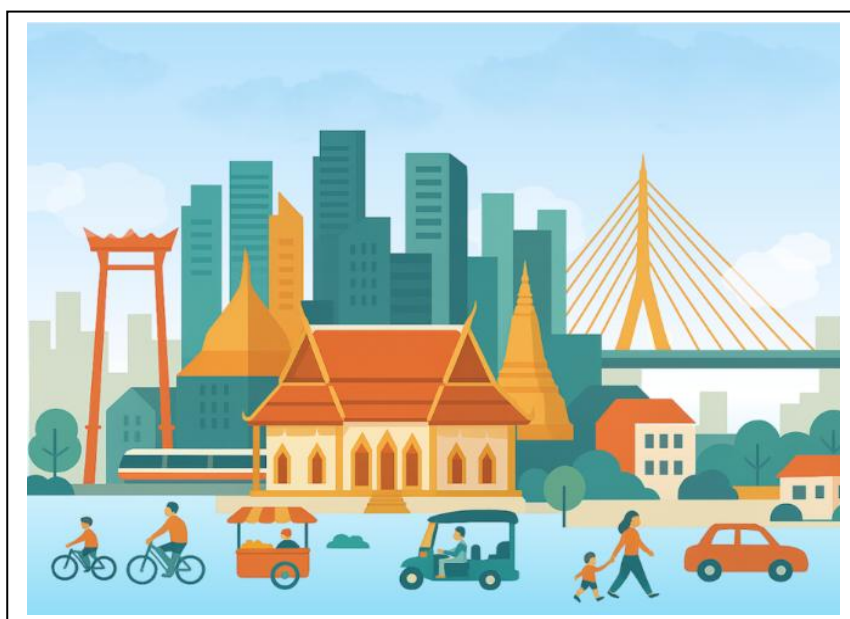


Terminal Evaluation of the UNEP Project
“Providing Support to Countries and Cities in Improving Air
Quality in Order to Improve Environmental Quality and the
Health and Well-Being of All (SMA ID 40440)”
(2019-2023)



Evaluation Office of the United Nations Environment Programme

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Providing Support to Countries and Cities in Improving Air Quality in Order to Improve Environmental Quality and the Health and Well-Being of All

SMA ID 40440

Date 01/2026

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The evaluator would like to express their gratitude to all persons met and who contributed to this evaluation, as listed in [Annex III](#).

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The evaluation consultant hopes that the findings, conclusions and recommendations will contribute to the successful finalisation of the current project, formulation of any next phases and to the continuous improvement of similar projects in other countries and regions.

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Brief consultant biography

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About the Evaluation

Joint Evaluation: No

Report Language: English.

Evaluation Type: Terminal Evaluation

ABSTRACT: This report is a Terminal Evaluation of the UNEP project: *Providing Support to Countries and Cities in Improving Air Quality in Order to Improve Environmental Quality and the Health and Well-Being of All (SMA ID 40440)*, implemented between July 2019 and June 2023 in 24 countries in Africa, Asia and Pacific, Europe, Latin America and the Caribbean, South Asia, and West Asia. The project's overall goal was to strengthen global, regional, and national efforts to improve air quality by supporting the implementation of UNEA Resolutions 1/7 and 3/8. The project sought to scale up UNEP's global support to low- and middle-income countries by building capacity and addressing key gaps in legal frameworks, air quality monitoring (AQM) systems, and cross-sectoral coordination. It aimed to enhance air quality monitoring and pollutants emission assessment, promote affordable technologies, provide sectoral policy advice (mainly on transport, waste, energy, and industry), strengthen regional cooperation and knowledge sharing, and raise public awareness to advance effective air quality management and protect human health and the environment.

The evaluation sought to assess project performance (in terms of relevance, effectiveness and efficiency) and determine the sustainability of its results. The evaluation has two primary purposes: accountability and learning. Data collection methods included: field observations, in-depth interviews, Focus Group Discussions and document reviews. Data analysis was based on applying triangulated data to assess performance against a reconstructed Theory of Change and its causal pathways.

With an overall performance rating of Satisfactory, the 4.75 point on a six-point scale, the main findings include: i) strong strategic relevance and alignment with UNEP mandates, UNEA resolutions, and donor priorities; ii) substantial delivery of outputs and meaningful outcome-level contributions, including strengthened Air Quality monitoring systems, AQM policy frameworks, and regional cooperation, with variable depth of implementation across countries; and iii) efficiency gains through partnerships and adaptive management, alongside areas for further strengthening in results-based monitoring, indicator design, and data traceability. The main recommendations to UNEP are (i) strengthening results-based monitoring and knowledge management systems in a 'umbrella' project; (ii) enhancing the integration and interoperability of air quality data platforms; (iii) strengthening linkages between air quality management and climate and development finance opportunities to support scaling and sustainability; (iv) reinforcing UNEP's central technical leadership, coordination mechanisms, and staffing on air quality in line with the UNEP MTS 2026–2029; and (v) systematically integrating human rights, gender equality, and equity considerations across project design, implementation, and monitoring.

Source(s) of Funding by Country:

EANET member countries (namely Cambodia, China, Indonesia, Japan, Lao People's Democratic Republic, Malaysia, Mongolia, Myanmar, the Philippines, Republic of Korea, Russia, Thailand, and Viet Nam), Japan, Norway, the Republic of Korea, Sweden, and the United States.

Source(s) of Funding by Institution Type:

Foundation/NGO	Yes: PayTM Foundation
Private Sector	No
UN Body	Yes: UNICEF
Multilateral Fund	Yes: EANET (including EANET member countries), CCAC (Climate and Clean Air Coalition), SIDA(Sweden), United States (US Department of States), Government of Japan, Republic of Korea, Norway
Environment Fund	Yes

Key words: Capacity-Building, Monitoring and Assessment, science-based policy development, Regional Cooperation, Awareness

Primary data collection period: August -December 2025

Field mission dates: October and November 2025

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List of acronyms and abbreviations

ACAP	Asia Center for Air Pollution Research
ADB	Asian Development Bank
AE	Africa Evaluation
AMCEN	African Ministerial Conference on the Environment
APCAP	Asia Pacific Clean Air Partnership
AQ	Air Quality
AQCA	Air Quality Central Asia Platform
AQI	Air Quality Index
AQM	Air Quality Management
AQMx	Air Quality Management Exchange Platform
ASEAN	Association of Southeast Asian Nations
BTR	Biennial Transparency Report
CAAQMS	Continuous Ambient Air Quality Monitoring Stations
CCAC	Climate and Clean Air Coalition
CED	Committee on Environment and Development
CLRTAP	Convention on Long-range Transboundary Air Pollution
CO₂	Carbon Dioxide
COP	Conference of the Parties
COVID-19	Coronavirus Disease 2019
DAC	Development Assistance Committee
DIR	Direct Responsible Individuals
DO	Direct Outcome
DPCC	Development Partner Coordination Committee
EA	Expected Accomplishment
EANET	Acid Deposition Monitoring Network in East Asia
ECI	Environmental Compliance Institute
ECOWAS	Economic Community of West African States
EEA	European Environment Agency
EU	European Union
EWAD	Early Warning and Assessment Division (UNEP)
FGD	Focus Group Discussion
FMI	Finnish Meteorological Institute
GAW	Global Atmosphere Watch
GEF	Global Environment Facility
GEMS/Air	Global Environment Monitoring System for Air
GEO	Global Environment Outlook
GHG	Greenhouse Gas
GIS	Geographic Information System
HS	Highly Satisfactory
HU	Highly Unsatisfactory
ICA	Institutional Cooperation Agreement
IGES	Institute for Global Environmental Strategies
IGO	Intergovernmental Organization
IPMR	Integrated Planning, Management and Reporting

ISP-CWP	Intergovernmental Science-Policy Panel on Chemicals, Waste and Pollution
LAC	Latin America and the Caribbean
LEAP-IBC	Long-range Energy Alternatives Planning – Integrated Benefits Calculator
MEA	Multilateral Environmental Agreement
ML	Moderately Likely
MS	Moderately Satisfactory
MTR	Mid Term Review
MTS	Medium-Term Strategy
MU	Moderately Unsatisfactory
NAMP	National Air Quality Monitoring Programme (India)
NCAP	National Clean Air Programme (India)
NDC	Nationally Determined Contribution
NGO	Non-Governmental Organization
NH₃	Ammonia
NO	Nitrogen Monoxide
NO₂	Nitrogen Dioxide
NO_x	Nitrogen oxides
O₃	Ozone
OIC	Officer in Charge
PAHO	Pan American Health Organization
P-C	Project Component
PHU	Pollution and Health Unit
PIMS	Programme Information Management System
PM	Particulate Matter
PM₁₀	Particulate matter (≤ 10 microns)
PM_{2.5}	Fine particulate matter (≤ 2.5 microns)
POPs	Persistent Organic Pollutants
PoW	Programme of Work
PRC	Project Review Committee
ProDoc	Project Document
PR SAD	Periodic Report on the State of Acid Deposition
PSC	Project Steering Committee
RAPAP	Regional Action Programme on Air Pollution
RB	Regular Budget
RO	Regional Office
ROAP	Regional Office for Asia and the Pacific (UNEP)
SAC	Scientific Advisory Committee
SDGs	Sustainable Development Goals
SEI	Stockholm Environment Institute
SIDA	Swedish International Development Cooperation Agency
SLCP	Short-Lived Climate Pollutant
SO₂	Sulphur Dioxide
SO_x	Sulphur Oxides
SP	Sub Programme
S-P	Sub-Project

