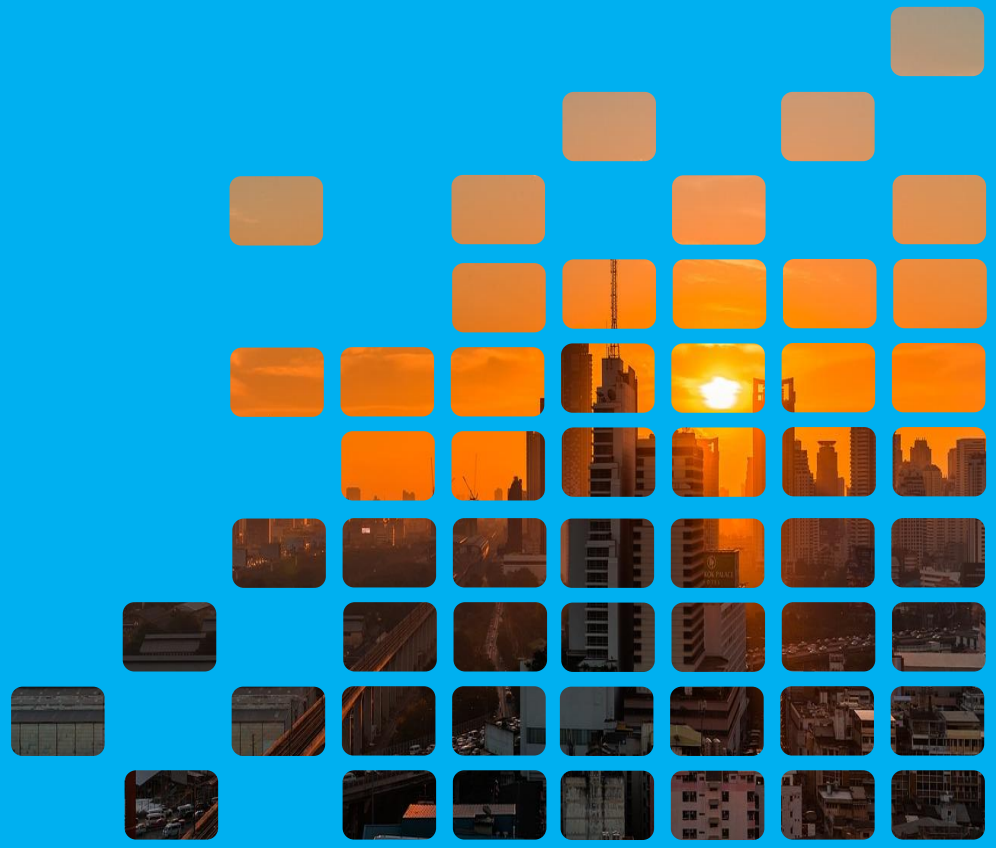
Next Presentation:
UNEP and CCAC– UNECE contribution to AQMx

UNEP Clean Air Updates

Task Force for International Cooperation on Air Pollution

5th November 2025

Soraya Smaoun
O.i.C Pollution & Health Unit
Coordinator – Air Quality



UNEP's air quality mandate

Promoting regional cooperation on air pollution to improve air quality globally

- ✓ Acknowledges progress made so far
- ✓ Encourages Member States and their partners to accelerate efforts
- ✓ Invites further regional cooperation, financing and goal-setting

Requests UNEP to:

to provide an **updated global online platform** for information sharing and communication

to form and facilitate a **cooperation network on air quality**

UNEA Resolution 6/10 **2024**

2022
UNGA Resolution 76/300
The human right to a clean, healthy and sustainable environment

2019
UNGA Resolution 74/212
International Day of Clean Air for blue skies

2018
UNEA Resolution 3/8
Preventing and reducing air pollution to improve air quality globally

2014
UNEA Resolution 1/7
Strengthening the role of the United Nations Environment Programme (UNEP) in promoting air quality

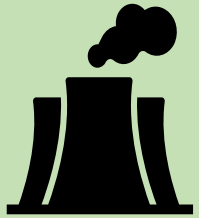
UN environment programme

UNEP's strategy for improving air quality

Vision:

Shift policies, practices and investments to reduce air pollution concentrations in key locations, to increase the number of people who breathe clean air; spur integrated approaches taking a One Atmosphere perspective.

Shifting Investments



- ✓ Guidance on air pollution control
- ✓ New industry standards
- ✓ Mobilizing new partnerships

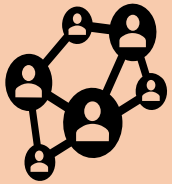
Strengthening Policy and Regulations

- ✓ Monitoring and legislative support
- ✓ Technical advice on sectoral interventions

Developing and Communicating Science

- ✓ Assessing health and environmental impacts
- ✓ Science-policy dialogues
- ✓ Prioritizing high-impact issues

Amplifying Advocacy and Networks



- ✓ UN integration
- ✓ High-level political commitment
- ✓ Regional collaboration

UN environment programme

Ongoing efforts to enable a global shift towards clean air

Drive investment and forge new partnerships to track air pollution across value chains

- A **2025-2027 CAF-funded project** will strengthen the capacities of companies to measure, report, and reduce air pollution and advocate for clean air.
- Ongoing work with UNEP-FI on **new pollution guidance for banks**.

Keep policy progress under review and provide guidance for policy, regulatory and sectoral action

- New **Policy Tracker** will allow users to compare national approaches and identify opportunities for support.
- The **AQMx** platform provides technical tools and models, data, and knowledge to build capacity among air quality managers globally.

Strengthen demand and political support for clean air

- Sixth **International Day of Clean Air for blue skies** held #Racingforair
- Support to the **South African G20 Presidency**, including through a technical paper on air quality.
- Side event on air quality at **UNEA-7** to take stock of progress implementing UNEA Resolution 6/10.

Connect countries, sectors and stakeholders to upscale action through international and regional cooperation mechanisms

- 70 Member States have nominated focal points for the **Global Air Quality Cooperation Network.**
- Support to **regional cooperation platforms** and **communities of practice.** (see next slide)

UN environment programme

Supporting regional cooperation

West Asia

- ✓ Established the West Asia Air Quality Network

Central Asia

- ✓ Central Asia Air Quality Platform
- ✓ Hosted the first high-level regional dialogue on clean air action

Latin America and the Caribbean

- ✓ Adoption of a new Regional Action Plan on Air Quality 2026 – 2029

Asia and the Pacific

- ✓ 5th APCAP Joint Forum
- ✓ Development of the EANET 5th Medium-term Plan
- ✓ Collaboration with ESCAP on RAPAP implementation

Africa

- ✓ Africa Clean Air Programme (ACAP)
- ✓ SADC Clean Air Workshop and webinar

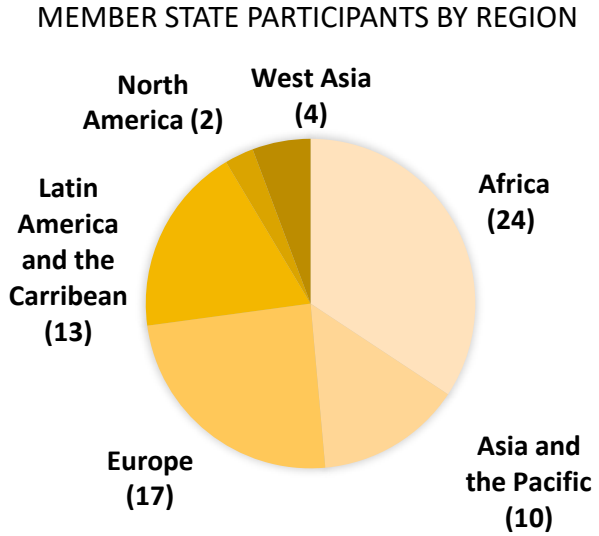
UN environment programme

Global Air Quality Cooperation Network

2. *Requests* the Executive Director of the United Nations Environment Programme, subject to the availability of resources, to form and facilitate a cooperation network on air quality, working with interested Member States, members of specialized agencies, secretariats of United Nations entities, including of the United Nations regional commissions and relevant multilateral environmental agreements,[4] and international, regional and subregional bodies, organizations and initiatives,[5] that would, inter alia:

Network formation:

- All MS's invited to express interest and nominate focal points (20th Dec 2024-20th Jan 2025).
- 70 Member State's nominated 1-2 Focal Points (so far).



