

The Twenty-sixth Session of the Scientific Advisory Committee (SAC26)
on the Acid Deposition Monitoring Network in East Asia (EANET)
20-22 October 2026, Kuala Lumpur, Malaysia

PRESENTATION BY SRI LANKA ON ITS INTEREST IN JOINING EANET

I. INTRODUCTION

1. It is recalled that on 28 June 2024, the Secretariat received by e-mail a letter (dated 26 June 2024) from the Secretary of the Ministry of Environment of Sri Lanka signifying their intention to explore the possibility of becoming a member of the EANET to further improve their technical capacity and knowledge on acid deposition and air quality management. They mentioned that they understand the obligations associated with becoming a Participating Country in EANET and are prepared to meet these obligations. The letter is available in **Attachment 1**.
2. The matter of the request for EANET membership of Sri Lanka was discussed at the Working Group Meeting in 2024 (WG2024) held virtually on 20-21 Aug 2024. As stipulated in Paragraph 28, (i) c. of the WG2024 Report of the Session (EANET/WG2024/10), *“The Secretariat confirmed it would seek the guidance of the IG26 on this matter and proposed to prepare possible options on how to respond to Sri Lanka, for consideration of the IG26.”* In addition, the Secretariat provided four *“Proposed option in response to an application by a country from outside East-Asia for participation in EANET (EANET/IG26/10/1)”*, including applicable legal framework and legal implications based on guidance of UNEP legal officers.
3. The Twenty-sixth Session of the Intergovernmental Meeting on the EANET (IG26) *“tasked the Secretariat to follow up with interested countries to find more information on the monitoring data and capacity of the interested countries”* (EANET/IG26/12).
4. As tasked by IG26, **Attachment 2** provides an overview of the status and scope of air quality monitoring in Sri Lanka.
5. The Overview of Air Quality Monitoring in Sri Lanka (EANET/SAC25/14/1) was presented and discussed during the Twenty-fifth Scientific Advisory Committee Meeting (SAC25) on the EANET, held from 20-22 October in Vientiane, Lao PDR.
6. The discussions during SAC25 were included in the Report of the SAC25 (EANET/SAC25/15) as follows:
 - (i) *“A country suggested that the EANET has primarily focused on Northeast Asia due to the historical context of acid deposition. It was mentioned that modeling conditions would differ in the case of Sri Lanka, which currently does not conduct acid deposition measurements. Therefore, cooperation with Sri Lanka could focus on air quality-related activities. It was*

further noted that, given the current limitations in capacity building and budget within the EANET, Sri Lanka could be invited to engage through project-based activities rather than as a full member.

- (ii) A country noted that from the scientific point of view, wind conditions in Sri Lanka have some influence over certain EANET Participating Countries.*
- (iii) The NC reminded that Sri Lanka is part of the Malé Declaration and recommended the current activities of the Malé Declaration should be explained as reference information.”*

7. The Recommendations from the SAC25 to the IG27 on the request from Sri Lanka mentioned the following (EANET/SAC25/15, Annex 2):
“On the Air quality monitoring overview of Sri Lanka, the SAC25 recommends that IG27 consider Sri Lanka’s request to join EANET, taking into account the discussions held at SAC25.”
8. The Intergovernmental Meeting (IG) on the Acid Deposition Monitoring Network in East Asia (EANET) held its Twenty-seventh Session (IG27) from 27-28 November 2025, in Bangkok, Thailand.
9. The Decisions of IG27 (EANET/IG27/12/Annex 2/VI.) *“On the Air quality monitoring overview of Sri Lanka*
 - a. Task the Secretariat to conduct an analysis on financial implication of inviting Sri Lanka to join as a full member of the EANET.*
 - b. Invite Sri Lanka to join the SAC26 meeting as an observer to present their interest to join the EANET online.”*
10. As such, **Attachment 3** provides an overview of the financial implication of inviting Sri Lanka to join as a full member of the EANET.
11. In addition, the Secretariat for the EANET has reached out by email to Sri Lanka on 11 September to re-confirm their interest to join the EANET and invited Sri Lanka to join the SAC26 online to deliver presentation supporting their request. Sri Lanka’s presentation is available in **Attachment 4**.

II. ACTIONS REQUIRED

12. The participants of the SAC26 are invited to review the meeting document and may wish to provide comments, suggestions, guidance, and recommendations for further action to the 28th Session of the Intergovernmental Meeting (IG28) on the EANET to be held in November 2026, as appropriate.

ATTACHMENT 1



පරිසර අමාත්‍යාංශය
சுற்றுடல் அமைச்சு
Ministry of Environment

"සොදාම ප්‍රියා", අං. 416/ජ/1, රොබට් ගුණවර්ධන මාවත, බත්තරමුල්ල, ශ්‍රී ලංකාව.

"Sobadam Priya", No. 416/C/1, Robert Gunawardana Mawatha, Battaramulla, Sri Lanka.

Gen. Tel. +94-11-2034100

දුරකථන

செயலாளர்
Secretary

+94-11-2034121

ෆැක්ස්

தொலை நகல்
Fax

+94-11-2879944

මගේ අංකය
எனது இல
My No

} ENV/ARM&NOU/02/02/141

ඔබේ අංකය
உமது இல
Your No

}

දිනය
திகதி
Date

} 26.06.2024

Mr. Bert Fabian

Coordinator of the Secretariat of the EANET

United Nations Environment Programme, Asia and the Pacific

Subject: Membership to EANET

Dear Mr. Bert Fabian,

On behalf of Sri Lanka, we would like to congratulate EANET on its achievements as the only regional cooperation initiative in East Asia focused on acid deposition and air pollution. The high-quality data collected and the platform provided for sharing common understanding over more than 20 years are highly appreciated.

Sri Lanka addresses air pollution issues under the National Environmental Act (NEA) to implement air quality monitoring, management, and regulatory functions under the supervision of the Ministry of Environment. The Ministry of Environment, as the national focal point, has formulated the National Environmental Policy and National Environmental Action Plan, including strategies for air quality management in the country as well as published regulations under NEA. As the operational focal point, the Central Environmental Authority, under the provisions of the NEA, has imposed several regulations to protect and maintain ambient air quality in the country.

Furthermore, both entities are involved in controlling air pollution in the country either in making policies or implementing them. Therefore, the Ministry of Environment would like to explore the possibility of becoming a member of EANET to further improve its technical capacity and knowledge in acid deposition and air quality management.

We understand the obligations associated with becoming a Participating Country in EANET and are prepared to meet these commitments.

Thank you very much, and we look forward to potential cooperation in the future.

Sincerely,

B K Prabath Chandrakeerthi
Secretary

Copy: Director General, Ocean Affairs, Environment and
Climate Change Division, Ministry of Foreign Affairs

} For your information

"මේ මහාභූමිය මත සත්ත්වයන් සියලුම ජීවත් වන්නාවූ සියලුම ජීවීන්ගේ සහ ජීවිතයන්ගේ ද සියලු සතුන්ට ද එකම අයිතිය"
 "இது பூமியில், மரத்திலிருந்து, மெல்லுமானவற்றிலிருந்து, மெல்லிய வானத்தில் பறந்து, திவிடில் பறக்கின்றவற்றிலும், பூமியில் வாழும் உயிரினங்களிலும், தாவரங்கள், விலங்குகளிலும், ஒலிக்கும் செந்திரமாவும்"
 "This great earth and the flora on it equally belong to the man and the birds flying in the sky, the quadrupeds and all creatures living on earth"

ATTACHMENT 2

OVERVIEW OF AIR QUALITY MONITORING IN SRI LANKA

Overview

1. In Sri Lanka, there are several government agencies, semi-government and private institutions which are involved in the air quality management sector in different ways including direct air quality monitoring, policy development, enforcement and technical services providers. The institutions that are involved in air quality monitoring have air quality data collected for national programs as well as research programs. Some of these monitoring programs are continuous for several years and most of them are short term for research activities, project-based activities to comply the legal requirements.

Historical Background¹

2. The first comprehensive continuous air quality monitoring program in Sri Lanka was started in 1997 by continuous measuring criteria air pollutants at two selected locations in Colombo with automated air quality monitoring system. The system collected data in every 5-minute data of criteria pollutants Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂), Carbon monoxide (CO) and ground level ozone (O₃) along with meteorological parameters and 24-hour PM₁₀ data for every seventh day. In addition, air quality in other selected cities were monitored from time to time using similar mobile air quality monitoring stations.
3. This air quality monitoring system was halted in 2005 due to the unavailability of spare parts and financial assistance for the maintenance. At the same time, the National Building Research Organisation (NBRO), a national government research and development institute established in 1984, developed passive sampling technology in 2001 for SO₂ and NO₂ levels in ambient air and established an air quality monitoring network with 16 locations in and around Colombo to collect monthly average exposure levels. The program was continuing from 2001 to 2009.
4. Later in 2012, with the financial assistance of the Vehicle Emission Test Trust Fund (VETTF), the monitoring program was started again with 19 locations at Colombo urban area and the program was extended to other major city areas of Gampaha, Kaluthara, Galle, Horana and Rathnapura. The passive monitoring network was further expanded to cover urban area of Kandy in 2014, Kurunegala and Anuradapura in 2015 and Puttalam in 2018. With the passive sampling monitoring system, monthly averages of SO₂ and NO₂ were collected. Later, monitoring of fine particulate matter (PM_{2.5}) was started in November 2017 at above cities in monthly basis.