SSFA	Small-Scale Funding Agreements
TE	Terminal Evaluation
ToC	Theory of Change
ToR	Terms of Reference
UN	United Nations
UNEP	United Nations Environment Programme
UNEA	United Nations Environment Assembly
UNECE	United Nations Economic Commission for Europe
UNEG	United Nations Evaluation Group
UNEP FI	United Nations Environment Programme Finance Initiative United Nations Economic and Social Commission for Asia and the Pacific
UNESCAP	
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children’s Fund
USDOS	United States Department of State
VOCs	Volatile Organic Compounds
WHO	World Health Organization
WMO	World Meteorological Organization
WRI	World Resources Institute
XB	Extra Budgetary Funding

Project identification table

Table 1: Project Identification Table

UNEP SMA ¹ ID:	PIMS: 02067 SMA: 40440	Grant ID ² (if applicable):	
UNEP Management (Division/Branch/Unit):	Industry and Economy Division/Chemicals and Health Branch/Air Quality and Mobility and Pollution and Health Unit		
Implementing Partners:	With SSFA: Environmental Compliance Institute (ECI), Clean Air Institute, Finnish Meteorological Institute, Asian Institute of Technology (AIT), MOVEGREEN, RES Foundation, Clean Air Asia, Stockholm Environment Institute (SEI), Seoul Research Institute, Incheon Research Institute, Cambodia Ministry of Environment, World Resources Institute (WRI) And through partnerships and synergies with other complementary initiatives. Asia Centre for Air Pollution Research (ACAP), Zoi Environment Network, Institute for Global Environmental Strategies (IGES), Gyeonggi Research Institute, Sri Lanka Ministry of Environment, ESCAP, UNICEF, and World Health Organization.		
Sources of Funding:	<i>Country³(ies):</i> - Sweden - United States - Japan - Republic of Korea - Norway - EANET member countries, (namely Cambodia, China, Indonesia, Japan, Lao People's Democratic Republic, Malaysia, Mongolia, Myanmar, the Philippines, Republic of Korea, Russia, Thailand, and Viet Nam)	<i>Institution⁴ Name/Type:</i> Bilateral Donors: - Sweden (SIDA) - United States (USDOS / US State Department) - Japan (Government of Japan) - Republic of Korea, and Subnational Governments (Seoul, Incheon, Gyeonggi) - Norway Multilateral Organizations and Networks: - UNICEF - EANET (including EANET member countries) - CCAC (Climate and Clean Air Coalition) Private/Philanthropic Entities: - PayTM Foundation	
Relevant SDG(s):	SDG 3 - target 9 (Indicator 3.9.1) SDG 7 - target 1 (Indicator 7.1.2) SDG 11- target 6 (Indicator 11 .6.2) SDG 12 - target 4 (Indicator 12.4.1) SDG 17 target 9 (Indicator 17.9.1)		
MTS (all that apply):	2018–2021 and 2022-2025	UNEP approval date:	01/07/2019
POW Direct Outcome(s) number/reference ⁵ (applicable for projects approved from 2022):	POW Direct Outcome (DO): POW 2022-2023:	MTS 2025 Outcome(s) number/reference	MTS 2022-2025 Outcome:

¹ SMA refers to the ID provided by the Integrated Planning, Management and Reporting Solution (IPMR) system, which was introduced by UNEP in July 2023. Previously, it was referred to as a PIMS ID number.

² For example, ID references from EC, IKI, UNDA, Adaptation Fund, GCF.

³ Where applicable, list countries who have provided project funds and/or co-finance.

⁴ Indicate where funding institutions are any/all of the following: Foundation/NGO; Private Sector; UN Body; Multilateral Fund; Environment Fund; Other.

⁵ For these items do not include full text; only enter the number or reference.

OR POW Output(s) number/reference <i>(applicable for projects approved pre-2022):</i>	DO (3.4) Air pollution action, sustainable mobility and clean energy are supported DO (3.5) Institutional capacity to adopt and act on national and international commitments is enhanced. DO (3.13) Sound science, data and statistics, analysis, information and knowledge are generated and shared.	<i>(applicable for projects approved from 2022):</i> OR POW Expected Accomplishment(s) number/reference <i>(applicable for projects approved pre-2022):</i>	3(iii) Releases of pollutants to air, water, soil and the ocean are reduced
	POW 2020–2021 Output: 5-c-1 Assessments of air quality status and trends at national and regional scales 5-c-3 Advisory and support services and capacity-building to facilitate the standard and strategy development and information sharing necessary to reduce air pollution 5-c-4 Support to strengthen cooperation, coordination and partnerships across the globe, including within the United Nations system, and enhance linkages and synergies among major air quality programmes and stakeholders		POW Expected Accomplishment(EA): POW 2020-2021 EA (c) <i>National emissions sources are identified, policies and legal, regulatory, fiscal and institutional frameworks and mechanisms to reduce air pollution are developed, institutional capacity to improve air quality is built and air quality assessments are done by countries with UNEP support and within the frameworks of relevant multilateral environmental agreement</i>
Sub-programme:	Chemicals and Pollution Action (formerly called Chemicals, Waste and Air Quality)	Programme Coordination Project (if relevant):	
Expected start date: ⁶	01/04/2019	Actual start date: ⁷	01/07/2019

⁶ Expected/planned dates are listed in the Project Document (ProDoc).

⁷ Actual start date is the date of project approval by the Division Director.

Planned completion date:	30/06/2022	Actual operational completion date:	06/2023
Planned project budget ⁸ at approval:	Planned Core Funding (regular budget, Environment Fund, etc.): N/A Planned Extra-budgetary Funds ⁹ : Cash: USD 8,592,291 In-kind: USD 215,375 (CCAC, XB in kind) +1,192,160(EF post Cost) +308,377(Regular budget post cost) Total Planned Budget: USD 10,308,203		
Secured budget ¹⁰	Secured Core Funding (regular budget, Environment Fund, etc.): N/A at Revision 1 Environment Fund (at project closure): USD 105,000 Secured Extra-budgetary Funds: USD 4,835,789 (as per Revision No. 1) USD 6,412,924 (at project closure) Total secured budget as of 05/01/2022 as per Revision 1: USD 4,835,789 Total Final secured budget at project closure: USD 7,958,466.05		
Actual expenditures reported (cash only):	Actual Core Funding expenditures reported as of 23/04/2024: N/A Actual Extra-budgetary Funds expenditures reported as of 23/04/2024: USD 6,236,788.29 Total actual expenditures reported as of 23/04/2024: USD 6,236,788.29		
First disbursement:		Planned date of financial closure:	Estimated 1 year after operational completion
No. of formal project revisions:	1	Date of last approved project revision:	05/01/2022
No. of Steering Committee meetings:	N/A	Date of Last Steering Committee meeting:	N/A
Mid-term Review/ Evaluation ¹¹ (required or not required):	UNEP requirement: Y Donor requirement: N	Mid-term Review/ Evaluation actual date:	June 2022
Terminal Evaluation (planned date):	2025	Terminal Evaluation actual date:	August 2025
Coverage - Country(ies):	13 participating countries from the Acid Deposition Monitoring Network in East Asia (EANET), namely Cambodia, China, Indonesia, Japan, Lao People's Democratic Republic, Malaysia, Mongolia, Myanmar, the	Coverage - Region(s):	Africa, Asia and Pacific, Europe, Latin America and the Caribbean, South Asia, and West Asia.

⁸ Total budget may include: Regular Budget, Environment Fund, Extra-Budgetary, including 'softly-earmarked' etc.

⁹ Extra-budgetary funds may include co-finance (cash/in-kind).

¹⁰ From last project/budget revision.

¹¹ UNEP projects of four or more years duration require an MTR unless there is an exceptional circumstance. See the *Evaluation in the Project Cycle* section in [UNEP Programme and Project Management Manual](#). Donor requirements may vary and should be considered in conjunction with UNEP's requirements.