First Network meeting held on 24th March 2025 in Cartagena, Colombia

UN environment programme

Thank you for listening!

UN environment programme

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Air Quality Coordinator
Soraya.smaoun@un.org

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www.unep.org

CLIMATE &
CLEAN AIR
COALITION
TO REDUCE SHORT-LIVED
CLIMATE POLLUTANTS

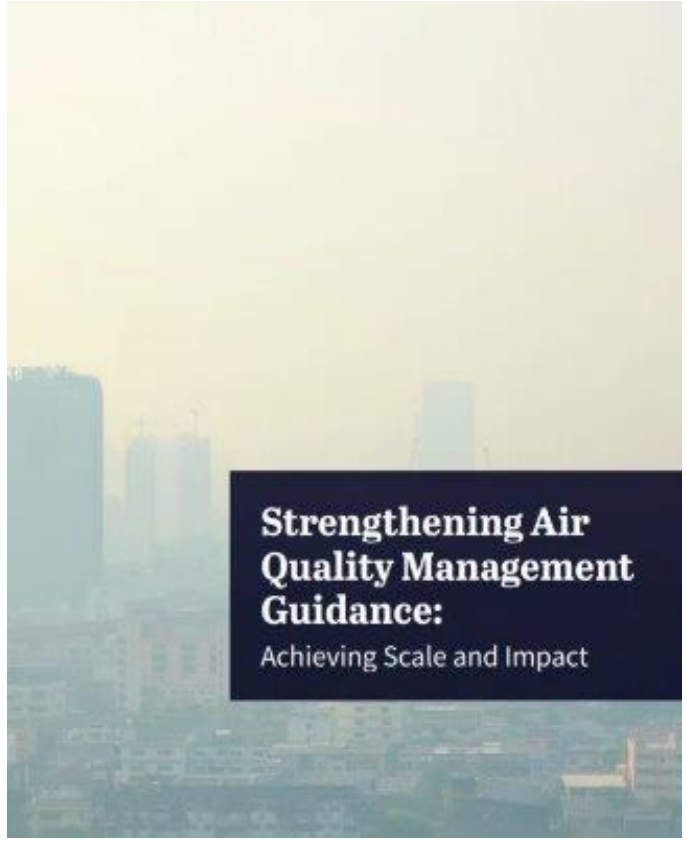
CLIMATE & CLEAN AIR COALITION
TO REDUCE SHORT-LIVED CLIMATE POLLUTANTS

CLEAN AIR FLAGSHIP

CLIMATE & CLEAN AIR COALITION
TO REDUCE SHORT-LIVED CLIMATE POLLUTANTS

1. **Amplify and strengthen multi-level governance**, cooperation and capacity on integrated climate and air quality management
2. **Strengthen science communication** to support policy action and fill critical information gaps, especially on the economic cost and benefits of climate and clean air action
3. **Elevate air quality agenda** through advocacy
4. **Promote transparency to encourage private sector action** on integrated climate and air quality management
5. **Mobilize finance** for the air quality agenda

The need for a global knowledge platform on air quality



UNITED NATIONS

UNEP/EA.6/Res.10

United Nations Environment Programme

UNEP

Distr.: General
5 March 2024

Original: English

United Nations Environment Assembly of the United Nations Environment Programme
Sixth session
Nairobi, 26 February–1 March 2024

Resolution adopted by the United Nations Environment Assembly on 1 March 2024

6/10. Promoting regional cooperation on air pollution to improve air quality globally

The United Nations Environment Assembly,

Recalling its resolution 1/7 of 27 June 2014 on strengthening the role of the United Nations Environment Programme in promoting air quality and its resolution 3/8 of 6 December 2017 on preventing and reducing air pollution to improve air quality globally, and noting World Health Assembly resolution WHA68.8 of 26 May 2015, entitled "Health and the environment: addressing the health impact of air pollution", and General Assembly resolution 74/212 of 19 December 2019 on the International Day of Clean Air for Blue Skies,

Recognizing that air pollution, including fine particulate matter and tropospheric ozone and their precursors, is one of the greatest environmental risks to health and that populations living in vulnerable situations are disproportionately exposed to air pollution and have a higher risk of associated negative health impacts and premature death,[1]

Underscoring the need to elevate efforts at all levels of government, by environmental and health organizations and by the private sector to collaborate on addressing the significant impacts of air pollution, in accordance with the Sustainable Development Goals,

Acknowledging the progress achieved by existing bodies and initiatives that facilitate cooperation on in-country and transboundary air pollution, including the Convention on Long-range Transboundary Air Pollution;[2] the meteorological synthesizing centres of the Economic Commission for Europe and its Task Force for International Cooperation on Air Pollution; the *Integrated Assessment of Air Pollution and Climate Change for Sustainable Development in Africa*[3] and its proposed Africa clean air programme; the Climate and Clean Air Coalition to Reduce Short-lived Climate Pollutants and its recently launched Clean Air Flagship 2024–2026 fact sheet; the air quality work programme under the Fifth Montevideo Programme for the Development and Periodic Review of Environmental Law; and the Acid Deposition Monitoring Network in East Asia,

Recognizing that air pollution also has significant adverse effects on ecosystems, leading to loss of biodiversity,

[1] World Bank, "Pollution", 19 Sept. 2023. Available at https://www.worldbank.org/en/topic/pollution (accessed on 28 Jan. 2024).
[2] United Nations, *Treaty Series*, vol. 1302, no. 21623.
[3] United Nations Environment Programme, *Integrated Assessment of Air Pollution and Climate Change for Sustainable Development in Africa* (Nairobi, 2022).

K2404182[E] 090424

CLIMATE & CLEAN AIR COALITION TO REDUCE SHORT-LIVED CLIMATE POLLUTANTS
a UNEP convened initiative

1.5°C

CCAC-DEC2023-02

CLEAN AIR FLAGSHIP 2024-2026

At the Climate and Clean Air Ministerial 2022, CCAC Partners requested a new effort to achieve clean air across the world. At the Climate and Clean Air Ministerial 2023, the CCAC is launching a "Clean Air Flagship" to mobilise the partnership and 'move the needle' on this important topic. It is aimed at:

Saving lives	Supporting governments to achieve cleaner air as quickly as possible, consistent with improved WHO air quality interim targets
Slowing climate change	Taking full advantage of win-win opportunities to reduce the emissions of short-lived climate pollutants simultaneously with other harmful pollutants
Maximizing co-benefits	Improving agricultural productivity, economic development and the overall quality of life

To achieve those aims, we ask the CCAC through joint and individual efforts, including CCAC project funding, to:

1. **Amplify and strengthen** regional and multi-level governance, cooperation and capacity on integrated climate and air quality management;
2. **Strengthen science communication** to support policy action and fill critical information gaps, especially on the economic cost and benefits of climate and clean air action, and through integrated inventories, monitoring and air pollution modeling;
3. **Elevate the air quality agenda** through advocacy, by highlighting readily available solutions, providing capacity support for data and implementation, and reinvigorating the BreatheLife Network;
4. **Promote transparency** to encourage private sector action on integrated climate and air quality management; and
5. **Mobilize finance** for the air quality agenda by raising US$30-40 million through a Clean Air Sprint.

Immediately in 2024 we will:

- Convene a Clean Air Task Team of all interested partners to guide the Flagship;
- Launch a knowledge platform for air quality managers and host national and sub-regional technical and advocacy workshops;
- Support country-driven projects on air quality including on National Clean Air and SLCP Plans;
- Re-invest in BreatheLife and engage with key partners in a new campaign to be launched on Clean Air Day in 2024; and
- Convene a series of Ministerials including a Joint Climate and Health Ministerial on the margins of the WHO Global Conference on Air Pollution and Health.