¹ https://env.gov.lk/web/images/downloads/biodiversity_division/completed_projects/air_quality_assessment_report_of_the_project_on_air_quality_assessments_for_health_and_environment_policies.pdf

Air Quality Monitoring by the Central Environmental Authority (CEA)

5. The Central Environmental Authority (CEA) was established in August 1981 under the provision of the National Environmental Act No:47 of 1980. The objective of establishing the CEA was to make provision for the protection, management and enhancement of the environment, regulation, maintenance and control of the quality of the environment and prevention, abatement and control of pollution.
6. The CEA monitors the ambient air quality using **two automated reference-grade real-time ambient air quality monitoring stations** (fully operational in March 2019) fixed at Battaramulla (urban site) (Colombo district) and Kandy town (urban site) (Kandy District) that were donated through the government's vehicular emission testing program and sensor-based equipment donated by UNEP installed in some areas in the island. **Parameters monitored** include PM₁₀ and PM_{2.5}, SO₂, NO₂, O₃, and CO. The Air Quality Index (AQI) is also disseminated for the public daily available in the newly launched National Air Quality Platform (<https://www.aq.cea.lk/>).² The monitoring facility of **meteorological parameters** such as wind speed and wind direction, relative humidity (RH) and temperature were also integrated with monitoring stations as meteorological data are essential for data analysis and interpretation of results.
7. CEA also has low-cost sensors installed across the country. CEA is operating 12 low-cost sensors from IQAir, covering PM_{2.5} which started in 2025. CEA integrated the low-cost sensors operated by NBRO in the national air quality platform (<https://www.aq.cea.lk/>). **Human resources:** There are about 7 team members within the CEA leading work on air quality, noise and vibration monitoring.
8. The CEA developed and recently launched software to facilitate data integration of air quality monitoring data and dissemination for public awareness, called **National Air Quality Platform** (<https://www.aq.cea.lk/>), with financial support of the Vehicle Emission Test Trust Fund (VETTF).

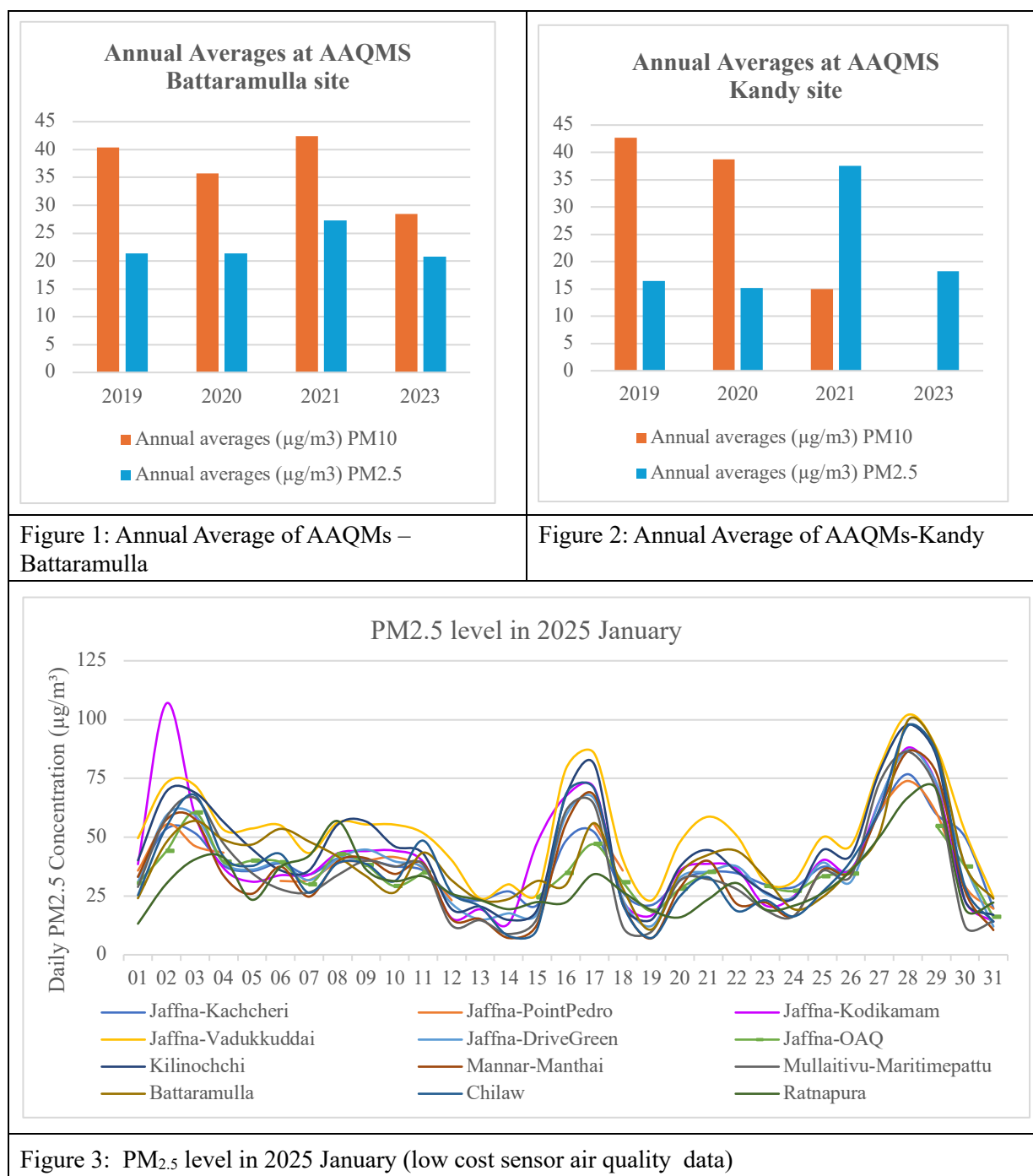
Analysis of Air Quality Data by the Central Environmental Authority (CEA)

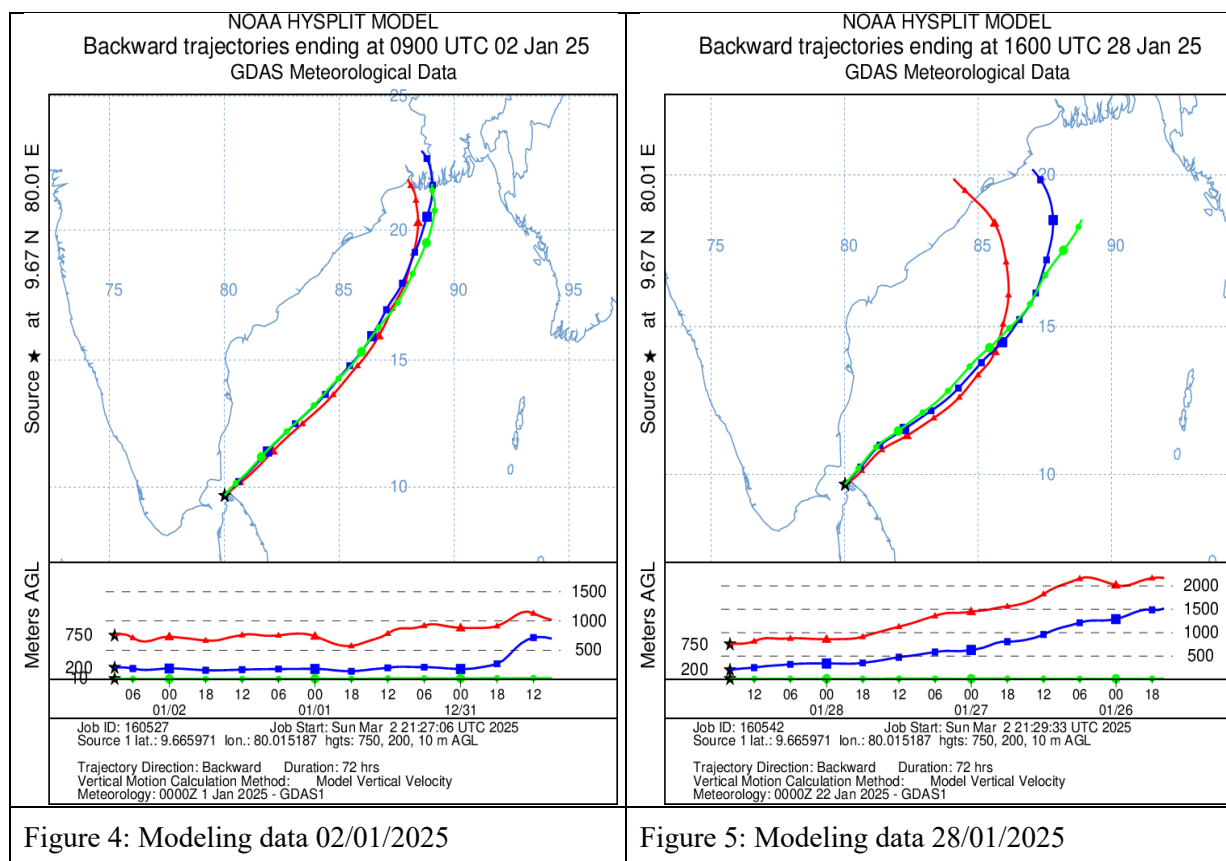
9. To evaluate the air quality levels, CEA uses monitoring data received from the National Building Research Organization (NBRO) (around 14 low-cost sensors-based equipment) and University of Peradeniya (around 20 TSI Blue sky low-cost sensor-based equipment), and modeling and satellite information and weather conditions.
10. According to the monitoring data, **particulate matter (PM₁₀ & PM_{2.5}) was identified as the primary criteria air pollutant** and during past years it is observed that the country's air quality stays majorly within the national ambient air quality standards but exceed in few major occasions during October to March periods due to the transboundary phenomena.
11. Annual averages of PM₁₀ and PM_{2.5} at Battaramulla and Kandy monitored using Automated air quality

² https://www.cea.lk/web/images/pdf/airquality/AQI-SL_Calculation_Guideline_CEA.LK_V1.0.pdf

monitoring stations (AAQMS) were shown in the Figure 1 and 2 and result of air quality monitoring during the Month of January 2025 monitored using AAQMS and low-cost sensor-based equipment were shown in the Figure 3.

12. The elevated $PM_{2.5}$ levels during the monitoring period as shown in Figure 3 are likely influenced by the transboundary effect, a common phenomenon during this season, where pollutants from neighboring regions are transported by wind patterns (Figure 4 & 5).





Overview of air quality management in Sri Lanka

13. National Environmental Act and establishment of Central Environmental Authority in 1981:

The Central Environmental Authority (CEA) is the main regulatory institute established to implement the National Environmental Act. Under its powers and functions, CEA is involved for conservation, protection and management of the country's environment including air quality management and monitoring.

14. Clean air action plan: Clean air 2000, 2015, 2025, 2030 action plan for air quality management was established by the Ministry of Environment with collaboration of all stakeholder agencies.

15. Establishment of The Air Resources Management Centre (AirMAC): The Air Resource Management Center (AirMAC) was established jointly by the Ministry of Environment and Central Environmental Authority in partnership with all stakeholder agencies to provide leadership, guidance and facilitation to manage the country's air resources by mitigating the air pollution in order to enhance the health and well-being of the public and air quality of our environment .