	Philippines, Republic of Korea, Russia, Thailand, and Viet-Nam; as well as 11 other countries: Ethiopia, Uganda, Costa Rica, Peru, India, Palestine, Serbia, Kazakhstan, Kyrgyzstan, Uzbekistan, and Sri Lanka.		
Dates of previous project phases:	531.4 Institutional Measures and Technical Assistance to Address Air Pollution 533.1a Upscaling UN Environment's work on air quality through support to air quality management at city level	Status of future project phases:	Follow up project title: UNEP-wide project on Improving Air Quality (2023-05-15~2026-12-31) SMA ID 156083

Executive Summary

Project background

1. The UNEP 'umbrella'¹² project *"Providing Support to Countries and Cities in Improving Air Quality in Order to Improve Environmental Quality and the Health and Well-Being of All"* (SMA ID 40440) was implemented from July 2019 to June 2023 across 24 countries in Africa, Asia and the Pacific, Europe, Latin America and the Caribbean (LAC), and West Asia. The project covered 7 components(sub-projects) with a total expenditure of USD 6,236,788.29, which was funded through the Environment Fund and 12 grants contributions from Sweden (Sida), the United States (U.S. Department of State), Japan, the Republic of Korea (including the subnational governments of Seoul, Incheon, and Gyeonggi), Norway, UNICEF, EANET member countries, the Climate and Clean Air Coalition (CCAC), and the PayTM Foundation.
2. The project was led by Industry and Economy Division/Chemicals and Health Branch/ Pollution and Health Unit (formerly led by Sustainable Mobility Unit until 31 March 2020) with cooperation with 20 partners¹³. It aimed to strengthen national and subnational air quality management (AQM) by addressing key gaps in air quality monitoring systems, legal and policy frameworks, institutional coordination, and access to science-based evidence. It supported countries and cities through pollutants and their sources assessments, monitoring and modelling tools, policy and action planning, regional cooperation platforms, and awareness-raising activities, in alignment with UNEA resolutions 1/7 (Strengthening the role of the United Nations Environment Programme in promoting air quality), 3/8 (Preventing and reducing air pollution to improve air quality globally) and UNEP's Medium-Term Strategies(MTS) and Programmes of Work(POW) Expected Accomplishment. It was bringing for the first time the work of different divisions, regional offices and initiatives (e.g. the CCAC) on air quality under a coherent framework.

This evaluation

3. The terminal evaluation (TE) sought to assess project performance (in terms of relevance, effectiveness and efficiency) and determine the sustainability of its results. It assessed performance against 9 evaluation criteria¹⁴ and assigned¹⁵ [redacted]; and through 5 TE strategic questions examined how effectively the project addressed the needs of differentiated groups, identified sustainable and innovative financing options, leveraged data

¹² A 'umbrella' project – often referred to within UNEP as a 'framework' or 'basket' project- is a PRC-approved project that encompasses a diverse set of funding sources, initiatives and implementing partners under one overarching structure, even though it is approved as a single project. It functions as a container for several independently designed and managed components and hosts multiple grants, each with distinct financial arrangements, disbursement timelines, and country coverage. These grants have varied results frameworks that may contribute to different parts of the 'umbrella' project's results framework or may reflect that results framework as a whole. The grants are implemented by multiple partners, each accountable for its own component.

¹³ Including: the Asian Institute of Technology (AIT), Asia Center for Air Pollution Research (ACAP), Cambodia Ministry of Environment, Clean Air Asia (CAA), Clean Air Institute (CAI), Environmental Compliance Institute (ECI), Economic and Social Commission for Asia and the Pacific (ESCAP), Finnish Meteorological Institute (FMI), Gyeonggi Research Institute (GRI), Incheon Research Institute (IRI), Institute for Global Environmental Strategies (IGES), MOVEGREEN, RES Foundation, Seoul Research Institute (SRI), Sri Lanka Ministry of Environment, Stockholm Environment Institute (SEI), United Nations Children's Fund (UNICEF), World Resources Institute (WRI), World Health Organization (WHO), and Zoi Environment Network.

¹⁴ (1) Strategic Relevance, including Complementarity; (2) Quality of Project Design; (3) Nature of External Context; (4) Effectiveness (incl. availability of outputs; achievement of outcomes and likelihood of impact); (5) Financial Management; (6) Efficiency; (7) Monitoring and Reporting; (8) Sustainability and (9) Factors Affecting Project Performance and Cross-Cutting Issues.

¹⁵ The six-point scale is as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability and Likelihood of Impact are rated from Highly Likely (HL) down to Highly Unlikely (HU) and Nature of External Context is rated from Highly Favourable (HF) to Highly Unfavourable (HU). The ratings against each criterion are 'weighted' to derive the Overall Project Performance Rating. The greatest weight is placed on the achievement of outcomes, followed by dimensions of sustainability.

to influence policy at national, regional, and global levels, enabled scaling and replication of successful approaches, and acted upon the recommendations of the Mid-Term Review (conducted in 2022 June).

4. The evaluation has two primary purposes: accountability and learning. Data collection methods included: field observations, in-depth interviews, focus group discussions and document reviews. Data analysis was based on applying triangulated data to assess performance against a reconstructed Theory of Change and its causal pathways.

Key findings and performance ratings

5. The project demonstrated **strong Strategic Relevance**, with full alignment to UNEP's mandates, Medium-Term Strategies (MTS 2018–2021: *Chemicals, Waste and Air Quality*, and 2022-2025: *Chemicals and Pollution Action*) and Programmes of Work (*Subprogramme 5: Chemicals, Waste and Air Quality* under POW 2018–2019, 2020–2021, and 2022-2023), as well as to donor priorities and global, regional, and national air quality agendas. It directly supported UNEA resolutions on air pollution and contributed to strengthening regional and intergovernmental cooperation frameworks, including in Asia–Pacific (EANET, APCAP, Asia-Pacific Regional Action Programme on Air Pollution), Africa (Africa Clean Air Network), and promoted the establishment of regional cooperation platforms in West Asia (Regional Air Quality Network), and LAC (Intergovernmental Network on Atmospheric Pollution for LAC). Through its 'umbrella' project design, UNEP was able to address the multi-dimensional and transboundary nature of air pollution, linking global assessments with country- and city-level action. The project integrated complex issues across energy (e.g. clean fuel), waste management (e.g. open burning), climate-related pollutants (e.g. SLCP- short-lived climate pollutants) mitigation, chemicals [e.g. POPs-Persistent Organic Pollutants- Dioxins (PCDDs) generated from incomplete combustion of fuel from heavy-duty trucks and buses] management, meteorological influence (e.g. wildfires, winter fog), health impact assessment (e.g. disease attributable quantification), and key emission sectors such as transport, agriculture, residential and commercial buildings, and industry. This approach reinforced UNEP's normative leadership and convening role while enabling coherence between global evidence generation and context-specific policy and implementation support.

6. In terms of **Effectiveness**, the project delivered a substantial and diverse portfolio of outputs (detailed in [Section 4.4.1](#) of this report), particularly in scientific assessments, air quality monitoring and modelling guidance, and policy and action planning advice and support. Key deliverables included **8 major air quality action and assessment reports (with 15 sub-reports)**, **17 technical guidance documents and tools**, **15 sectoral and city-level air quality action plans** (including cities Kampala, San José, Lima, as well as countries India, Cambodia, Thailand, Palestine, etc.), and **3 regional AQM action plans** for Asia and the Pacific, Africa, and LAC. The project also established **more than 10 knowledge-sharing mechanisms (event, forum, platform)**, produced **2 action-based solution reports** (e.g. *Beating air pollution in Seoul Metropolitan Region through evidence based solutions in Republic of Korea*), and delivered extensive capacity-building activities, training **over 370 practitioners** in air quality monitoring and related topics across Latin America, Africa, and Central Asia, while engaging **approximately 900 participants** through communities of practice. In addition, global outreach through online platforms and major awareness campaigns—such as World Environment Day and the International Day of Clean Air for Blue Skies—reached a much wider audience globally.

7. The project demonstrated concrete outcomes through its contribution to AQM policy development and institutional change at national and subnational levels. Notable examples include the *UNEP Actions on Air Quality Report and Global Methane Assessment Summary for Decision Makers*, regional and city-level assessments (e.g. *UNEP/CCAC Integrated Assessment of Air Pollution and Climate Change for Sustainable Development in Africa*; *Seoul*

Metropolitan Region Air Quality Assessment), and technical guidance on monitoring, modelling, and air quality legislation (e.g. *Practical Considerations for Real World Air Quality Instrument Siting, Calibration and Reporting*; *Guide on Ambient Air Quality Legislation - Air Pollution Series*; and *Child-centred clean air solutions - A guide for Asia and the Pacific region*). Several countries and cities adopted or advanced clean air action plans, standards, or regulatory measures, part of examples including the *Kampala Clean Air Action Plan*, *Uganda's Ambient Air Quality Standard Regulation and Vehicle Emission Standards*, *Clean Air Action Planning in Cambodia and Peru*, *Palestine Strategy Pathways to Cleaner Air*, and the application of monitoring data to support *enforcement actions in Addis Ababa and Nairobi*. Long-term impact depends on sustained investment, stronger alignment with climate/environment finance mechanisms, and continued UNEP leadership to support scaling and consolidation of results, such as action taken, with Chile demonstrating that substantial progress is achievable – evidenced by a 40% reduction in PM_{2.5} levels over the last decade. Overall project effectiveness was rated **Satisfactory**, reflecting meaningful outcome-level contributions across multiple regions, while recognizing that the depth and pace of implementation of clean air measures varied according to national capacity, availability of financing, and the maturity of existing air quality management systems.