Air pollution is associated with ~7 million premature deaths annually

2.4 billion people are exposed to dangerous levels of household air pollution

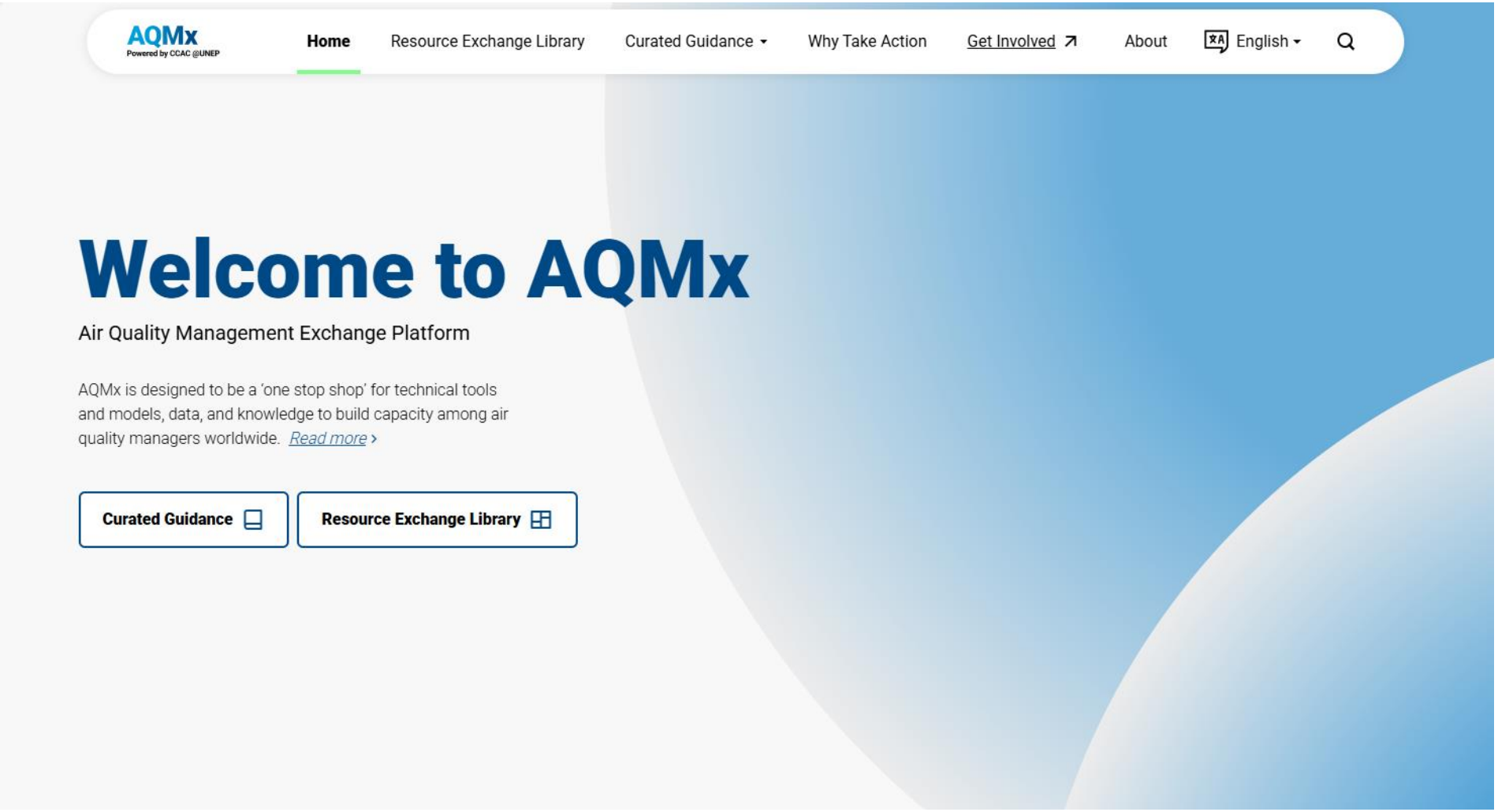
On average, up to 15% of some crops are lost each year due to air pollution

99% of the world breathes unsafe air

Costs of health impacts: US$8.1 trillion per year

Air Quality Management Exchange Platform

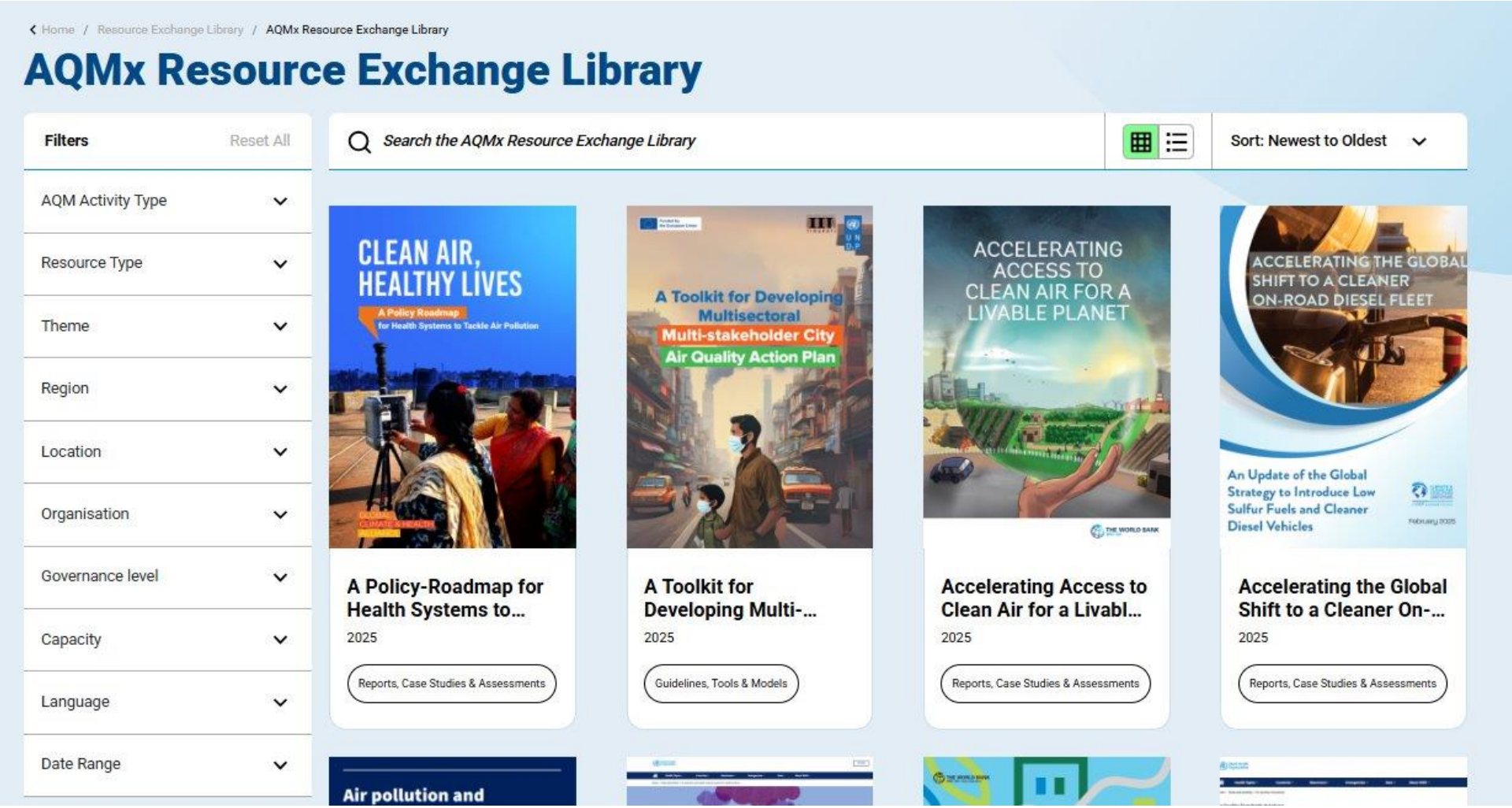
A one-stop-shop for knowledge and guidance on air quality management



Air Quality Management Exchange Platform

- Databases
- Tools
- Models
- Reports
- Case studies
- Scientific publications
- Standards and regulations