16. National Environmental Action Plan (NEAP) 2022-2030: NEAP introduced 10 thematic area considering clean air to be essential, not only for human health and wellbeing, but also for the integrity of the biosphere. The action plan for the thematic area on Air Quality Management has following ten strategies.

- a. Strategy 1. Effectuate a sound institutional framework for integrated AQM, while fostering

- advocacy, governance and stakeholder participation.
- b. Strategy 2. Manage air pollution from mobile sources.
 - c. Strategy 3. Manage air pollution from stationary sources.
 - d. Strategy 4. Manage indoor air pollution issues.
 - e. Strategy 5. Prevent air pollution due to unethical, unintentional, unprofessional and harmful actions.
 - f. Strategy 6. Reduce air pollution by deploying environmentally sound technologies, processes and cleaner fuels.
 - g. Strategy 7. Establish comprehensive and integrated air quality monitoring and modelling facilities, with a centralized data sharing platform.
 - h. Strategy 8. Encourage information and knowledge management, including citizen science, for better air quality.
 - i. Strategy 9. Foster innovation, research and development for effective AQM.
 - j. Strategy 10. Enhance global participation and collaboration for furthering AQM.

17. The National Environmental Ambient Air Quality Regulations: According to provisions of the NEA, CEA has established the National Environmental Ambient Air Quality Regulations introducing maximum permissible level for six criteria air pollutants {particulate matter (PM_{2.5}, PM₁₀), sulfur dioxide, ground-level ozone, carbon monoxide and nitrogen dioxide} in 2008. Furthermore, in order to maintain better ambient air quality in the country, the following regulations were cited furthermore considering the control of main air pollution sources.

- a. **The National Environmental (stationary source emission control) regulations:** The National Environmental (stationary source emission control) regulations were established by CEA for control industrial air emission. Industrial air pollution is mostly managed and regulated through the Environmental Protection Licenses (EPL) scheme and Environmental Impact Assessment procedure with the provisions of the National Environmental (stationary source emission control) regulations by the CEA.
- b. **The National Environmental (vehicle air, fuel and importation) standards:** The National Environmental (vehicle air, fuel and importation) standards to control air emission from transport sector and it was Amended 5 times and upgraded compatible with euro 4 standards Sri Lanka Vehicle Emissions Testing program (SVETP) was established to implement the National Environmental (vehicle air, fuel and importation) standards cited under the provisions of National Environmental Act.
- c. **The National Environmental (prohibition of burning of plastic waste) regulations:** The National Environmental (prohibition of burning of plastic waste) regulations was established by the CEA to control the air emission (dioxin & furan) from open burning of solid waste. Further CEA is involved to manage and regulate the air emission from burning of solid waste including plastic and polythene in order to prevent the emission of dioxin and furan with support of Sri Lanka Police.

18. **Contingency Response action plan:** CEA has prepared a Contingency response action plan (CRAP) with participation of stakeholder agencies in order to control local air pollution and reduce the exposure of citizens in any air quality deterioration events.

ATTACHMENT 3

Table 1. Estimated Voluntary Financial Contribution of Participating Countries including Sri Lanka to the Secretariat & Network Center Core Budget for the EANET

Participating Countries	UN scale of assessment for 2026-2030 (%) ***	Scale of EANET burden sharing (%)	Estimated Annual Contribution (US\$)	
			Secretariat	Network Center
Cambodia *	0.008	0.024	147	152
China	20.004	60.534	367,561	383,483
Indonesia	0.579	1.752	10,639	11,099
Japan	6.930	20.971	127,335	132,851
Lao PDR *	0.006	0.018	110	114
Malaysia	0.326	0.987	5,990	6,254
Mongolia*	0.004	0.012	73	76
Myanmar*	0.010	0.030	184	190
Philippines	0.198	0.599	3,638	3,795
Republic of Korea	2.349	7.108	43,161	45,029
Russia	2.094	6.337	38,476	40,145
Sri Lanka	0.038	0.115	698	729
Thailand	0.341	1.032	6,266	6,538
Viet Nam	0.159	0.481	2,922	3,046
Total	---	100	607,200	633,500

* Minimum amount for the voluntary financial contribution is US\$ 200

** Estimated 5-year flat amount of annual voluntary contribution based on MTP for the EANET (2026-2030)

*** UN Scale of Assessment 2026-2030: <https://docs.un.org/en/A/RES/79/249>

The estimated annual voluntary financial contribution from Sri Lanka to the EANET Core Budget is **US\$ 1,427**, comprising US\$ 698 for the Secretariat and US\$ 729 for the Network Center, as calculated in accordance with the proposed EANET burden-sharing formula based on the United Nations Scale of Assessment (2026–2030) (Table 1). The inclusion of Sri Lanka as a Participating Country would result in a corresponding adjustment to the estimated annual voluntary contributions of the existing Participating Countries under the burden-sharing formula.

For reference, Sri Lanka has consistently supported UNEP's Environment Fund through voluntary contributions since 1981, with contributions generally meeting or closely aligning with its Voluntary Indicative Scale of Contributions (VISC), indicating a sustained commitment to multilateral environmental financing.

Table 2. Estimated Travel Costs for Participation in EANET Annual Meetings

Estimated Cost (2 representatives)	SAC (3 days)	STM (2 days)	IG (2 days)	Total (US\$)
Round-trip airfare from and to Colombo, Sri Lanka	1,000	1,200	2,000	4,200
Daily Subsistence Allowance (DSA)	2,576 ¹	1,776 ²	1,620 ³	5,972
Total Estimated Cost	3,576	2,976	3,620	10,172

¹DSA rate: US\$ 259/day – Kuala Lumpur, Malaysia for SAC26 (UN rate as of 1 July 2026).

²DSA rate: US\$ 212/day – Jakarta, Indonesia for STM27 (UN rate as of 1 July 2026).

³DSA rate: US\$ 186/day – Niigata, Japan for IG28 (UN rate as of 1 July 2026).

In terms of expenditure, EANET would be expected to provide financial support for the in-person participation of two eligible representatives from Sri Lanka in the annual meetings including the Senior Technical Manager's Meeting (STM), the Scientific Advisory Committee Meeting (SAC), and the Intergovernmental Meeting (IG), in accordance with the existing practice for Participating Countries and the UN travel rules and regulations. As the locations of these meetings vary from year to year, the actual expenditure would depend largely on the meeting venues, applicable travel costs, and prevailing Daily Subsistence Allowance (DSA) rates.

Based on the current meeting arrangements for 2026, the estimated annual expenditure is **US\$ 10,172**, covering round-trip airfare and Daily Subsistence Allowance (DSA) for participation in the STM (2 days) in Jakarta, Indonesia, the SAC (3 days) in Kuala Lumpur, Malaysia, and the IG (2 days) in Niigata, Japan, as presented in Table 2.

ATTACHMENT 4

The Twenty-sixth Session of the Scientific Advisory Committee (SAC26) on the Acid Deposition Monitoring Network in East Asia (EANET) 20-22 October 2026, Kuala Lumpur, Malaysia (Hybrid)

Air Quality Management in Sri Lanka

Warnika Ranawaka Arachchi

Director (Air Quality, Noise and Vibration Monitoring)

Environmental Protection Division



මධ්‍යම පරිසර අධිකාරිය
மத்திய சுற்றாடல் அதிகாரசபை
Central Environmental Authority



22.10.2026

Content

2

- Central Environmental Authority
- Regulations imposed for Air quality management under the powers vested from National Environmental Act
- Ambient Air quality monitoring in Sri Lanka
- National Air quality Network –Sri Lanka
- Contingency response action plan
- Project activities /Research
- Future plan and expectation from EANET

Central Environmental Authority

3

(Our website: <http://www.cea.lk>)

- The Central Environmental Authority (CEA) was established in August 1981 under the provision of the National Environmental Act No:47 of 1980.
- The CEA was given wider regulatory powers under the National Environment(Amendment) Acts No:56 of 1988 and No:53 of 2000.

Vision : A clean and Green Environment through Service Excellency

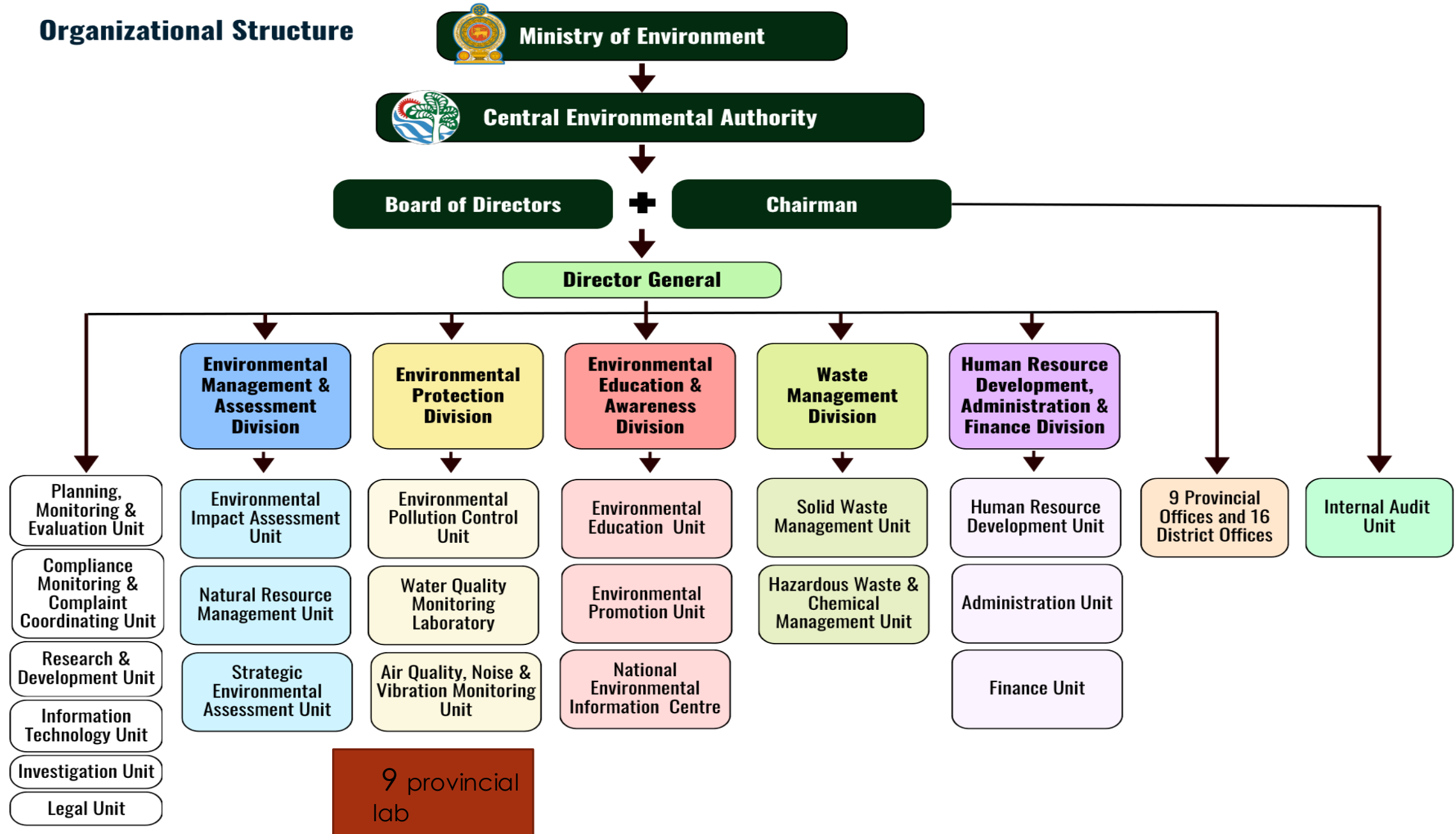
Mission : Flagship of the nation in protecting and managing the environment by coordination , public participation, enforcement , appropriate technological interventions, education and awareness