8. **Efficiency** was also assessed as **Satisfactory**, supported by extensive use of existing scientific datasets, institutional frameworks, and partner networks (e.g., APCAP, CCAC, CAI, Clean Air Asia, EANET, ECI, FMI, SEI, UNESCAP, UNICEF, WHO, etc.), which reduced start-up costs and enabled rapid implementation. Adaptive management allowed the project to maintain delivery momentum despite COVID-19 disruptions, including through the effective shift to virtual and hybrid modalities. However, efficiency gains were partially constrained by overlapped data collection and surveys (e.g. countries reporting air quality data separately to UNEP's GEMS/Air platform and WHO's Global Air Quality Database assessments), fragmented air quality data platforms [as monitoring data are distributed across national systems (e.g. AirKorea), regional networks (e.g. EANET), global platforms (e.g. GEMS/Air), and emerging sensor-based systems (e.g. AirQo), often operating with different standards and reporting formats], and limited co-financing for scaling up best practices, which reduced opportunities for economies of scale and integrated knowledge management.

9. **Monitoring, reporting, and financial management** presented mixed performance. Monitoring and reporting were constrained by the absence of a project steering committee, limited staffing inputs (with one P4 leading the project at approximately 90% engagement, supported by limited inputs from six P4s, three P5s, three P3s, one P2, and two consultants), weaknesses in results indicator design, inconsistent verification methods, and limited data traceability – particularly during the transition from UNEP's Programme Information and Management System (PIMS) to Integrated Program Management Report (IPMR). These factors collectively affected the robustness of output-level evidence. Financial management complied with UNEP procedures and donor agreements, but system-level constraints limited full expenditure traceability at output and component/sub-project levels.

10. The **Sustainability** of the project's results was assessed as **Moderately Likely**, reflecting a combination of strong enabling factors and persisting risks. Sustainability is demonstrated by continued political commitment to air quality across regions (e.g. UNEA Resolution 6/10 – “Promoting regional cooperation on air pollution to improve air quality globally”), UNEP follow up project “UNEP-wide project on Improving Air Quality(2023-05-15~2026-12-31)”, ongoing regional cooperation frameworks (including RAPAP in Asia-Pacific, the Africa Clean Air Network, and the Intergovernmental Network on Atmospheric Pollution for Latin America and the Caribbean), and the integration of air quality into broader climate, health, and development agendas (e.g. the CCAC Clean Air Flagship initiative to mobilise partnerships for faster action on air pollution and short-lived climate pollutants while delivering health and climate co-benefits, as well as two Finland and EIB joint funded

Institutional Cooperation Instrument projects in air quality monitoring in Tajikistan and Kyrgyzstan). The project's emphasis on capacity building, normative guidance, and policy and planning instruments has enhanced institutional ownership and the likelihood that tools, data, and approaches will continue to be used beyond the project period. However, sustainability remains constrained by uneven national financing, limited integration of air quality actions into domestic budget cycles, variable institutional capacity, and dependence on external technical support in some countries.

Strategic questions:

a) *In what ways, and to what extent, have the needs and interests of differentiated groups been considered in the implementation and monitoring of the project?*

The evaluation finds that the project addressed differentiated stakeholder needs primarily through inclusive, health-oriented engagement across governments, civil society, research institutions, and regional networks, although gender and equity considerations were not systematically operationalised or monitored. In cooperation with UNICEF, the project promoted 20 child-centred clean air solutions, contributing to the realisation of children's fundamental rights to breathe clean air and live in a stable climate.

b) *What innovative financing mechanisms can be explored to sustain air quality initiatives beyond the project's lifecycle?*

The project also advanced innovative financing pathways by framing air quality improvement as a "triple win" for health, climate, and economic development and highlighting opportunities to link air quality measures, particularly SLCP mitigation, to climate and green finance mechanisms (such as alignment with *World Bank cost-effective approaches* to address outdoor air pollution and the *Asian Development Bank's new toolkit providing practical guidance for development finance institutions* to integrate air quality improvements across sectors).

c) *How can the project's data and findings be leveraged to influence policy changes at the national regional and global levels?*

The project leveraged its data and analytical outputs by translating technical evidence into policy-relevant products tailored to decision-makers at different levels (detailed examples are provided in this report [Section 4.4.2](#)). At national and city levels, air quality data, assessments, and modelling informed clean air action plans, regulatory standards, and sectoral priorities. For example, Addis Ababa (Ethiopia) and Nairobi (Kenya) used UNEP-supported air quality data to inform regulatory and policy decisions, including demonstrating improvements following truck restrictions in urban areas and enforcing compliance orders on industrial facilities exceeding emission thresholds; In the Seoul–Incheon–Gyeonggi metropolitan region, sectoral modelling was applied to quantify PM_{2.5} contributions—particularly from buildings and transport—supporting targeted mitigation measures. Regionally, harmonised datasets supported peer learning and coordinated responses through established platforms. At the global level, synthesised evidence contributed to UNEA discussions, WHO guideline implementation, SDG monitoring, and climate–air quality co-benefits advocacy, reinforcing UNEP's normative role within broader climate, health, and sustainable development agendas.

d) *How can the project's successes and innovative approaches be scaled up and replicated in other regions facing similar air quality challenges?*

Project results demonstrated strong potential for scaling and replication through the institutionalisation of tools, training packages, and regional platforms (e.g. initiatives led by Clean Air Fund), supported by peer learning and South–South cooperation (e.g. Latin America & Africa Air Quality Community of Practice encompasses 93 members across 6 countries - Mexico, Colombia, Ghana, Kenya, Senegal, and Uganda).

e) In what ways, and to what extent, were the recommendations from the Mid Term Review actioned upon?

Uptake of Mid-Term Review recommendations was partial: coordination and efficiency improved following COVID-19 disruptions, while systematic gender mainstreaming and results-based monitoring remain areas requiring further strengthening.

Conclusions summary

11. Overall, the project performed at a **Satisfactory** level. The evaluation concludes that the project made a meaningful and timely contribution to global, regional, and national efforts to address air pollution, particularly through its strong strategic relevance, policy influence, and effective partnerships. Its main achievements include strengthened institutional capacity for air quality management, improved access to monitoring data and assessments, enhanced regional cooperation, and tangible policy and planning outcomes in multiple countries and cities.

12. Strong performance was evident in relevance, partnership-based delivery, and knowledge generation and communication to users. Comparative weaknesses related to coordination across components, results-based monitoring, and systematic knowledge management under the 'umbrella' project structure. The 'umbrella' project approach was not fully leveraged, partly due to the absence of a formal Project Steering Committee and a structured project-wide kick-off process.

Table 2: Summary of project ratings

Criterion	Rating
Strategic Relevance	HS
Quality of Project Design	S
Nature of External Context	MU
Effectiveness	S
Financial Management	S
Efficiency	S
Monitoring and Reporting	MU
Sustainability	ML
Factors Affecting Performance	S
Overall Project Performance Weighted Rating	S

Lessons Learned

13. **Lesson 1: Strategic partnerships enable scale and resilience in complex, multi-country air quality programmes.** Collaboration with UN agencies, regional networks, research institutions, and national and subnational governments was critical to delivering results across diverse contexts. These partnerships enabled cost-effective delivery, knowledge sharing, and continuity despite external shocks (e.g. COVID-19), demonstrating the value of leveraging established platforms and mandates in multi-country air quality programmes.

14. **Lesson 2: Integrating air quality objectives with climate finance frameworks strengthens sustainability and scalability.** Aligning air quality interventions with climate and SLCP mitigation frameworks enhanced both political relevance and financial sustainability. Framing air pollution reduction as a "triple win" for health, climate, and economic outcomes

helped attract donor interest, supported co-benefit investments, and positioned air quality more firmly within climate finance and green investment agendas.

Recommendations

15. **Recommendation 1: Improve results-based monitoring, indicator clarity, and strategic knowledge management systems across ‘umbrella’ air quality programmes**, to ensure clearer and more measurable indicators at output and outcome levels, defined verification methods and data sources, and a structured digital system to link activities, outputs, and outcomes across sub-projects and components. This will improve traceability, support learning and adaptive management, and enable systematic capture of synergies and results across complex, multi-country air quality management interventions.

16. **Recommendation 2: Strengthen integration and interoperability of air quality data platforms**. UNEP, through the Industry and Economy Division (Pollution and Health Unit), should develop and operationalise a **lightweight interoperability framework** (technical guidance with minimum data standards) that links existing national, regional, and global air quality platforms (e.g. GEMS/Air, EANET, APCAP, AQCA, national portals), enabling shared metadata, harmonised indicators, and cross-platform data access for policymakers and practitioners.

17. **Recommendation 3: Strengthen links between air quality management and climate finance mechanisms**, to support countries and cities to integrate air quality measures—particularly SLCP mitigation—into NDCs, national investment plans, and proposals to climate and green finance instruments, enabling scaling of proven interventions.

18. **Recommendation 4: Strengthen UNEP’s central technical leadership and staffing for air quality, in line with the UNEP MTS 2026–2029**, to support global oversight and coherence. This should include: (a) **elevating air quality leadership** through the designation or reinforcement of a **senior-level coordination role** (P5/D1 or equivalent) with a clear mandate to oversee global air quality strategy, inter-divisional coordination, and UNEA 6/10 follow-up; and (b) **increasing technical staffing** (scientists, modellers, data and policy specialists) at headquarters and regional levels to support analytical work, quality assurance, and country/regional advisory functions, reducing over-reliance on external partners.