Over 1,000 resources, frequently updated



Air Quality Management Exchange Platform

Curated Guidance for 8 areas of Air Quality Management

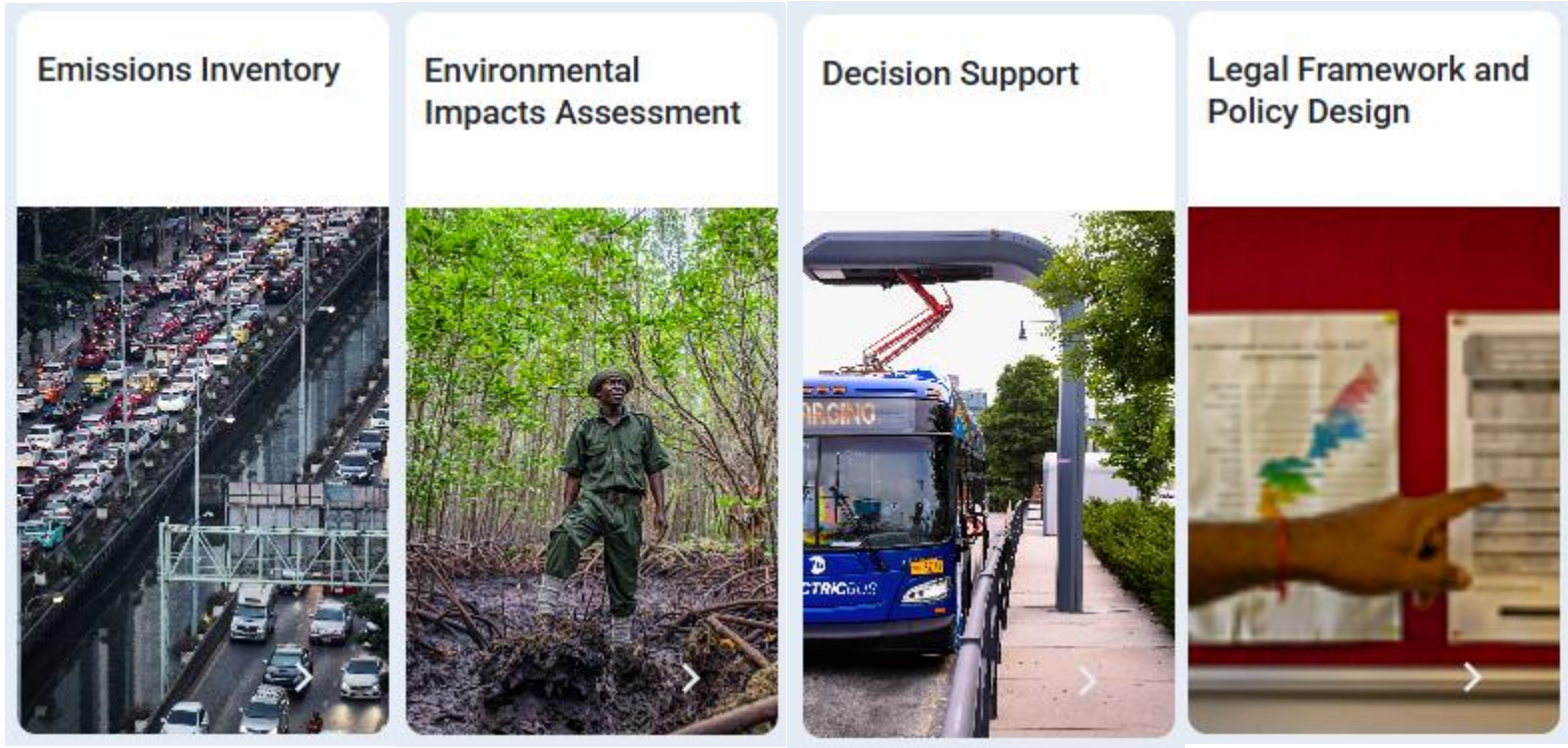
- Stages 1, 2, 3: available
- Stages 4,5: launch in 2026

Contribution of UNECE/LRTAP to AQMx Library

- **75 resources** from UNECE/LRTAP and affiliated bodies currently available on the AQMx Library
- Need to take a **more consistent approach** with organisations listed as authors: ongoing discussion with UNECE, other organisations welcome to give their views

Contribution of UNECE/LRTAP to AQMx Guidance

- Active contribution of UNECE/LRTAP to the **review of AQMx Guidance**



AQMx Next Steps: Sectoral Mitigation Guidance

Agriculture:

Agriculture Residue Management

Household Energy:

E-Cooking

Transportation:

Fuel Quality

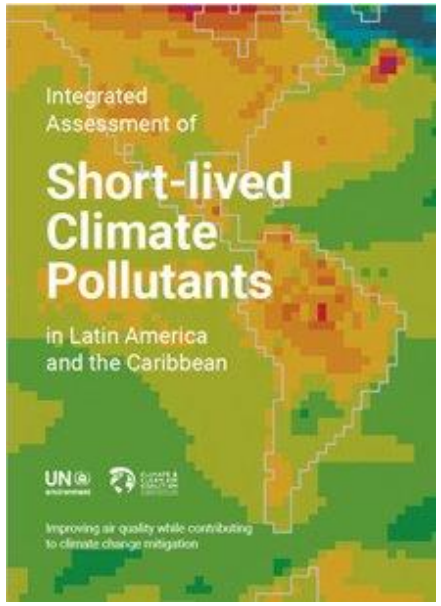
Vehicle Emission Standards

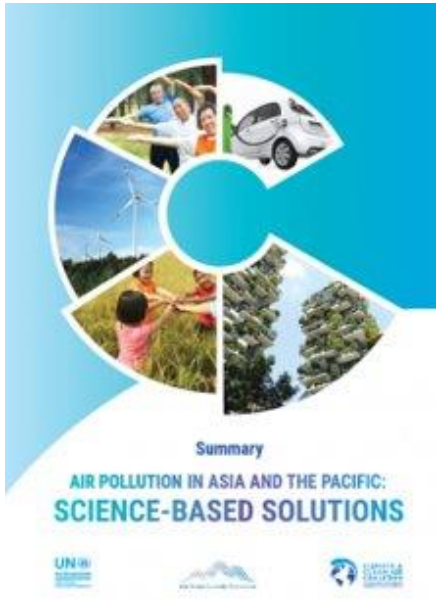
Inspection and Licensing Systems

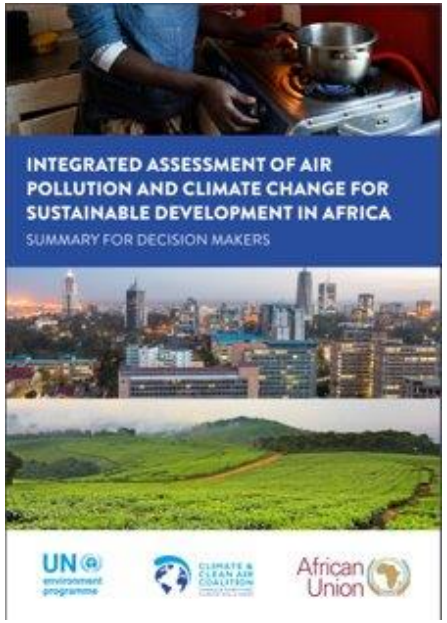
Waste Management:

Elimination of Open Waste Burning

Sectoral Mitigation Guidance aligned with measures identified in CCAC Regional Integrated Assessment







Launch of first set of Guidance: end of 2025

AQMx Next Steps: Regional knowledge hubs

Potential content of AQMx regional knowledge hubs:

- Establish a **common platform to share information, success stories, and lessons learned** (users will be able to suggest content through a contact form)
- Set up an **online repository** for region or subregion-specific guidance and best practices
- List (sub)region specific **partners, donors, implementers**
- List **training and capacity-building opportunities**
- List ongoing call for proposals and other **funding opportunities**
- Provide **roster of experts** for the region that can support requests for one-to-one guidance
- (Sub)regional **air quality fact sheets** (air pollution levels, sources, health and other impacts, key stakeholders…)