Objectives

- Protect, manage and enhance the environment
- Regulate, maintain and control the quality of the environment
- Prevent, abate and control pollution

Provide islanded service through Head office and 9 provincial offices and 16 District offices including provincial laboratories

Organizational Structure



Central Environmental Authority

5

Provision of NEA for Air Quality -Part IV B

- 23J. Subject to section 23A of this Act with effect from the relevant date, no person shall discharge or emit waste into the atmosphere except in accordance with such standards or criteria as may be prescribed under this Act.
- 23K. (1) No person shall pollute the atmosphere or cause or permit the atmosphere to be polluted so that the physical, chemical or biological condition of the atmosphere is so changed as to make or reasonably be expected to make the atmosphere or any part thereof unclean, noxious, poisonous, impure, detrimental to the health, welfare, safety, or property or human beings, poisonous or harmful to animals, birds, wildlife, plant or all other forms of life or detrimental to any beneficial use of the atmosphere.

Regulations cited for Ambient Air Quality management under provisions of NEA

6

Ambient Air Quality management

✓ The National Environmental (Ambient Air Quality) Regulations

No. 1562/22 - FRIDAY, AUGUST 15, 2008

<i>Pollutant</i>	<i>Averaging Time*</i>	<i>Maximum Permissible Level</i>		<i>+ Method of measurement</i>
		μgm^{-3}	<i>ppm</i>	
1. Particulate Matter - Aerodynamic diameter is less than $10\ \mu\text{m}$ in size (PM_{10})	Annual	50	—	Hi-volume sampling and Gravimetric or Beta Attenuation
	24 hrs.	100	—	
2. Particulate Matter - Aerodynamic diameter is less than $2.5\ \mu\text{m}$ in size ($\text{PM}_{2.5}$)	Annual	25	—	Hi-volume sampling and Gravimetric or Beta Attenuation
	24 hrs.	50	—	

Regulations cited for Ambient Air Quality management under provisions of NEA

7

Ambient Air Quality management

✓ The National Environmental (Ambient Air Quality) Regulations

No. 1562/22 - FRIDAY, AUGUST 15, 2008

National Ambient Air Quality standards

Pollutant	Averaging Time*	Maximum Permissible Level		+ Method of measurement
		μgm^{-3}	ppm	
3. Nitrogen Dioxide (NO_2)	24 hrs.	100	0.05	Colorimetric using saltzman Method or equivalent Gas phase chemiluminescence
	8 hrs.	150	0.08	
	1hr.	250	0.13	
4. Sulphur Dioxide (SO_2)	24 hrs.	80	0.03	Pararosaniline Method or equivalent Pulse Fluorescent
	8 hrs.	120	0.05	
	1hrs.	200	0.08	
5. Ozone (O_3)	1 hr.	200	0.10	Chemiluminescence Method or equivalent Ultraviolet photometric
6. Carbon Monoxide (CO)	8 hrs.	10,000	9.00	Non-Dispersive Infrared Spectroscopy™
	1 hr.	30,000	26.00	
	Any time	58,000	50.00	

* Minimum number of observations required to determine the average over the specified period —

03 hour average - 03 consecutive hourly average

08 hour average - 08 hourly average

24 hour average - 18 hourly average

Yearly average - 09 monthly average with at least 02 monthly average each quarter

† By using Chemicals or Automatic Analysers.

National Ambient Air Quality Standards Sri Lanka

	Parameter	Unit	WHO guideline AQG-2021	WHO guideline AQG-2005	SL NAQS	US NAQS
24hr	PM _{2.5}	µg/m ³	25(IT2) - annual	50(IT2) - annual	25 (IT2) - annual	35
24hr	PM ₁₀	µg/m ³	50(IT2) - annual	100(IT2) - annual	50 (IT2) - annual	150
1hr	O ₃	ppb	51		100	70
8hr	CO	ppb	8733		9000	9000
1hr	NO ₂	ppb	106		130	100
24hr	SO ₂	ppb	15		30	1hr/75

Ambient Air Quality Standards - Comparison

PM 2.5

Standard	WHO Guideline	USA	Japan / S. Korea	UK / France / Germany	Sri Lanka / WHO IT-2	China	India
Annual	5	9	15	20	25	35	40
Daily	15	35	35	25	50	75	60

PM10

Standard	WHO Guideline	UK / France / Germany	Sri Lanka / WHO IT-2 / Japan or S. Korea	India	USA	China
Annual	15	40	50	60	-	70
Daily	45	50	100	100	150	150

Regulations cited for Air Quality management under provisions of NEA

10

Main Local Air pollution sources

- **Transport (≈55–60%)** – Largest contributor due to rapid increase in vehicles and traffic congestion
- **Industry & Power (≈20–25%)** – Includes factories, thermal power plants, and fuel combustion
- **Domestic sources (≈15%)** – Cooking, waste burning, and small-scale emissions

Regulations cited for Air Quality management under provisions of NEA

11

Stationary Sources Emission Management

❑ The National Environmental (Stationary Sources Emission Control) Regulations, No. 01 of 2019 by Extra Ordinary Gazette Notification No. 2126/36 dated 05 .06. 2019

- ❖ Instrument/Equipment Based Standards
- ❖ Pollutant based Standards
- ❖ Fugitive Emission control standard

These regulation implement by the CEA through

- Environmental Protection Licensing scheme – Prescribe industries (around 1000 air polluting industries among the 50,000 prescribe industries are regulated)
- Environmental Impact Assessment procedure – Prescribe activities
- Environmental Clearance - Siting of Prescribe industries

Regulations cited for Air Quality management under provisions of NEA

12

Vehicle Emission Management

☐ The National Environmental (Air, Fuel and Vehicle Importation Standards) Regulations No 01 2003 and its amendments (5)

- Extra Ordinary Gazette Notification No. 1137/35 dated 23.06.2000
- Extra Ordinary Gazette Notification No. 1295/11 dated 30 .06. 2003
- Extra Ordinary Gazette Notification No. 1557/20 dated 09 .07. 2008
- Extra Ordinary Gazette Notification No. 1887/20 dated 05.11.2014
- Extra Ordinary Gazette Notification No. 2094/42 dated 12.07.2018
- Extra Ordinary Gazette Notification No. 2083/3 dated 06.08.2018

Preparation of Combined Gazette -in progress

Regulations cited for Air Quality management under provisions of NEA

Vehicle Emission Management

- ❑ The National Environmental (Air, Fuel and Vehicle Importation Standards) Regulations No 01 2003 and its amendments (5)
 - Part 1 : Vehicle **Exhaust** Emission Standard- Permissible air emission limits for all vehicles operate in the Sri Lanka .It mandate that vehicle must not exceed these limits and outline the process for vehicle emission testing centres to certify compliance
 - Part 11: Fuel standard- Specifying the quality for petrol , Auto Diesel and super Diesel
 - Part 111: Vehicle Exhaust emission standard for vehicle importation- emission standard for vehicle being imported into the Sri Lanka

Regulations cited for Air Quality management under provisions of NEA

Vehicle Emission Management

- ❑ **The National Environmental (Air, Fuel and Vehicle Importation Standards) Regulations No 01 2003 and its amendments (5)**

Responsibility:

- Department of Motor Traffic /Ministry Of Transport
- Department of Imports and Export Control
- Ceylon Petroleum Cooperation

Implementation strategy :

- Establishment of Vehicular Emission Testing centers in 2008 - 2013 island wide
- Vehicle emission testing program
- Vehicle Emission testing Trust Fund (VETTF)
- Objectives of (VETTF)
 - Air quality Monitoring to check the effectiveness of the program
 - Air quality management related to the transport sector (Traffic management)

Regulations cited for Air Quality management under provisions of NEA

15

Management of air pollution due to open burning of refuse and other combustible matters inclusive of plastics

- ❑ The National Environmental (Prohibition of open burning of refuse and other combustible matters inclusive of plastics) Regulations No. 1 of 2017.

**Extra Ordinary Gazette
Notification No. 2034/36 -
FRIDAY SEPTEMBER 01, 2017**

- No person shall burn openly or cause to, allow or allow the open burning of refuse or other combustible matters inclusive of plastics.
- Any person who does not follow the regulations above shall be liable to an offence and punishable under Section 31 of the National Environmental Act, No. 47 of 1980

Implementation with support of Sri Lanka Police

National Environmental Action Plan 2022-2030

10 Strategies under *Air Quality Management Theme*

1. **Strengthen policy, legal and institutional framework**

Improve regulations, standards, and enforcement mechanisms for air quality management.

2. **Strengthen air quality monitoring systems**

Expand and upgrade monitoring networks and data systems.

3. **Develop and maintain emission inventories**

Establish comprehensive emission databases for major pollution sources.