19. **Recommendation 5: Systematically operationalise human rights and gender equality in air quality management interventions**. UNEP should ensure that all new air quality projects approved from **2025 onward** include a **mandatory gender and human rights operational package**, consisting of: (a) at least one gender- or equity-specific indicator; (b) sex- and age-disaggregated participation and outcome data; and (c) support for the development of methodologies and technical capacity to analyse differentiated exposure or health impacts, including strengthening internal and partner capacities and enabling the progressive integration of such analyses into UNEP monitoring and reporting systems.

20. **Recommendation 6: The Mid-Term Review (MTR) of the successor project “UNEP-wide Project on Improving Air Quality (2023-05-15–2026-12-31), SMA ID 156083”** should consider, inter alia, the extent to which the recommendations from this Terminal Evaluation have been implemented and integrated into project design, implementation, and monitoring practices.

1 THE PROJECT

1.1 Context

1.1.1 Intervention context

22. The UNEP project “Providing Support to Countries and Cities in Improving Air Quality in Order to Improve Environmental Quality and the Health and Well-Being of All”(SMA ID 40440), was designed to address the urgent global challenge of air pollution, which causes 6.5 million deaths annually, disproportionately impacts low- and middle-income countries in Africa, Asia and the Pacific, Europe, Latin America and the Caribbean(LAC), and West Asia, harms ecosystems, and accelerates climate change. Targeting primarily low- and middle-income countries, the project supported air quality monitoring, promotion of affordable technologies, policy advice across key sectors (e.g. transport, waste, energy, industry), enhanced regional cooperation and knowledge sharing, and implemented a robust awareness and communications strategy. It aimed to address critical gaps in capacity, legal frameworks, monitoring systems, and cross-sectoral coordination to enable more effective air quality management.

1.1.2 Institutional context

23. The project functioned as a global ‘umbrella’ initiative to achieve the Expected Accomplishment (c) under UNEP’s Subprogramme 5: Chemicals, Waste, and Air Quality, within the *Programme of Work(PoW) for 2018–2019 and 2020–2021, and 2022-2023*, aligned with the *Medium-Term Strategy (MTS) 2018–2021 and 2022-2025*. In response to UNEA Resolutions *UNEP/EA.1/RES.7 and UNEP/EA.3/RES.8*, the project scaled up UNEP’s support to governments through a global air quality programme that consolidated expertise across the organization. The Project was approved on July 1, 2019, and implemented from July 2019 to June 2023 (with a one-year extension revision in January 2022) and it underwent a Mid-term Review in June 2022. The project was carried out across 24 countries spanning the Africa, Asia-Pacific, Europe, Latin America and the Caribbean, and West Asia regions: 13 participating countries from the Acid Deposition Monitoring Network in East Asia (EANET), namely Cambodia, China, Indonesia, Japan, Lao People’s Democratic Republic, Malaysia, Mongolia, Myanmar, the Philippines, Republic of Korea, Russia, Thailand, and Viet- Nam; as well as 11 other countries: Ethiopia, Uganda, Costa Rica, Peru, India, Palestine, Serbia, Kazakhstan, Kyrgyzstan, Uzbekistan, and Sri Lanka.

24. The project was built on a series of global and regional initiatives, lessons learned, and key outputs that had generated strong momentum toward a comprehensive and integrated approach to clean air, which the project sought to consolidate and expand. It drew on two foundational project preparation phases: *Upscaling UNEP’s Work on Air Quality*, and *Strengthening Delivery on Environment and Health: Air Quality Focus*. It also was built on the *Asia-Pacific project Institutional Measures and Technical Assistance to Address Air Pollution*, the regional initiative *Air Pollution and Human Health: The Case of Western Balkan Countries*, and science-based assessments such as *Air Pollution in Asia and the Pacific: Science-based Solutions*. In addition, the project leveraged ongoing collaboration with key regional networks and partnerships, including the Acid Deposition Monitoring Network in East Asia (EANET), the Asia Pacific Clean Air Partnership (APCAP), and the Climate and Clean Air Coalition (CCAC).

25. The project mobilised a total secured budget of USD 6,872,155 (ref. Project Revision, January 2022) and reported expenditures of USD 6,236,788.29 as of 23 April 2024. Funding was provided through the Environment Fund and 12 grants from a diverse group of donors and partners, including EANET member countries, the Climate and Clean Air Coalition (CCAC), the Governments of Japan and Norway, the Republic of Korea (including the subnational

governments of Seoul, Incheon, and Gyeonggi), the PayTM Foundation, the Swedish International Development Cooperation Agency (Sida), UNICEF, and the United States Department of State. This diversified funding base strengthened the project's financial resilience and enabled implementation across multiple regions and thematic areas.

1.2 Results Framework

26. This 'umbrella' project comprises 7 components (i.e. sub-projects, see Table 3 for title details) contributing to the project intended ToC and its relevant Outputs. These 7 components are a combination of (1) projects with a start and end date and dedicated funding, e.g. P-C5 and 6, (2) intergovernmental initiatives such as P-C1 EANET, (3) networks or voluntary partnerships such as P-C2 APCAP, and in addition (4) support from CCAC (e.g. for P-C7), UNICEF (for P-C4), and additional corporate resources (e.g. for P-C3) received during the lifetime of the project (mostly SIDA, as referenced in the project revision document).

Table 3: Project components overview

Number	Title of Project Components (P-C)
P-C 1	Acid Deposition Monitoring Network in East Asia (EANET)
P-C 2	Asia Pacific Clean Air Partnership (APCAP)
P-C 3	Air Quality Action forum in India
P-C 4	Clean Air Solutions for Children
P-C 5	Beating Air Pollution in Seoul; Metropolitan region through evidence-based solutions
P-C 6	Improve air quality in the Asia-Pacific region by establishing and strengthening air quality communities of practice
P-C 7	Supporting Countries to Monitor and Improve Urban Air Quality

27. According to the ProDoc, project revision, and the PIMS monitoring and progress reports, the project outputs and outcome are summarized in Table 4. Justifications for the reformulation of result statements (see [Annex XIII](#)) to ensure alignment with UNEP's definitions of result levels and the project's causal pathways, and further details, are provided in [Table 9](#) in [Section 3 Theory of Change](#).

Table 4: Summary of project's latest approved results framework

	Results Statement
Project objective	To support countries, cities and other stakeholders to take action on air pollution by providing the needed understanding, capacity, tools and policy support and global and regional cooperation on air quality.
Impact	Reduced global air pollution levels and related risk to the environment and human health
Intermediate state	A significant increase in actions on air pollution by countries, cities. Stakeholders, including citizens, increasingly aware of risks of air pollution and influence actions towards cleaning the air
Project outcome	Governments have measures, policies or frameworks in place to address air pollution for improved air quality and human health at national and subnational level through the support of UNEP.

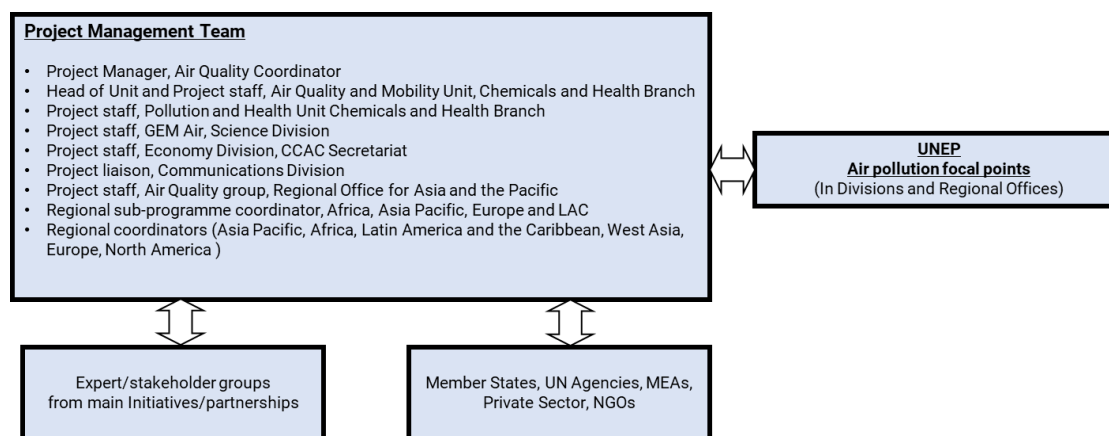
(divided into 7 milestones ¹⁶ , measured by 2 indicators)	
Outputs (divided into 34 milestones, measured by 14 indicators)	A) Assessments to inform the state of air quality developed and made available to decision-makers and relevant stakeholders (via 7 milestones)
	B) Advisory and support services provided to establish functional urban air quality monitoring networks (via 6 milestones)
	C) Advisory and support services provided in action planning and air quality strategy development and implementation (via 7 milestones)
	D) Governments' institutions demonstrate increased knowledge, and coordination/collaboration on air quality action enhanced at regional and global level (via 7 milestones)
	E) Enhanced communication and awareness-raising tools to encourage action and promote best practices (via 7 milestones)

Source: project revision dated on January 5, 2022

1.3 Project Implementation Structure and Partners

28. The project was managed by the Pollution and Health Unit (PHU, formerly the Air Quality and Mobility Unit until January 2018) within the Chemicals and Health Branch of UNEP's Industry and Economy Division (project management structure see Figure 1). It was coordinated with other UNEP divisions, including the Early Warning and Assessment Division (EWAD), Law Division, and the Communication Division, as well as regional offices in Africa, Asia and the Pacific, Europe, Latin America and the Caribbean, and West Asia. The UNEP North America Office also facilitated policy engagement and donor liaison, including liaison with the U.S. State Department and Canada, which provided financial support to the CCAC. A total of 20 implementing partners¹⁷ were involved, 12 through SSFAs and the remainder via partnerships and synergies with complementary initiatives (refer to [Table 1](#) for more details).