Future cooperation with UNECE/LRTAP

- Periodic upload of new **UNECE/LRTAP knowledge products on AQMx Library**
- Development of **AQMx Sectoral Guidance for Fossil Fuels** (production): draw upon expertise of LRTAP and especially **TFTEI**
- Proposal to contribute to future **AQMx Guidance on regional cooperation for AQM**, supporting the future Regional Knowledge Hubs, and drawing on key **principles and best practices from LRTAP**

AQMx Focus Group

Join the AQMx Focus Group to contribute to the development of new content and functionalities for the platform!

https://forms.office.com/e/Tru25jpRrN

CLIMATE & CLEAN AIR COALITION
TO REDUCE SHORT-LIVED CLIMATE POLLUTANTS

Thank you for your attention!

amanda.brown@un.org
juliette.laurent@un.org

Next Presentation:
WHO – updates on WHO latest work

FICAP
Forum for International Cooperation on Air Pollution

Update on WHO activities related to air pollution and health

5 November 2025 (online)

Task Force for International Cooperation on Air Pollution

Dr Sophie Gumy
Environment, Climate Change and Health, World Health Organization

World Health Organization

Overview

1. 2nd WHO Conference on air pollution and health - outcomes
2. WHO road map on air pollution and health
3. Other WHO Activities

World Health Organization

READ THE COMMITMENTS

WHO 2nd global conference on air pollution and health

25-27 March 2025 ¦ Cartagena, COLOMBIA

co-organized with the Government of Colombia

- **Major commitments** from over 50 countries, cities and organizations
- **New shared goal**: 50% reduction in health impacts from anthropogenic sources of air pollution by 2040
- Nearly **50 million health professionals**, patients, advocates, representatives from civil society organizations, and individuals worldwide signed **clean air call to action**

Building international momentum for clean air prescriptions

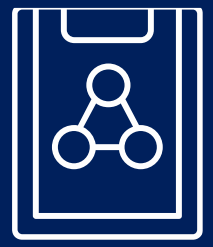
- WHO 2nd global conference on air pollution and health
- Updated road map for enhanced global response to the adverse health effects of air pollution (EB156/24, WHA78)
- Promoting and prioritizing an integrated lung health approach (EB156/19, WHA78 May 2025)
- Political declaration of 4th HLM on NCDs (UNGA, Sep 2025)

WHA Updated air pollution road map – New Voluntary target

50% reduction in health impacts from anthropogenic sources of air pollution by 2040 (*relative to 2015 baseline values*)

Updated road map is organized into four categories:

Knowledge and evidence



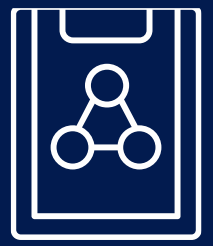
Measuring progress

Institutional Capacity-strengthening

Global leadership and coordination

WHA road map on AP: https://apps.who.int/gb/ebwha/pdf_files/EB156/B156_24-en.pdf

What WHO intends to track for health sector's response to air pollution



Governance/Policy/Finance

- Normative – health-based air quality standards
- Health engagement in multi-sectoral decision-making
- Monitoring for health impacts
- Financial and human resource allocation in heath sector

Institutional Capacity

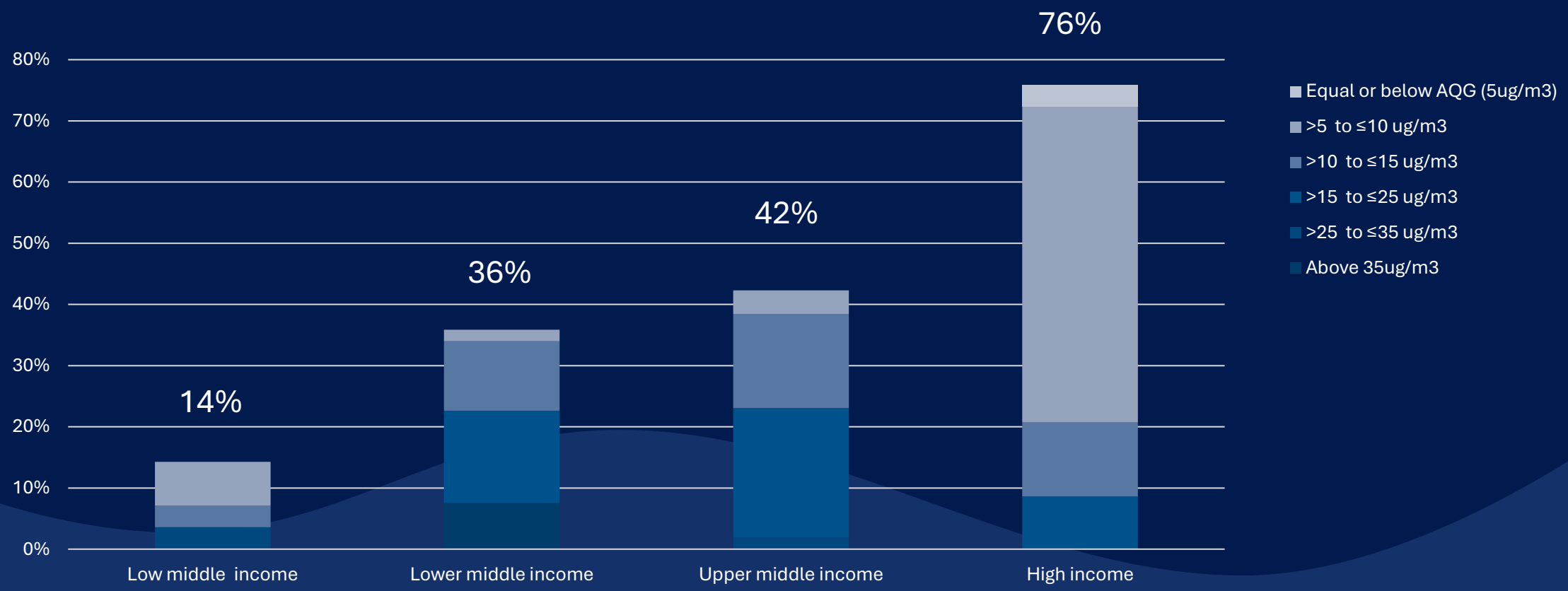
- Health professional training
- Health surveillance systems
- Health-based tools and resources used to inform multisectoral decision-making

Leadership/Advocacy

- Advocacy or awareness-raising
- Health promotion integration
- Research prioritization
- Stakeholder engagement

Air quality standards aligned with WHO Air Quality Guidelines

Inequity across income groups



and the need for legal enforcement!

Note: For the EU 27 countries, the new value of 10 mg/m^3 is considered.
Word Bank Income region 2023.
Source: WHO Air Quality Standards database: interactive tool (update 2025). Version 2.2. Geneva, World Health Organization, 2025.

WHO’s actions for clean air for public health

Knowledge, Evidence & Measuring Progress

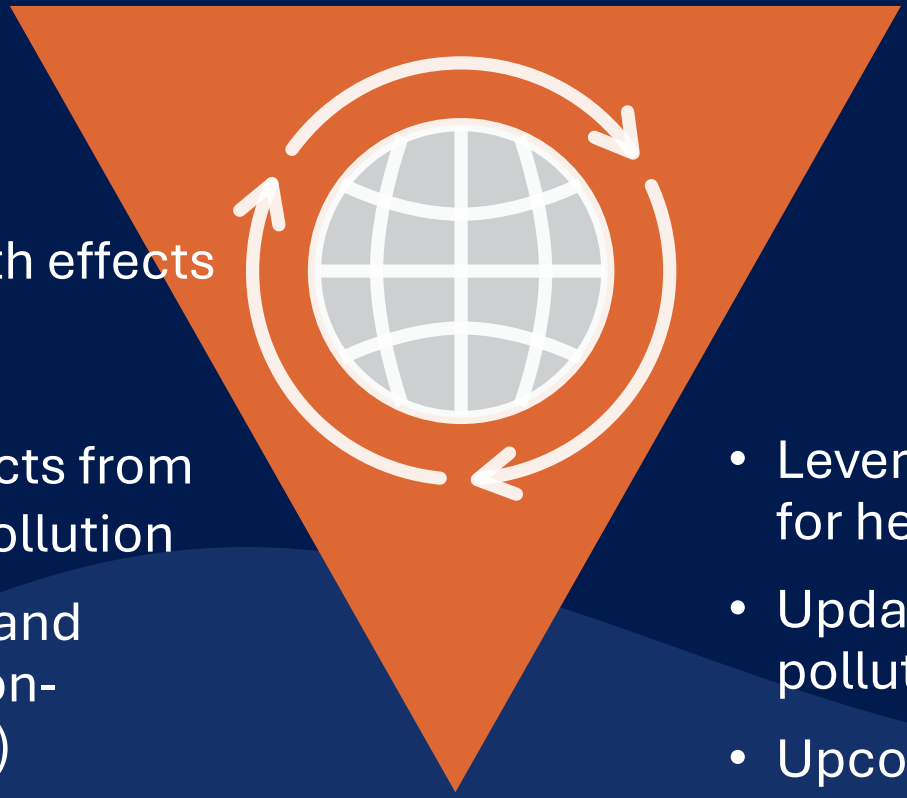
Institutional Capacity Building & Technical Support