4. **Control emissions from transport sector**

Improve vehicle emission standards, inspection systems, and promote cleaner transport.

5. **Control industrial emissions**

Enforce emission standards for industries and promote cleaner production technologies.

National Environmental Action Plan 2022-2030

6. **Promote clean energy and fuel quality improvements**

Encourage low-sulfur fuels, renewable energy, and energy-efficient technologies.

7. **Control open burning and area sources**

Regulate waste burning, biomass burning, and other diffuse pollution sources.

8. **Strengthen urban air quality management**

Integrate air quality considerations into urban planning and development.

9. **Enhance public awareness and stakeholder participation**

Conduct awareness programs and involve communities and private sector.

10. **Strengthen research, capacity building and data sharing**

Promote scientific studies, training, and information dissemination.

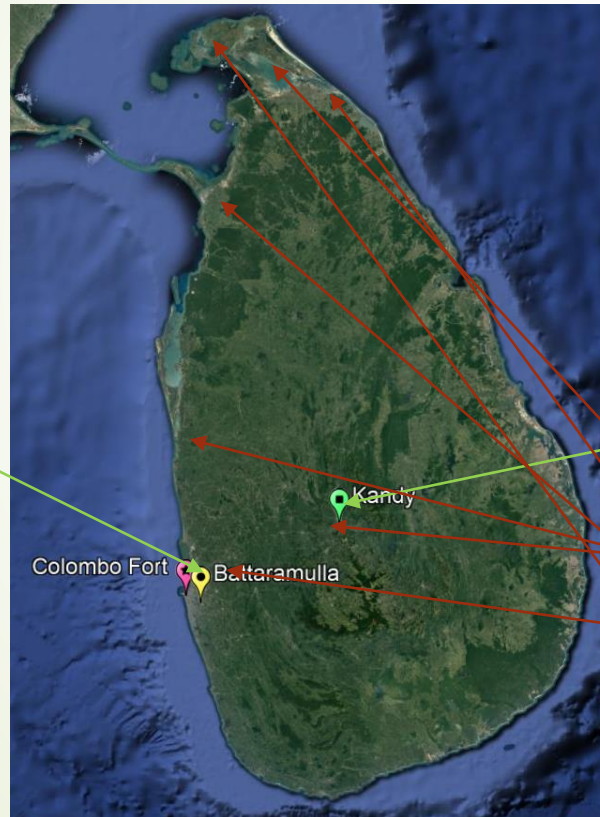
Ambient Air quality monitoring in Sri Lanka -CEA

18

Existing Ambient Air quality monitoring locations



Battaramulla AAQM Site
Western Province
Donated by VETP



Kandy AAQM
Site Central
province
Donated by
VETP

AQ Air sensors (Donated by UNEP)

- Rathnapura
- Chilaw
- Colombo
- Kilinochchiya
- Ampara
- Mulathiya
- Jaffna

Ambient Air quality monitoring in Sri Lanka

19



- ☐ CO analyzer SERINUS 30
- ☐ NO₂ Analyzer SERINUS 40
- ☐ Ozone Analyzer SERINUS 10
- ☐ SO₂ analyzer SERINUS 50
- ☐ PM Spirant BAM Particulate monitors
- ☐ VOC Analyzer

Automated Continuous Ambient Air Quality Monitoring Stations consist of



meteorological parameters
wind speed and wind direction
relative humidity
solar radiation
ambient pressure and ambient temperature

National Air Quality Index

20

Air Quality Index (AQI)

AQI is a measurement of air pollutant concentrations in ambient air pollution and their associated health risks. AQI use to declare the information of the air quality level and it calculate based on the most commonly found pollutants that have a significant impact.

AQI Color	Level of Concern	Index
Green	Good	0 - 50
Yellow	Moderate	51 - 100
Orange	Slightly Unhealthy	101 - 150
Red	Unhealthy	151 - 200
Purple	Very Unhealthy	201 - 300
Maroon	Hazardous	301 - 500

Publications in CEA web: <http://cea.lk/web/en/publication>
PDF in CEA website: <http://bit.ly/AQI-SL>

Category	Health Message	
	At-risk population	General population
Good	Enjoy outdoor activities.	Ideal air quality for outdoor activities.
Moderate	Continue day-to-day activities, with a caution.	Continue usual outdoor activities.
Slightly Unhealthy	Reduce outdoor activities, avoid strenuous outdoor activities.	Continue day-to-day activities, with a caution.
Unhealthy	Avoid outdoor activities. Limit the pollutant exposure.	Reduce outdoor activities. Limit the pollutant exposure.
Very Unhealthy	Avoid outdoor activities. Limit the pollutant exposure. Get medical advice.	Avoid outdoor activities. Limit the pollutant exposure.
Hazardous	Avoid outdoor activities. Limit the pollutant exposure. Get medical advice. Be alert.	Avoid outdoor activities. Limit the pollutant exposure. Get medical advice.
Beyond AQI	Health risk is too high and follow the instructions for "Hazardous".	

National Air Quality Network - Sri Lanka



Dashboard

About

Monitoring

AQI

FAQ

EN

AirShare - National Air Quality Network, Sri Lanka

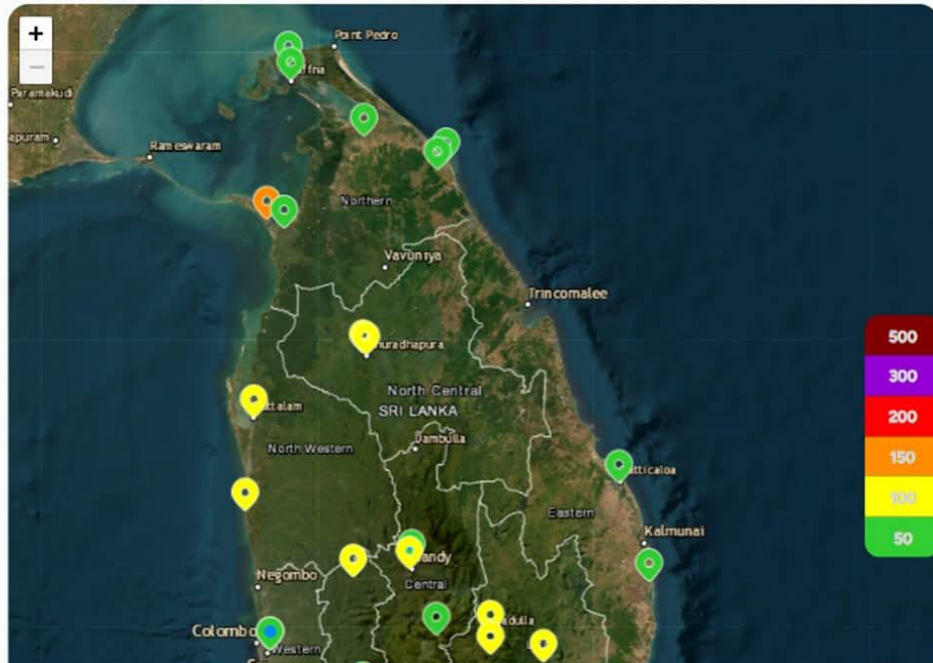
Real-Time & Historical Air Quality Data and Insights for Sri Lanka

Equipment Type: All

Measured By: All

Ranking: All

Disclaimer: The real-time data displayed on this website is intended for awareness purposes only. For decision-making or research and development, please consult the appropriate authorities for verified information.



What Is AQI?

Air quality is determined by pollution levels, focusing on six key 'criteria pollutants' that significantly impact health, wildlife, and ecosystems. Understanding air quality levels helps prevent health issues, protect the environment, and guide regulations to improve air conditions.

AQI Category

- Good** (0 to 50)
Ambient air quality is considered to be healthy
- Moderate** (51 to 100)
Acceptable Air Quality with minor pollution level
- Slightly Unhealthy** (101 to 150)
At-risk population may experience health effect.
- Unhealthy** (151 to 200)
Everyone may begin to experience negative health effects.
- Very Unhealthy** (201 to 300)
People exposed to the concern air

ජාතික වායු තත්ත්ව වෙබ් අඩවිය නිල වශයෙන් ජනගහන කිරීමේ උත්සවය



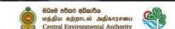
මධ්‍යම පරිසර අධිකාරිය
மத்திய சுற்றுலாடல் அதிகார சபை
Central Environmental Authority



ජාතික වායු තත්ත්ව වෙබ් අඩවිය නිල වශයෙන් ජනගහන කිරීමේ උත්සවය



ජාතික වායු තත්ත්ව වෙබ් අඩවිය නිල වශයෙන් ජනගහන කිරීමේ උත්සවය



Financial support - VETTF

Annual Averages over 2019-2021

Air Pollutant	Unit	Mean Concentration - 2019		Mean Concentration - 2020		Mean Concentration - 2021	
		Battaramulla	Kandy	Battaramulla	Kandy	Battaramulla	Kandy
O ₃	ppb	13.68	11.74	15.72	15.71	16.54	17.04
CO	ppb	629	673	537	612	508	513
NO ₂	ppb	11.41	13.36	11.18	8.72	21.45	11.98
SO ₂	ppb	5.77	1.69	6.87	1.19	4.25	1.02
PM _{2.5}	µg/m ³	21.36	16.49	21.18	15.10	27.95	14.97
PM ₁₀	µg/m ³	40.35	42.68	35.66	38.66	43.55	37.51