Figure 1: Organigram of the project with key project stakeholders



Source: ProDoc, revised according to the actual implementation by TE

¹⁶ **Milestones:** Are benchmarks (not activities) that represent attainment of a project stage or project achievement that show progress towards project outcomes and outputs. Milestones attainment was strictly answerable with a "yes" or "No" answer in project monitoring.

¹⁷ 20 project partners include: Asian Institute of Technology (AIT), Asia Center for Air Pollution Research (ACAP), Cambodia Ministry of Environment, Clean Air Asia (CAA), Clean Air Institute (CAI), Environmental Compliance Institute (ECI), Economic and Social Commission for Asia and the Pacific (ESCAP), Finnish Meteorological Institute (FMI), Gyeonggi Research Institute (GRI), Incheon Research Institute (IRI), Institute for Global Environmental Strategies (IGES), MOVEGREEN, RES Foundation, Seoul Research Institute (SRI), Sri Lanka Ministry of Environment, Stockholm Environment Institute (SEI), United Nations Children's Fund (UNICEF), World Resources Institute (WRI), World Health Organization (WHO), and Zoi Environment Network.

1.4 Stakeholders

29. The stakeholders involved in the project include a diverse range of actors from various sectors. These comprised governments, both at the national and local (city) levels, as well as relevant UNEP Divisions, their Regional Offices, and key initiatives. Additionally, several UN agencies and intergovernmental organizations (IGOs) were involved, alongside international and regional networks such as Acid Deposition Monitoring Network in East Asia (EANET) and the Climate and Clean Air Coalition (CCAC). Engagement also extends to civil society organizations, business and industry sectors, and the scientific and technological community, all of whom bring essential perspectives and expertise. Finally, citizens and communities, particularly those who are marginalized, vulnerable, or part of susceptible subgroups, were recognized as critical stakeholders whose inclusion ensures a more equitable and representative approach to project development and implementation.

30. The evaluator conducted a stakeholder analysis to identify the key stakeholder groups involved in the project. Based on this analysis conducted during the inception phase, their interests and engagement in influencing the project outcomes are summarized in TE Inception Report. Their specific contributions to the project, as well as the benefits they have derived, was examined and analysed and available in [Section 4: Evaluation Findings](#).

1.5 Changes in Design during Implementation

31. The project was revised in January 2022 to reflect UNEP's increased focus on the health impacts of air pollution, the availability of new funding, and alignment with its new Programme of Work (2022–2023) of Medium-Term Strategy (2022-2025), and its Chemical and Pollution Action subprogramme. Key changes included a one-year extension (from June 2022 to June 2023) to accommodate expanded outputs, the addition of three new Sub-projects/Project components, and an expected budget (including secured and unsecured extra-budgetary resources) increase from USD 8.59 million to USD 10.11 million supported by new funding sources contributions from the Government of Korea, UNICEF, PayTM, and SIDA.

1.6 Project Financing

32. The project was financed through a secured budget totalling USD 7,958,466.05, which included the Environment Fund (USD 105,000), Extra-budgetary funding (12 grants from 10 donors totalling USD 6,412,924), and in-kind contributions (USD 1,440,542). The total expenditures up to April 2024 was USD 6,236,789. The details of funding source and expenditures in subproject/component level are available in the Table 5 and 6 below.

Table 5: Project funding sources

Funding source	Planned funding	% of planned funding	Secured funding ¹⁸	% of secured funding
<i>All figures as USD</i>				
<i>Cash</i>				
Funds from the Environment Fund			105,000	2%
Funds from the Regular Budget				
Extra-budgetary funding (listed per donor):				

¹⁸ Secured funding refers to received funds and does not include funding commitments not yet realised.

Government of Japan – APCAP	1,349,999	13%	877,236	13%
EANET Member countries	1,843,181	18%	1,644,464	25%
Norway	3,788,522	37%	399,000	6%
SIDA			1,277,978	20%
CCAC	850,000	8%		0%
UNICEF	50,000	0%	44,940	1%
Republic of Korea City Governments (Seoul, Incheon and Gyeonggi)	800,850	8%	714,319	11%
PayTM Foundation	183,948	2%	173,113	3%
Republic of Korea	160,478	2%	140,148	2%
US State Department-South Africa	100,000	1%	154,116	2%
US State Department (Global)	592,592	6%	592,592	9%
US State Department (Asia Pacific)	395,018	4%	395,018	6%
Sub-total: Cash contributions	10,114,588	100%	6,517,924	100%
<i>In-kind</i>				
CCAC	150,000	9%	85,807.95	6%
Environment Fund staff-post costs	1,192,160	69%	1,132,997.59	79%
Regular Budget staff-post costs	308,377	18%	221,736.33	15%
Extra-budgetary funding for staff-posts (listed per donor)	65,375	4%	0	0%
Sub-total: In-kind contributions	1,715,912	100%	1,440,542	100%
Co-financing (Funding from a donor to a partner which is not received into UNEP accounts but is used by a UNEP partner or collaborating centre to deliver the results in a UNEP-approved project.)				
Co-financing cash contribution	N/A	N/A	N/A	N/A
Co-financing in-kind contribution	N/A	N/A	N/A	N/A
Sub-total: Co-financing contributions				
Total	11,830,500.00	11,830,500.00	7,958,466.05	

Table 6: Expenditure table by project components/sub-projects

Project component	Titles	Expenditure (in USD)
P-C 1	EANET	1,644,464
P-C 2	Asia Pacific Clean Air Partnership	877,236
P-C 3	Air Quality Action forum in India	173,113
P-C 4	Clean Air Solutions for Children	44,940
P-C 5	Beating Air Pollution in Seoul; Metropolitan region through evidence-based solutions	714,319
P-C 6	Improve air quality in the Asia-Pacific region by establishing and strengthening air quality communities of practice	956,418
P-C 7	Supporting Countries to Monitor and Improve Urban Air Quality	1,826,299
Total		6,236,789

2 EVALUATION METHODS

2.1 UNEP's Evaluation Approach

33. In line with the UNEP Evaluation Policy and the UNEP Programme and Project Management Manual, the TE is undertaken at completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (both actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned.

34. The main target audiences for the evaluation findings are UNEP and its 20 project partners (see [1.3 Project Implementation Structure and Partners](#), and [Annex XIV](#) for profiles). Many of these institutions contributed to the delivery of capacity-building, assessments, policy advice, and monitoring support across multiple regions, making their engagement in the evaluation process essential.

35. As guided by Evaluation Terms of Reference (TOR– See [Annex XVII](#)) This TE was carried out using a set of 9 commonly applied evaluation criteria which include: (1) Strategic Relevance (2) Quality of Project Design, (3) Nature of External Context, (4) Effectiveness (incl. availability of outputs; achievement of outcomes and likelihood of impact, complementarity with other initiatives), (5) Financial Management, (6) Efficiency, (7) Monitoring and Reporting, (8) Sustainability and (9) Factors Affecting Project Performance and Cross-Cutting Issues. (see [Annex II: Evaluation Framework/Matrix](#) for more details on each evaluation criterion).

36. Most evaluation criteria are rated on a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability and Likelihood of Impact are rated from Highly Likely (HL) down to Highly Unlikely (HU) and Nature of External Context is rated from Highly Favourable (HF) to Highly Unfavourable (HU). To generate the overall project performance rating, individual ratings are weighted, with greatest emphasis placed on the achievement of outcomes, followed by sustainability considerations and quality of project design.

37. The UNEP Evaluation Office provided detailed guidance on the evidence required for each performance rating. In line with this guidance, the evaluator systematically assessed all evidence gathered through interviews, document review, field visits, and observation against these benchmarks. The ratings thus reflect a balanced judgement integrating multiple sources of verified data.

38. In addition to the 9 standard evaluation criteria, the TE addressed a number of strategic questions identified by the UNEP Evaluation Office and the project team, aimed at strengthening future programming. These include:

- (a) In what ways, and to what extent, have the needs and interests of differentiated groups been considered in the implementation and monitoring of the project?
- (b) What innovative financing mechanisms can be explored to sustain air quality initiatives beyond the project's lifecycle?
- (c) How can the project's data and findings be leveraged to influence policy changes at the national regional and global levels?