Leadership & Coordination

WHO strategy on air quality, energy and health : https://www.who.int/publications/i/item/9789240114968

Ongoing WHO's actions

Knowledge, Evidence & Measuring Progress



In a snapshot:

- Systematic reviews of the health effects of black carbon

- Methodologies for health impacts from fossil fuels attributable to air pollution
- Methodology for development and evaluation of "best buys" for non-communicable diseases (NDC)
- Update of the WHO indoor air quality guidelines : household fuel combustion

- Leveraging clean household energy for heating
- Update of SDGs related to air pollution & health
- Upcoming WHO/UNICEF report on children's health and air pollution

Ongoing WHO’s actions

Institutional Capacity Building & Technical Support

In a snapshot:

- Updates / New modules as part of the Air Pollution and Health Toolkit
- Regional trainings on WHO tools (e.g. CHEST, BAR-HAP, AirQ+)
- Country support for the quantification of health benefits from nationally determined contributions
- Electrification of health care facilities

Ongoing WHO’s actions

In a snapshot:

- Tracking conference commitments with UN partners under Breathe Life
- Keeping the political momentum in high-level coalitions & country engagements (NCD, climate)
- Advocacy on the road map target
- Re-definition of WHO expert groups after WHO’s reprioritization, leveraging synergies with mandates from other UN partners
- Multi-partner engagement within ATACH on air quality
- Leveraging and engaging health community

Leadership & Coordination

SDG Indicators related to air pollution and health

SDG 3.9.1: Mortality from air pollution

SDG 7.1.2: Percentage of population with primary reliance on clean fuels and technologies at the household level

SDG 11.6.2: Annual urban mean concentration of particulate matter (PM2.5), population-weighted

Country consultation ongoing

Close collaboration with WMO and UNEP

https://www.who.int/teams/environment-climate-change-and-health/air-quality-energy-and-health/health-impacts/health-science-and-policy-summaries

Health science and policy summaries

17 July 2025

Transboundary cooperation for our shared air: protecting public health

Download Read More

17 July 2025

Health and air pollution co-benefits of climate change mitigation

Download Read More

17 July 2025

Agriculture: sectoral solutions for air pollution and health

Download Read More

17 July 2025

Exposure to health damaging air pollutants

Download Read More

17 July 2025

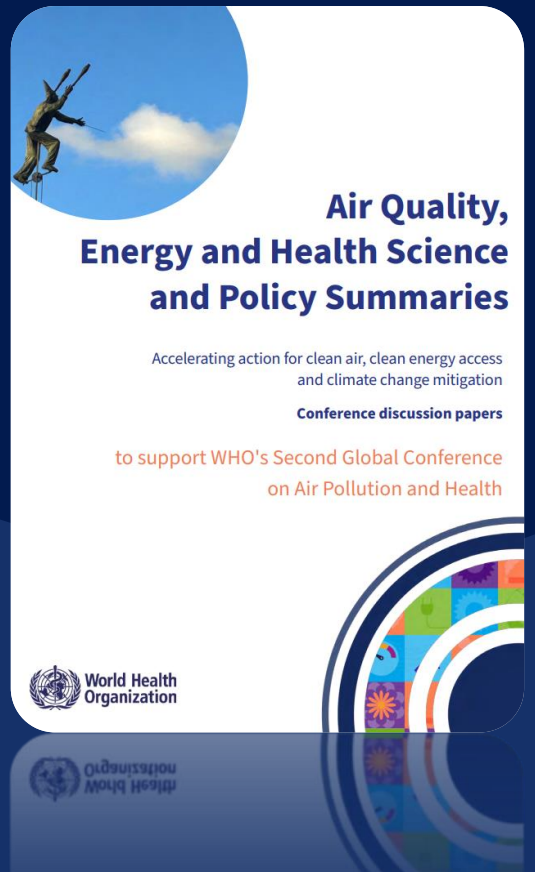
Air quality legislation and implications for health

Download Read More

4 September 2025

Understanding the health impacts of sand and dust storms

Download Read More



WHO’s upcoming activities on air pollution, energy and health

- Health pavilion at COP30 in Brazil & Health Day 13 November
- Launch of the Estimation of morbidity of air pollution and its economic costs (*coming 2026*)
- Updated SDG indicators 3.9.1 (mortality from air pollution) and 11.6.2 (air quality in cities)
- WHO/UNICEF report on children, air pollution and health (*coming 2026*)
- Health pavilion at COP30 in Brazil & Health Day 13 November

Thank you!

Heather Adair-Rohani, Karla Cervantes Martinez, Pierpaolo Mudu, Aubrey Musngi-Anouar, Abraham Mwaura, Maria Ordonez, Samantha Pegoraro, Paul Safar, Kerolyn Shairsingh, Ludmila Svobodova, Cristina Vert, Salvatore Vinci, and Wenlu Ye

Environment, Climate change and Health
World Health Organization

Next Presentation:
AirQo

FICAP
Forum for International Cooperation on Air Pollution

Scaling up continuous air quality data and evidence-driven actions across Africa: Experiences from AirQo

Deo Okure, Engineer Bainomugisha
AirQo, Makerere University

airqo
Breathe Clean.

MAKERERE UNIVERSITY

About AirQo (www.airqo.africa)

Founded in 2015 at Makerere University, to close the gaps in air quality management in Africa, through leveraging technology innovation to drive action.

Vision

Clean air in all African cities

Mission

To collect, analyse and forecast air quality data and work with partners to reduce air pollution and raise awareness of its effects in African cities.

airqo
Breathe Clean.

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AQ management strategies implemented in Africa over the last 20 years

What AQ management strategies have been (*are being*) implemented in Africa between 2000-2019?

Technology

- Household cleaner cooking alternatives - 86%
- Household energy other than cooking - 8%
- Air quality management technologies - 4%
- Green mobility - 2%

75%

Policy

- Interventions represented a mix between air quality management plans, tobacco control, enabling legislation for investment in projects with co-benefits for air quality