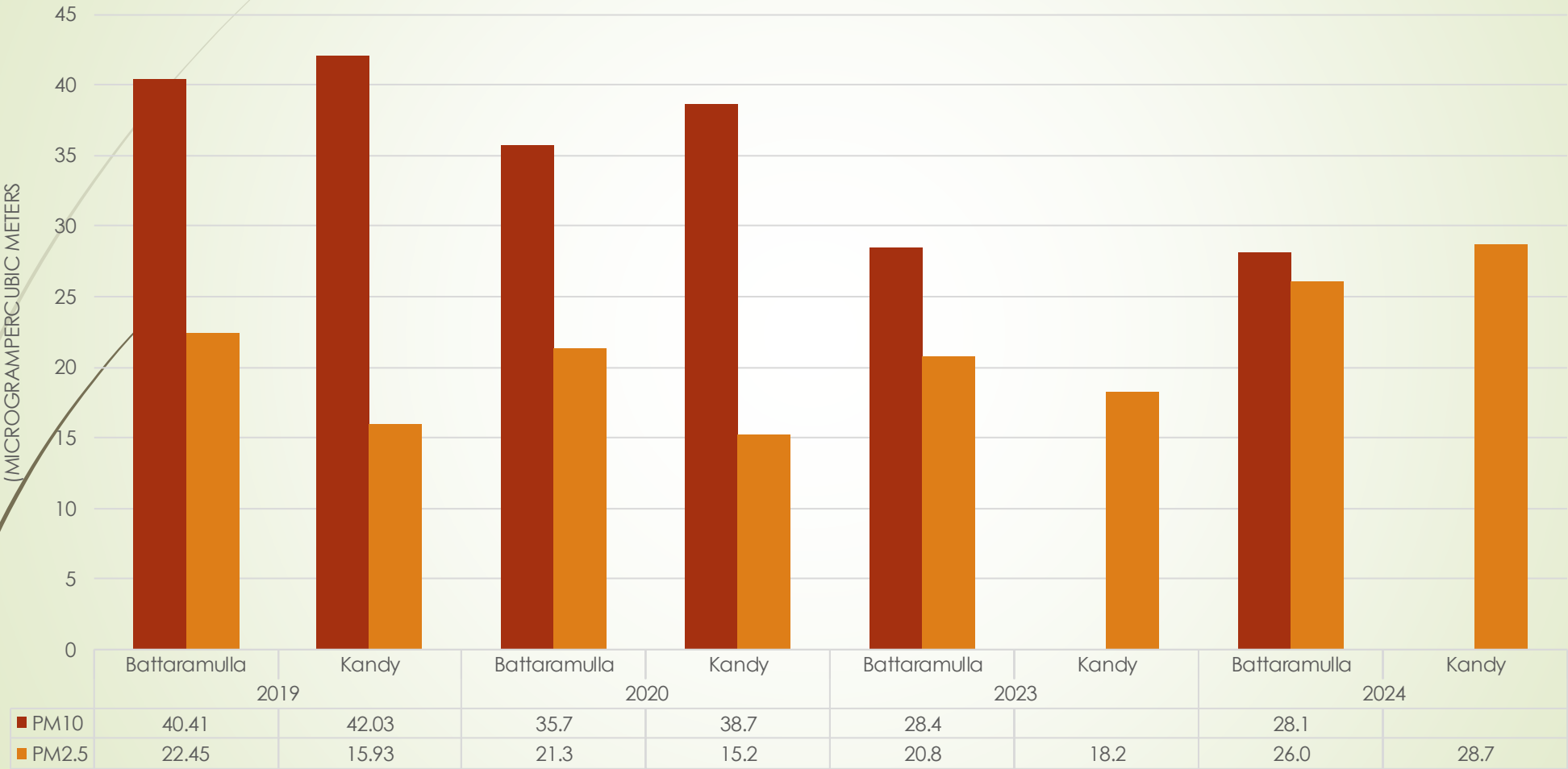
Calculations were not done for 2022 due to insufficient data

Annual Averages over 2023-2025

Air Pollutant	Unit	Mean Concentration - 2023		Mean Concentration - 2024		Mean Concentration - 2025	
		Battaramulla	Kandy	Battaramulla	Kandy	Battaramulla	Kandy
O ₃	ppb	8.9	7.2	11.09	2.35	12	5
CO	ppb	433.6	699.2	342.9	566.11	*	890
NO ₂	ppb	5.2	17.4	7.76	11.53	5	11
SO ₂	ppb	11.1	0.1	6.21	0.57	6	2
PM _{2.5}	µg/m3	20.8	18.2	26.01	28.73	26	21
PM ₁₀	µg/m3	28.4	*	28.06	46.05	43	*

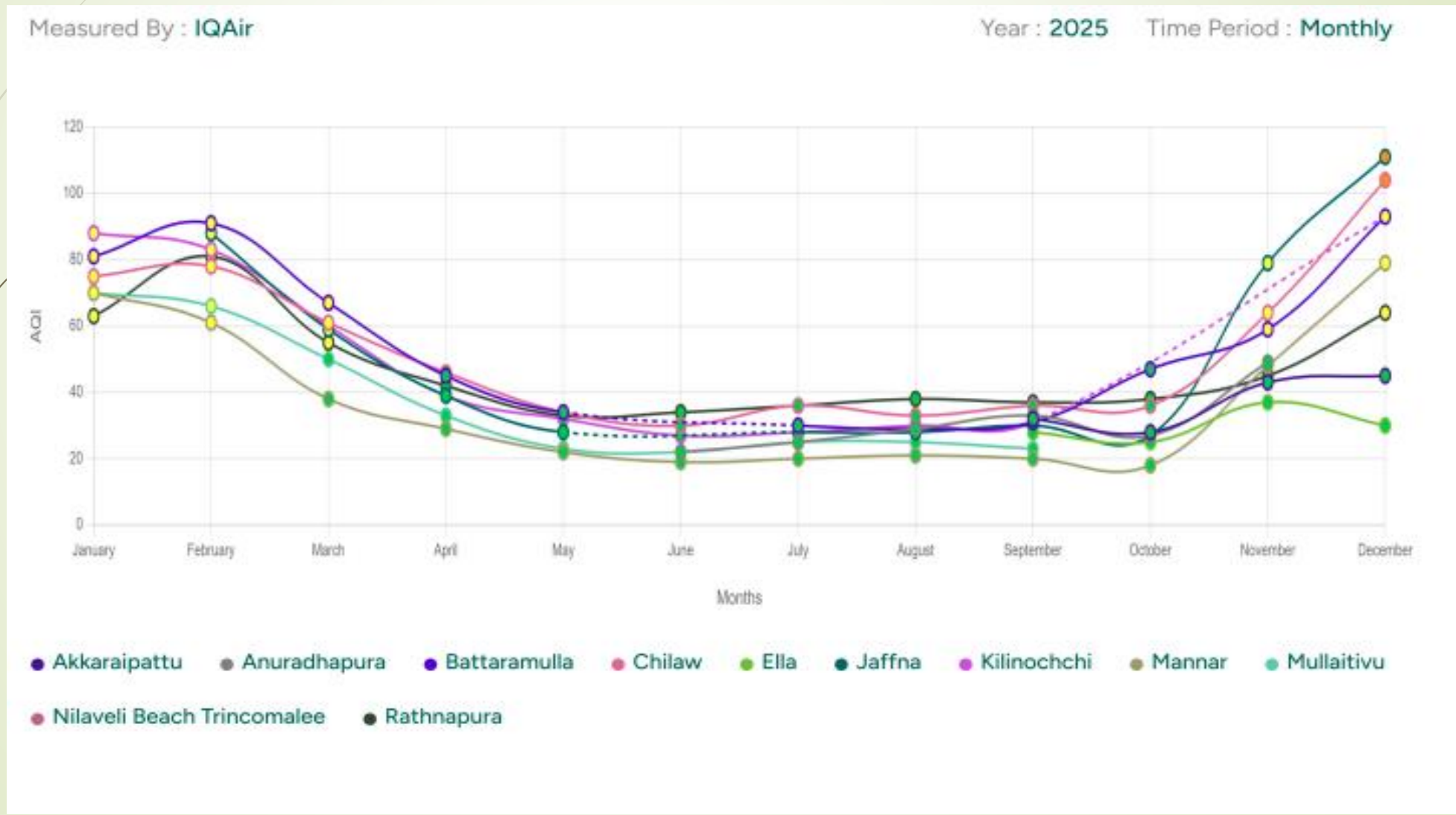
Air quality status

Annual averages of PM



PM 10 Annual Average – 100 Micro Gram per cubic meters
PM 2.5 Annual Average – 50 Micro Gram per cubic meters

Air Quality Monitoring data -2025 across the country throughout the year



Air Quality Monitoring data from Jan – Feb 2026

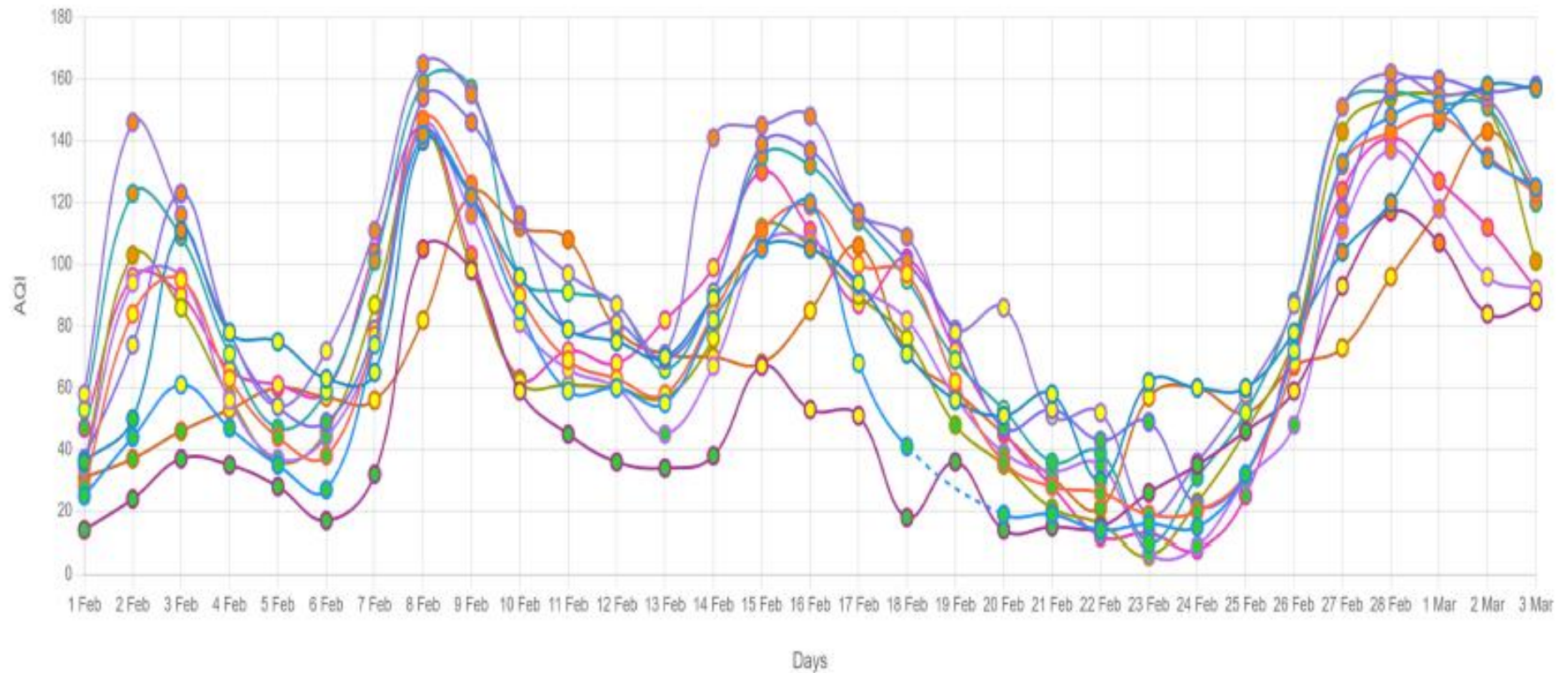
Measured By : IQAir

Parameter : PM2.5

AQI Average : Daily

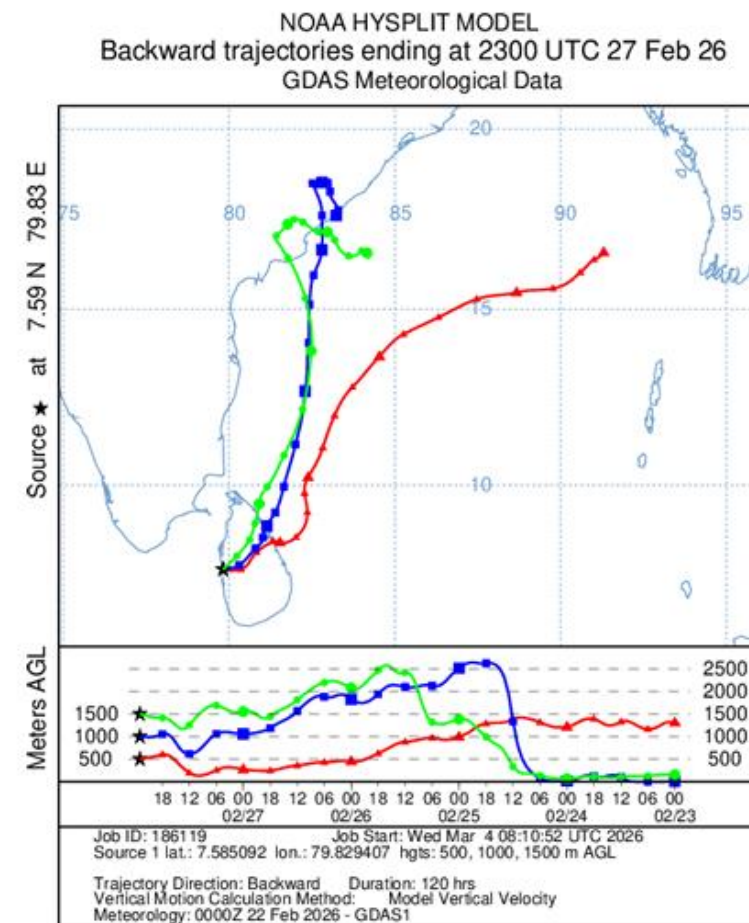
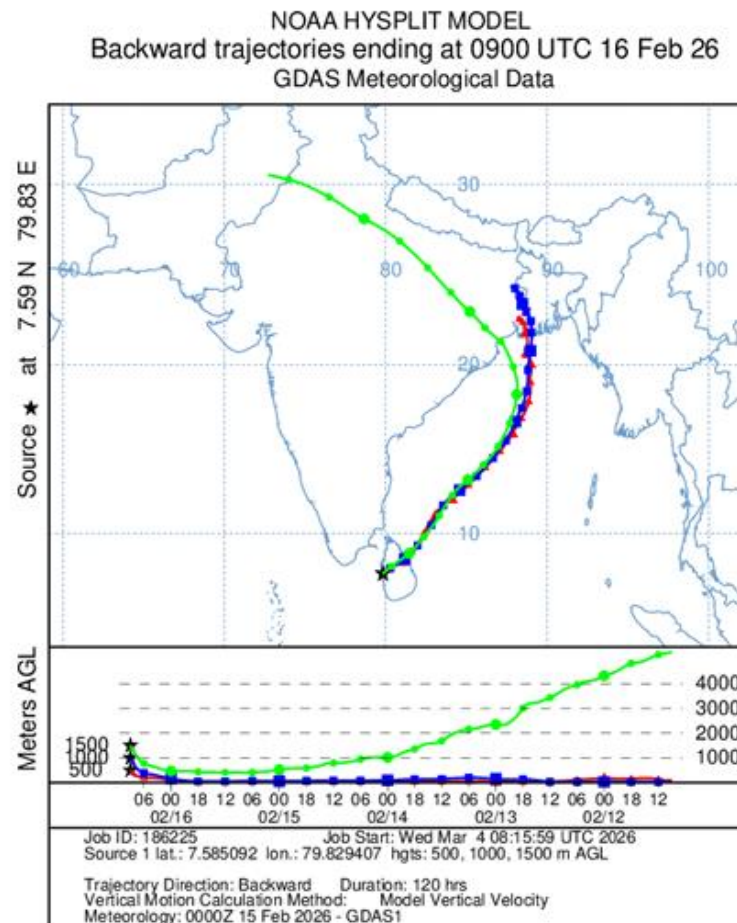
Type : AQI

Date: 2026-02-01 to 2026-03-03



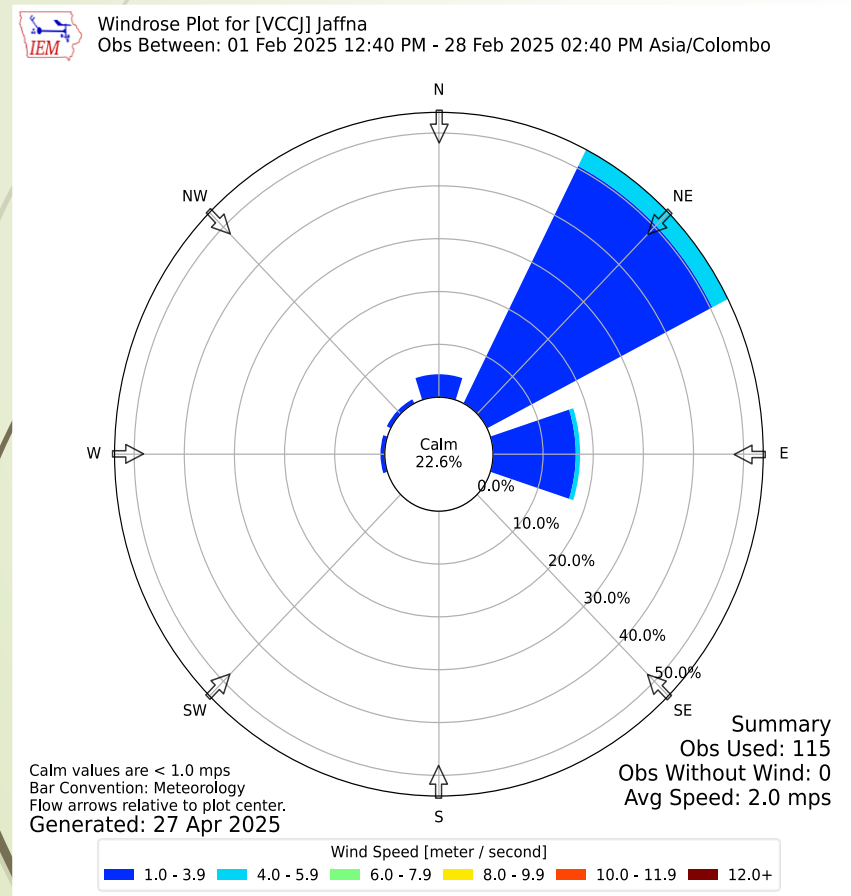
● Akkaraipattu ● Anuradhapura ● Battaramulla ● Chilaw ● Ella ● Jaffna ● Kilinochchi ● Mannar ● Mullaitivu
● Nilaveli Beach Trincomalee ● Rathnapura

Backward Trajectory Analysis for recorded highest air pollutant 16-02-2026 and 27-02-2026 at Above Ground Level 100m, 500m, 1000m for Chilaw

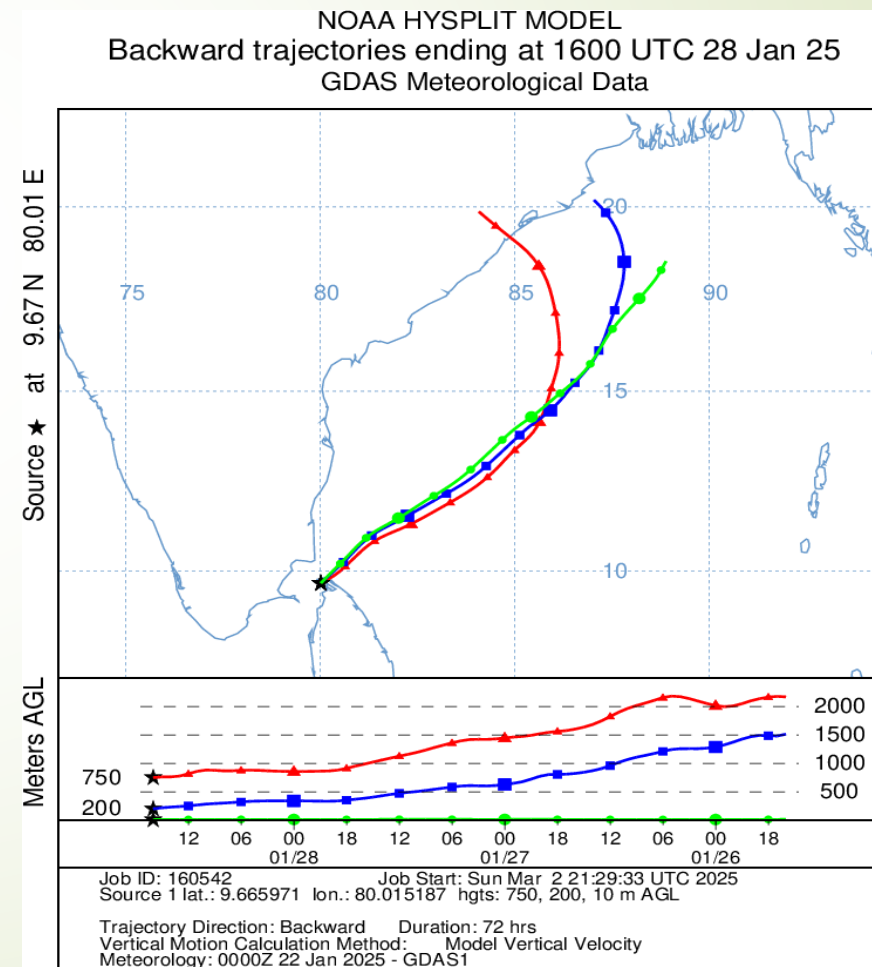


Backward Trajectory Analysis for recorded highest air pollutant during the Jaffna air quality monitoring -2025