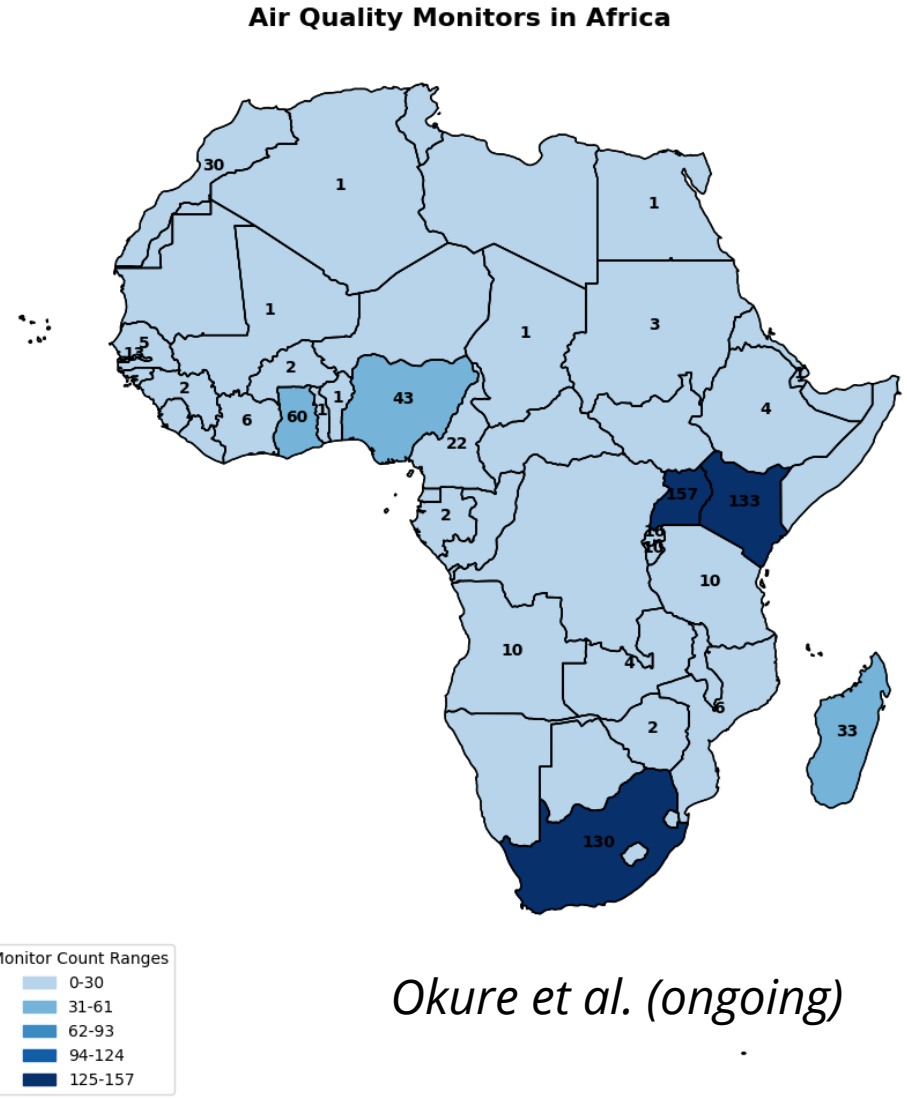
20%

Education/Behavioural change

5 %

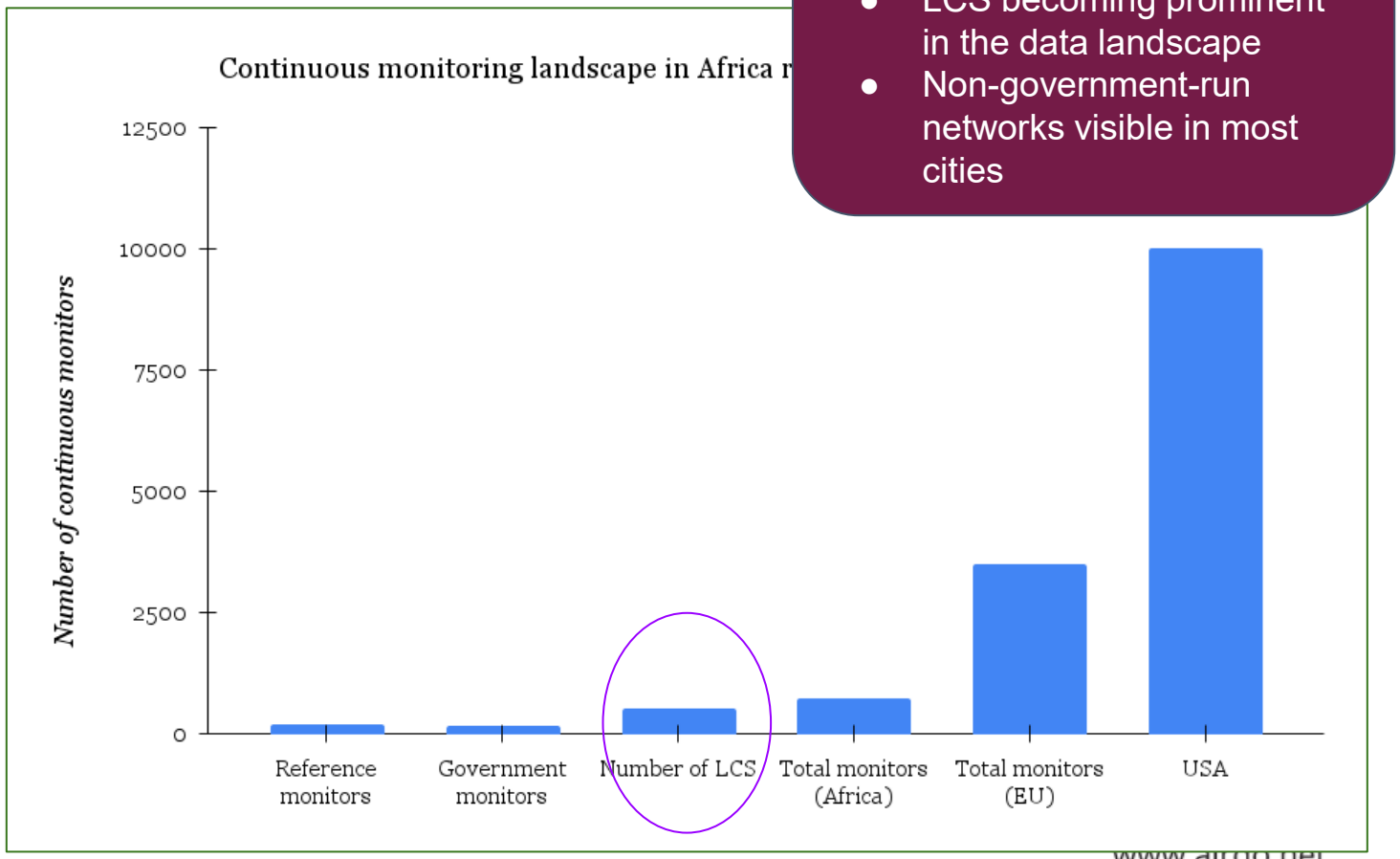
Gabriel Okello, Rebecca Nantanda, Babatunde Awokola, Meelan Thondoo, Deo Okure, Lambed Tatah, Engineer Bainomugisha, Tolu Oni (2023), Air quality management strategies in Africa: A scoping review of the content, context, co-benefits and unintended consequences, Environment International,Volume 171, 2023, 107709, ISSN 0160-4120,

Continuous monitoring in Africa is evolving ↑



Okure et al. (ongoing)

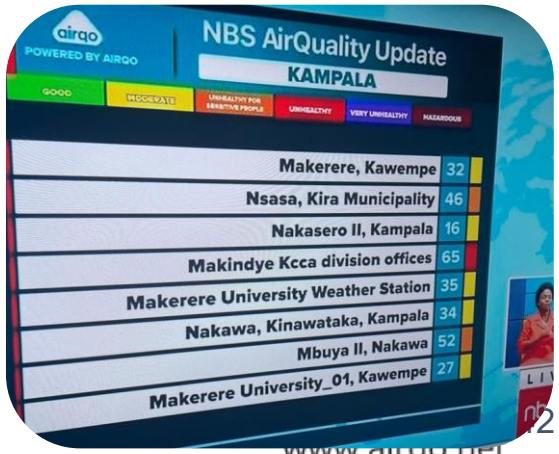
- A number of countries have no access to continuous monitoring
- LCS becoming prominent in the data landscape
- Non-government-run networks visible in most cities