Windrose. January 2025
(Courtesy: mesonet.agron.iastate.edu)



Backward Trajectory, Jan 28

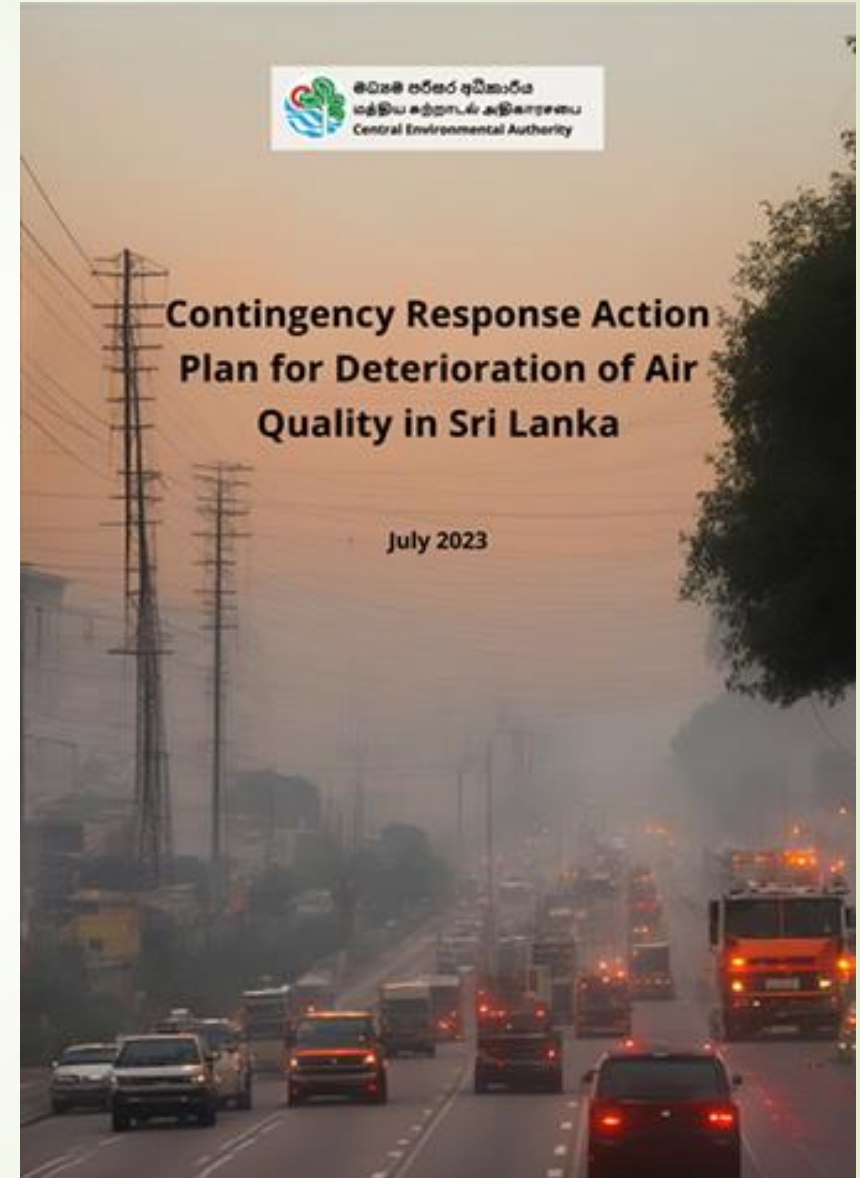




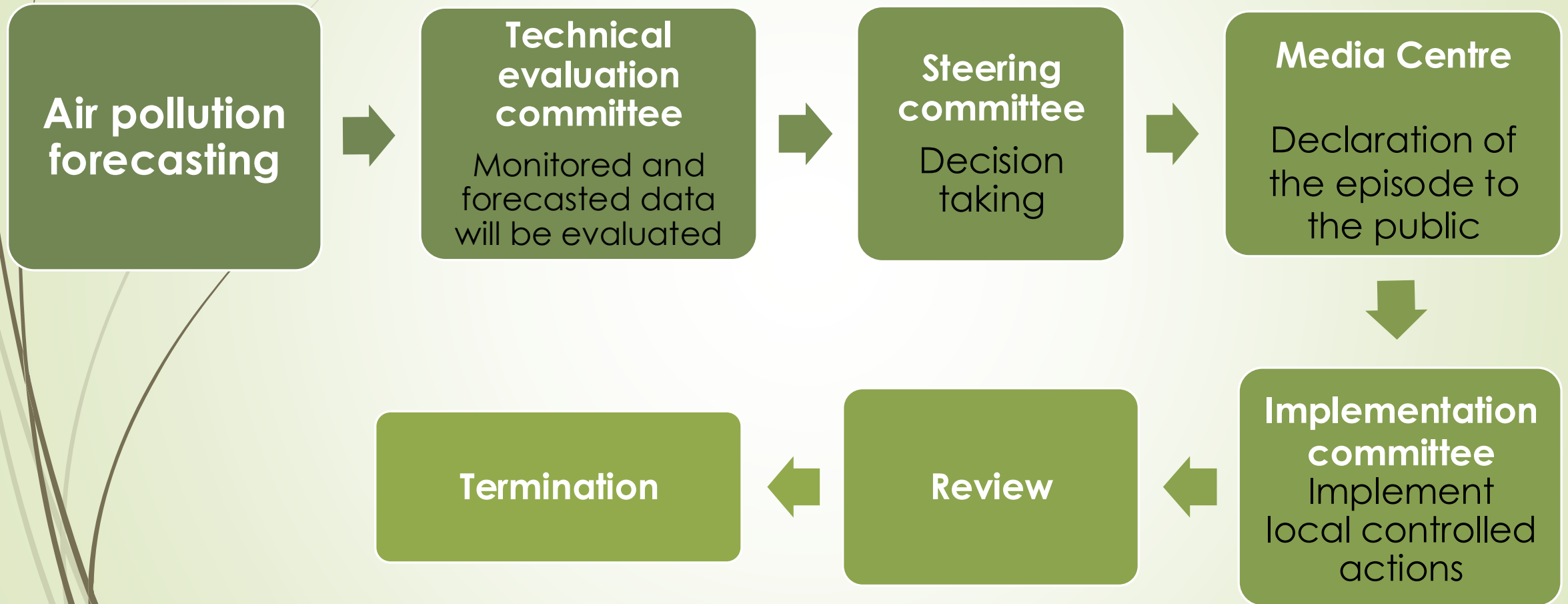
Transboundary air pollution

- Backward trajectory analysis clearly illustrates the transport pathways and directions of air pollutants reaching Sri Lanka ,with the influence of the Northeast Monsoon, pollutants are transported over long distances into the country from other regions
- This indicates that transboundary pollution plays a major role, significantly contributes to local air quality deterioration, accounting for more than 70% of particulate pollution levels during peak periods.
- This transboundary pollution phenomenon is a significant challenge for regulators, since a large portion of the pollution originates outside national boundaries and is beyond direct domestic control.

Contingency Response Action Plan for Deterioration of Air Quality in Sri Lanka (CRAP-DAQ-SL)



How the action plan works



Earlier International Cooperation Projects on Air Quality Management in Sri Lanka.

- Malé Declaration on Control and Prevention of Air Pollution and Its Likely Trans boundary Effects for South Asia
- Capacity Development for the evidence –based improvement of strategies and policies on air quality management in Colombo Mega police Area –Three party agreement with Ministry of Environment , Franc development Agency and Airparif (Technical expert) 2023-2025.Objective is to reinforce the capacity of the Sri Lankan authorities regrading AQM and to allow , in time, the identification local needs in terms of investment project for air quality management

Research Activities collaborated by CEA

Project 1

- Comprehensive Assessment of PM2.5 Sources, Long-Range Transport, and Health Implications in Colombo and Kandy, Sri Lanka.

Project 2

- Attribution of Risks Associated with Black Carbon Driven by Combined Local and Regional Contributions in Sri Lanka.

University of Chinese
Academy of Sciences,
University of Peradeniya,
Central Environmental
Authority

These collaboration aims to strengthen scientific understanding of air pollution sources, transport pathways, and associated health impacts in Sri Lanka

Project 3

- Investigation of Indoor air quality in school and households in diverse environment condition in selected regions

Education university of Hong
Kong
Central Environmental Authority



Future Plans

- ▶ Strengthening of Ambient Air quality Monitoring net work deploying 50 micro sensors island wide
 - ▶ Establishment of forecasting facility
 - ▶ Revision of Regulations (Ambient air quality regulation/ Source emission control regulation..etc)
- 

Expectations from EANET

Capacity Building and Knowledge Sharing for Sri Lanka

- **Strengthening Ambient Air Quality Monitoring**
 - Monitoring mechanisms and SOPs
 - Site selection criteria
 - Data validation and QA/QC
 - Data analysis and interpretation
- **Advanced Monitoring and Laboratory Techniques**
 - Ambient VOC sampling and analysis
 - Airborne fiber measurement and analysis
 - Laboratory quality assurance

Expectations from EANET

Capacity Building and Knowledge Sharing for Sri Lanka

- **Acid Deposition Monitoring**
 - Wet deposition sampling
 - Precipitation chemistry
 - Laboratory analysis
 - Environmental impact assessment
- **Practical Technical Cooperation**
 - Hands-on training
 - Expert technical missions
 - Laboratory and site visits
 - Staff exchanges and collaborative research



Thank you