Scalable end-end monitoring infrastructure

- Portable sensors for decentralised monitoring networks
- Open-source cloud-native/platform for network management
  - Cloud-based calibration
  - Tools for network managers to analyse sensor network performance
- Community-aware digital platforms to enable access (Mobile App, web platform, API)

https://analytics.airqo.net/user/home



Ongoing priorities and future direction

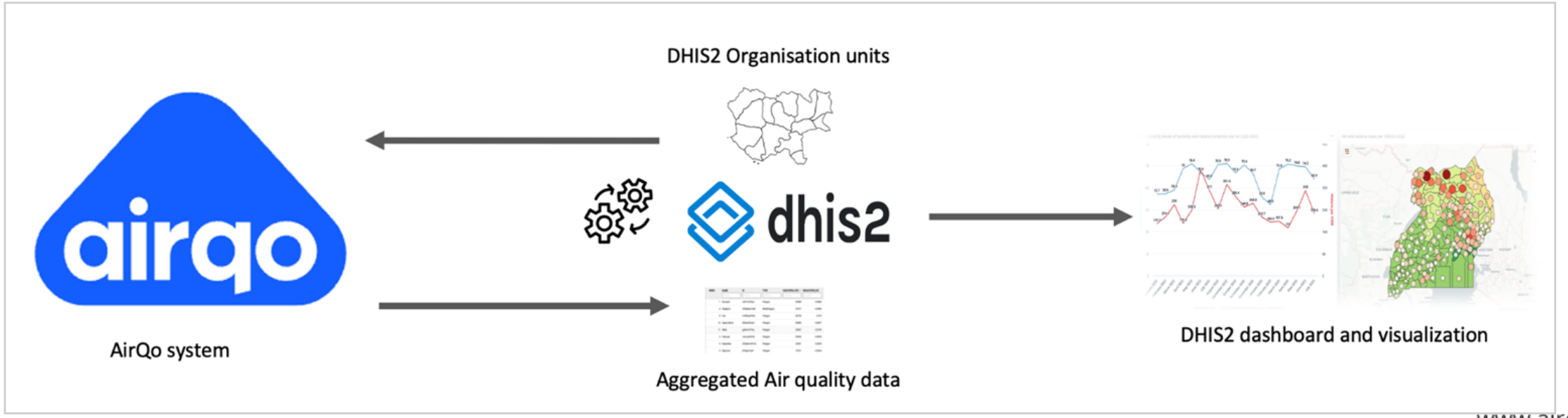
Strengthening data flows and use of LCS

- Network development
  - Develop digital tools to optimise sensor placement
- Data credibility
  - Digital registry of reference monitors in Africa
  - Scaling localised calibration
- Data access
  - Personalised recommendations
  - Enhancing API applications and interoperability
  - Data governance and responsible data sharing

Moving to “one data”: health+AQ dataset

Integrating Air Quality and Health Data for Resilient Health Systems

- Evidence links air pollution exposure to adverse health outcomes
- AQ and health data systems remain largely siloed
- A case study that demonstrates the design and implementation of the integration of the AirQo platform



Reflections

1. Shared air quality challenges across the continent
   a. Limited access to ground monitoring data
   b. Enabling mechanisms for collaborations
   c. Growing, but limited awareness and public participation
   d. Participatory policy development
2. Resources for robust interventions *can be* prohibitive for low-resourced cities, and *bolsters* the need *for* new approaches and holistic models
3. Need to scale up coordinated efforts grounded on evidence-driven collaborations

airqo
Breathe Clean.

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Next Presentation:
Africa Clean Air Network

FICAP

Forum for International Cooperation on Air Pollution

Africa Clean Air Network

Enabling cross-border partnerships for science-driven actions in Africa

Deo Okure and Pallavi Pant

November 2025

The mission of *Africa Clean Air Network* (AfriCAN) is to build cross-border, cross-sector, multi-skilled partnerships that deliver scalable, evidence-driven and open-access clean air solutions for African cities.

Le réseau African d’air pur a pour mission de promouvoir les partenariats transfrontaliers et intersectoriels qui offrent des solutions innovantes, évolutives, et fondée sur les faits pour les villes Africaines.

Goals

Connecting people and ideas
Connecter les individus aux idées

Increasing awareness
Sensibiliser le public aux problèmes liés à la pollution atmosphérique

Growing open data capacity
Renforcer les capacités en matière de données ouvertes

Helping to turn data into policy change
Aider à transformer les données en changements de politique

57 Partners and growing

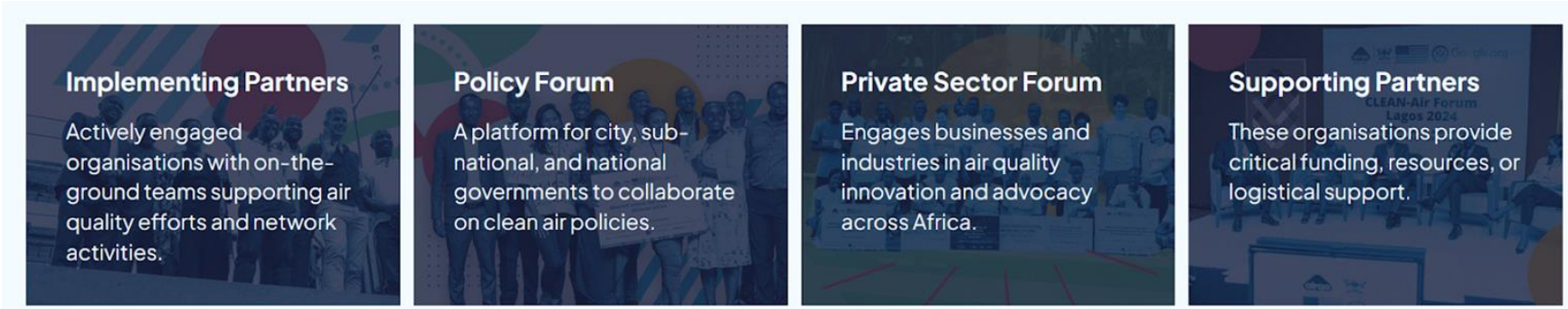
15 Government
23 Academia/Research
15 Non Government Organisations and civil society
4 Private sector

Network Governance Gouvernance

Convenors Animateurs de réseau

Secretariat | **Advisory Council**
Secrétariat | Conseil Consultatif

Partners Partenaires



Strategic Priorities

Enabling cross-border knowledge exchange and collaboration

- Annual CLEAN-Air Forum
- Webinars, trainings, and workshops
- Spotlight African case studies/success stories

Strengthening the open air quality data systems

- Coordinated application of locally relevant tools e.g LCS, AI, and modelling at city and national levels
- Provide dedicated support for expansion of air quality monitoring

Strengthening science-policy pathways

- Capacity strengthening for research and publications
- Promoting peer-learning and collaborations
- Strengthening the capacity for evidence-based policy action

Ongoing Activities

Bolstering evidence and strengthening capacity

- Clean Air Journal Special Issue (https://cleanairjournal.org.za/)
- Peer Editing Support (Sign-up)
- Partner-led events to spotlight new data, tools, and resources
- Showcasing African success stories through partnership with regional and global programs (e.g., South-South event at Better Air Quality Conference 2026)

Sensor Bank Scheme

- Support expansion of air quality monitoring across African cities
- AirQo and AirGradient have generously donated to the scheme so far

Annual CLEAN-Air Forum 2026 (South Africa)

- Consolidating strategic partnerships with South Africa-based institutions

CLEAN-Air Forum

Flagship event of the Africa Clean Air Network

- A platform to convene stakeholders to foster knowledge sharing, collaboration, and cross-border partnerships.
- Typically jointly hosted by the local government and a research institution/civil society organisation.

Past editions were held in Kampala (Uganda), Lagos (Nigeria), and Nairobi (Kenya)

The 2025 edition brought together ~390 participants from more than 35 countries for deliberations on the theme "*Partnerships for Clean Air Solutions*"; 77% of the speakers were from Africa.

Call to action Appel à l'action

Join! Rejoignez le réseau!

Engage Engagez-vous

Spread the word Faites passer le mot

https://cleanairafrica.org/

network@cleanairafrica.org

Break – back at 16:05 CET

FICAP

Forum for International Cooperation on Air Pollution

Discussion Points

- Discuss how the UNECE Air Convention Parties can further contribute to and cooperate with the initiatives presented.
- Discuss what topics of information, tools, guidance, and techniques are relevant to regions to tackle air pollution as the ‘building blocks’ for air quality improvements.

Outcome

- An understanding of the opportunities for Parties to the Convention to further contribute to global initiatives and understanding of where our collective leverage could lead to better global outcomes for reduced air pollution.

End of day 2 – thanks for joining us!

FICAP

Forum for International Cooperation on Air Pollution