- (d) How can the project's successes and innovative approaches be scaled up and replicated in other regions facing similar air quality challenges?
- (e) In what ways, and to what extent, were the recommendations from the Mid Term Review actioned upon?

39. A participatory and utilisation-focused approach guided the evaluation, ensuring continuous engagement with the project team, partners, and beneficiaries. The reconstruction and validation of the project's Theory of Change (ToC) began during the inception phase, where initial consultations helped clarify causal pathways, underlying assumptions, and the conditions required to support intended change. The ToC was further refined during the data collection phase and is presented in its final form in this report. It served as the analytical backbone for assessing the project's contribution to outcomes and potential long-term impacts.

2.2 Data Collection

40. The TE employed a mixed-methods approach that combined desk review, interviews, field visits (Kampala October, 27-31, Bangkok November, 24-28, 2025, Clean Air Week event). This allowed for a comprehensive examination of project relevance, performance, and results. Data collected through these methods were analysed and verified to determine the extent to which observed changes could be attributed to project interventions.

2.2.1 Primary data sources

41. **Project documentation review:** A systematic review was conducted of management documents (project design, PRC report, progress reports), technical deliverables (assessments, methodologies, guidance tools), and financial records. Documentation was provided by UNEP, project partners, and additional online sources (see [Annex IV](#)).

2.2.2 Secondary data sources

42. **Field visits:** Uganda and Thailand were selected as field visit sites due to the concentration of project outputs, geographic diversity, presence of regional UNEP partners (e.g., UNEP ROAP in Bangkok), and the opportunity to observe Clean Air Week 2025 activities. Site visits (itinerary available in [Annex V](#)) provided an opportunity to validate reported achievements, interview national and local partners, and observe monitoring installations, results of capacity-building activities, and institutional coordination.

43. **Interviews:** 37 structured and semi-structured interviews were conducted with national and city government officials, UNEP divisions, partners, UN agencies, NGOs, civil society organisations, private sector actors, researchers, and representatives of vulnerable groups (detail listed in [Annex III](#)). A summary of stakeholder groups and sampling is presented in Table 7. Interview questions (available in *TE Inception Report*) were tailored to each respondent's involvement, ensuring relevance and depth.

Table 7: Stakeholder engagement and field visits

Stakeholders – Individuals	Number of People Interviewed (M/F) *
Project team (those with management responsibilities and executing responsibilities)	9 (5/4)
Project (implementing/ executing) partners (receiving funds from the project)	17 (10/7)
Donor	1 (0/1)
Government	8 (3/5)
Local community	1 (1/0)

Additional International Organization	1 (1/0)
*16 by field visit to Kampala and Bangkok, and 21 by online	In total 37 (20/17)

2.2.3 Strategies for inclusivity

44. The list of stakeholders to be consulted was provided by the project management team and project partners and covered all of the target groups. To ensure the inclusion of women and marginalized groups relevant to the project, the evaluation assessed how their specific needs, perspectives, and participation have been integrated into the design, implementation (training, assessment, infrastructure installation etc.), and outcomes of air quality initiatives. This was done through targeted data collection methods, including disaggregated analysis by gender and vulnerability status, as well as consultations with representatives from these groups. The evaluation examined whether the project has effectively addressed equity and inclusiveness in improving air quality at the country and city levels.

2.3 Data Analysis

45. The evaluation applied qualitative and quantitative analysis to assess the project's performance and contribution to change. Contribution analysis supported the development of a credible causal narrative consistent with the project's theory of change (ToC).

46. **Content analysis** was applied to project documents, interview transcripts, and stakeholder feedback to identify common themes related to policy uptake, institutional engagement, and technical achievements.

47. **Outputs/outcome mapping** traced observed behaviour and policy changes among governments, institutions, and partners, linking them to project-provided support such as training, advisory services, assessments, and knowledge products.

48. **Trend analysis** was applied where air quality monitoring data or proxy indicators are available to assess progress in target cities or countries.

49. **Contribution analysis** explored how project outputs influenced AQ management policy development, monitoring improvements, and institutional capacity. External influences (e.g. national initiatives, donor-funded programmes, and policy shifts), were considered to determine the project's added value. Only results achieved before project closure in June 2023 were assessed. Any continuing or follow-up activities funded by remaining or reallocated resources were included in the scope of this evaluation where they provided relevant evidence of the project's sustainability or demonstrated results attributable to project-supported deliverables (e.g., activities resulting from draft policies/actions developed under the project).

50. **Triangulation** across interviews, documents, field observations, and internet research results strengthened the reliability of findings and ensured consistency across data sources. This analysis supported the assessment of whether the project has effectively improved institutional capacity, coordination, and action planning for air quality management in the supported countries and cities.

2.4 Limitations and Mitigation Strategies

51. Because the project closed two years prior to this TE, some former managers and component leads were no longer reachable, limiting access to institutional memory and clarifications. Additionally, UNEP's transition from PIMS to IPMR system in June 2023 resulted

in information gaps due to changes in data categorization and structure. To mitigate these limitations, the evaluator sought assistance from the project manager to identify alternative contacts, retrieve missing information, and access archived materials where possible.

2.5 Ethical Considerations

52. The evaluation followed UNEG ethical guidelines and UN standards of conduct. All interviews were voluntary and conducted with informed consent. Anonymity and confidentiality were guaranteed, and photographs or field data were collected only with explicit permission. The evaluation team sought to represent diverse perspectives, including those of women and marginalised groups, in the final report. AI tools were used solely to support transcription and summarisation; they did not replace the Evaluator's professional judgement, analysis, or responsibility for the findings.

3 THEORY OF CHANGE AT EVALUATION

53. The Project Document included an initial Theory of Change (ToC). During the evaluation, a reconstructed ToC was developed in line with UNEP's Evaluation Policy, reflecting UNEP's definition of result levels, clearer causal pathways, stakeholder dynamics, and external influences. The revised ToC more accurately illustrates the logical flow from activities to outcomes and impacts, supporting a stronger assessment of project effectiveness and sustainability. The reconstructed ToC was consulted with and validated by the Project Team during the evaluation inception phase.

54. The project is composed of **7 interlinked project components** – 1) EANET, 2) APCAP, 3) Air Quality Action Forum in India, 4) Clean Air Solutions for Children, 5) Beating Air Pollution in Seoul, 6) Strengthening Air Quality Communities of Practice, and 7) Supporting Urban Air Quality Monitoring. These project components collectively contribute to **5 key outputs** (reformulated with justifications in Table 8): (A) Assessments developed and made available to inform decision-makers on the state of air quality; (B) Urban authorities access advisory and support services to establish and operate functional air quality monitoring networks; (C) National and local authorities access advisory and support services to develop and implement air quality action plans and strategies; (D) Government institutions gain access to enhanced knowledge, tools, and collaborative mechanisms to coordinate and advance air quality action at regional and global levels; (E) Policymakers and practitioners in communities of practice, UNEP project managers have access to and use improved communication materials and awareness-raising tools that encourage action on air quality and promote best practices. Each component directly contributes to one particular Output with indirect contributions to others, because of the cross-cutting nature of some activities (see Table 8 and 9 for details).

Table 8: Justification for reformulation of results statements

Formulation in original project document(s) ¹⁹	Formulation for reconstructed ToC at evaluation inception (RTOC)	Justification for reformulation and/or consultant's explanatory notes on the interpretation of the result ²⁰	Contributed by P-C*
(LONG LASTING) IMPACT			
Reduced global air pollution levels and related risk to the environment and human health	Remain same with no change	<i>Impacts are long-lasting results arising, directly or indirectly from a project. Impacts are intended and positive changes and must relate to UNEP's mandate.</i>	1-7
INTERMEDIATE STATES			
A significant increase in actions on air pollution by countries, cities. Stakeholders, including citizens, increasingly aware of risks of air pollution and influence actions towards cleaning the air	Increased implementation of air quality measures by countries and cities, with stakeholders—including citizens—demonstrating greater awareness of air pollution risks and actively influencing and supporting actions to reduce air pollution.	<i>Intermediate states are changes (i.e., changes at the outcome level) beyond the Project Outcome(s) that are required to contribute towards the achievement of the intended impact of a project.</i>	1-7
PROJECT OUTCOME			

¹⁹ Source: ProDoc/July 2019

²⁰ Source: UNEP GLOSSARY OF RESULTS DEFINITIONS (Version8), December 2023:

Formulation in original project document(s) ¹⁹	Formulation for reconstructed ToC at evaluation inception (RTOC)	Justification for reformulation and/or consultant's explanatory notes on the interpretation of the result ²⁰	Contributed by P-C*
Governments have measures, policies or frameworks in place to address air pollution for improved air quality and human health at national and subnational level through the support of UNEP	National and subnational governments adopt and implement measures, policies, or frameworks to address air pollution and improve air quality and human health, as a result of UNEP's support.	<i>An outcome is a change at institutional level, or changes in behaviours, attitudes or conditions achieved from the use (i.e., uptake, adoption, application) of outputs by intended beneficiaries.</i>	1-7
OUTCOME INDICATORS [comment if relevant]			
Indicators used for the evaluation are identified as per the Revision dated on Jan 5.2022			
OUTPUTS			
A) Assessments to inform the state of air quality developed and made available to decision-makers and relevant stakeholders	Remain same with no change	<i>An output is the availability (for intended beneficiaries/users) of new products and services and/or gains in knowledge, abilities, and awareness of individuals or within institutions. For example, access by the intended user to a report; new knowledge held by a workshop participant at the end of a training event; heightened awareness of a serious risk among targeted decision-makers (Outputs are viewed from the perspective of the intended beneficiary or user of the output rather than the provider).</i>	1,5,7
B) Advisory and support services provided to establish functional urban air quality monitoring networks	B) Urban authorities access advisory and support services to establish and operate functional air quality monitoring networks.		1,4,7
C) Advisory and support services provided in action planning and air quality strategy development and implementation	C) National and local authorities access advisory and support services to develop and implement air quality action plans and strategies.		1,4,7
D) Governments' institutions demonstrated increased knowledge, and coordination/collaboration on air quality action enhanced at regional and global level	D) Government institutions gain access to enhanced knowledge, tools, and collaborative mechanisms to coordinate and advance air quality action at regional and global levels.		1,2,6
E) Enhanced communication and awareness-raising tools to encourage action and promote best practices on air quality	E) Policymakers and practitioners in communities of practice, UNEP project managers have access to and use improved communication materials and awareness-raising tools that encourage action on air quality and promote best practices.		3,4,6
OUTPUT INDICATORS			
Indicators used for the evaluation were identified as per the Revision dated on Jan 5.2022			
*Note: The contributions of multiple activities to each component are summarized in Table 9 below. Each component contributed directly to a specific output and, due to the cross-cutting nature of the project's activities, also provided indirect contributions to other outputs.			

Table 9: Project components contributions path to outputs

No	Project component	Contributions to project outputs (Direct contributions are shown in bold ; others contributed indirectly.)	
1	EANET	A, B, D	Output A: Contributes scientific assessments and regional data on air quality and acid deposition.

			Output B: Supports urban and regional air quality monitoring networks in East Asia. Output D: Strengthens regional cooperation among EANET member countries.
2	APCAP	D, E	Output D: Enhances global and regional partnerships and hosts joint forums. Output E: Conducts outreach and regional awareness campaigns (e.g., Asia Pacific Clean Air Week).
3	Air Quality Action forum in India	E	Output E: Engages in communication with state governments and public institutions.
4	Clean Air Solutions for Children	D, B, C, E	Output B: Links health-based urban monitoring initiatives focused on child exposure. Output C: Provides advisory support on integrating health concerns into air quality strategies. Output D: Builds collaboration with partners like UNICEF and other health-focused agencies. Output E: Develops targeted communication and awareness materials for schools, families, and health authorities.
5	Beating Air Pollution in Seoul; Metropolitan region through evidence-based solutions	A, E	Output A: Produces data and assessments for evidence-based urban air quality management. Output E: Implements communication campaigns and stakeholder awareness initiatives.
6	Improve air quality in the Asia-Pacific region by establishing and strengthening air quality communities of practice	D, E	Output D: Builds functional and cross-country communities of practice to promote exchange. Output E: Shares knowledge and practices through collaborative platforms.
7	Supporting Countries to Monitor and Improve Urban Air Quality	A, B, C	Output A: Conducts baseline assessments and situational analysis at the national and city level. Output B: Supports establishment and enhancement of urban monitoring networks. Output C: Provides hands-on advisory support for the development of national and city-level air quality strategies.

55. Drivers and assumptions relevant to the project context and Theory of Change were identified (see Table 10 and with justification in [Annex XII](#)). Their validity examined and assessed during the evaluation.

Table 10: Justification for reformulation / expansion of drivers and assumptions

Formulation in original project document(s)	Formulation for reconstructed TOC at evaluation (RTOC)
DRIVERS (From Outputs to Outcome)	
Stakeholders, including citizens, increasingly aware of risks of air pollution and influence actions towards cleaning the air	a) Increased public concern and advocacy around the disproportionate health impacts of air pollution on women and vulnerable groups ²¹ are driving demand for inclusive air quality policies and targeted interventions.
	b) The selection of countries is demand-driven, reflecting strong government and city-level interest and commitment.
	c) UNEA resolutions mandate UNEP's leadership in air quality and call for periodic assessments.
	d) Existing networks such as the Climate and Clean Air Coalition (CCAC), the Acid Deposition Monitoring Network in East Asia (EANET), and the Asia Pacific Clean Air Partnership (APCAP) support cooperation and facilitate implementation.
	e) Advances in low-cost sensor technology enable rapid deployment of air quality monitoring in under-monitored areas.
DRIVERS (From Outcome to Impact)	

²¹ If the project design document contains commitments on human rights and gender equality that are not reflected in the results framework, the commitment must appear as Driver.

N/A	f) Current and new government(s)' continued interest and commitment to reduce air pollutants and health risks.
	g) Continuation of awareness-raising and capacity building activities
	h) Continued active international and regional cooperation (incl. innovation) and support (i.e. allocation of human and financial resources) to implement strategies, policies, and action plans in air quality management
ASSUMPTIONS (From Outputs to Outcome)	
Political will to move forward on the pollution agenda	i) Countries and cities continue to show political will and engage in technical cooperation.
	ii) Stakeholders make use of assessment outputs and data to inform policy.
	iii) Capacity built through the project are retained and applied.
	iv) Coordination across regions and sectors lead to harmonized and complementary actions.
	v) Awareness-raising leads to behaviour change and increased demand for clean air from citizens and decision-makers.
	vi) UNEP's institutional mandate, experience, and extensive partner networks effectively supports the achievement of the project's objectives.
	vii) The project is aligned with and supports the UN principles on human rights and gender equality. ²²
ASSUMPTIONS (From Outcome to Impact)	
N/A	viii) Legal frameworks and institutional frameworks have been enhanced to facilitate the clean air.
	ix) Funding is made available by the governments, private sector, donors for upscaling of implementation, awareness-raising and capacity building activities

Casual Pathways

56. The project intervention logic was built on a robust problem analysis and responds directly to the vision of UNEP's Chemicals and Pollution Action subprogramme (formerly called Chemicals, Waste and Air Quality). UNEP, through its technical leadership and convening role, acted as a central change agent in coordinating global and regional efforts and logically sequencing and interconnecting outputs toward policy and institutional changes.

57. Based on the project design, theory of change, and causal logic, the following narrative describes the pathway from the 7 project components to the 5 project outputs, the defined project outcome, and intermediate states. Key actors in this pathway include UNEP and its regional offices, national and subnational governments, technical partners and research institutions, and regional cooperation platforms that support implementation and uptake.

- **Output A** (Scientific assessments), led by UNEP and technical partners, provides the evidence base for informed decision-making.
- **Output B** (Monitoring networks), implemented with city authorities, academic institutions, and technology partners, ensures the generation of real-time data, allowing for compliance checks and policy responsiveness.
- **Output C** (Action planning and strategy development), undertaken with governments and local institutions, builds on outputs A and B to operationalize concrete actions.
- **Output D** (Conferences, networks, and international collaboration), facilitated through platforms such as CCAC, EANET, APCAP, and regional dialogues, promotes peer learning, alignment, and coordination.

²² If the project design document and the framework are silent on human rights and gender equality, the following assumption must be included in the TOC: 'The project works toward the UN principles on human rights and gender equality'.

- **Output E** (Communication and awareness), delivered through UNEP campaigns and stakeholder engagement mechanisms, drives public and political will, which in turn facilitates uptake of policies and behavioural changes.

58. These outputs were planned to be delivered through a project context enabled by strong **drivers** such as UNEA mandates that reinforce UNEP's leadership, high levels of political will (as reflected in demand-driven country selection), existing coordination platforms like CCAC and EANET, and emerging sensor technologies that support efficient data generation and dissemination in reducing air pollution.

59. Given the assumptions that stakeholders will apply generated data, governments will maintain political commitment, capacities will be retained, and regional coordination will drive harmonized action and knowledge sharing, these outputs are expected to result in the **Outcome: National and subnational governments adopt and implement measures, policies, or frameworks to address air pollution and improve air quality and human health, as a result of UNEP's support.**

60. If the uptake continues and assumptions hold, this outcome will cumulatively lead to the **intermediate state** of *increased implementation of air quality measures by countries and cities, with stakeholders (including citizens, venerable groups) demonstrating greater awareness of air pollution risks and actively influencing and supporting actions to reduce air pollution.*

61. There is substantial evidence in the scientific literature²³ that effective reductions in air pollutants—particularly fine particulate matter (PM_{2.5}), black carbon, methane, NO_x, and SO_x—can lead to significant long-term improvements in public health, ecosystem integrity, and climate resilience. For example, reducing short-lived climate pollutants such as black carbon and methane could prevent over two million premature deaths annually, while also supporting crop productivity and contributing to climate mitigation efforts.

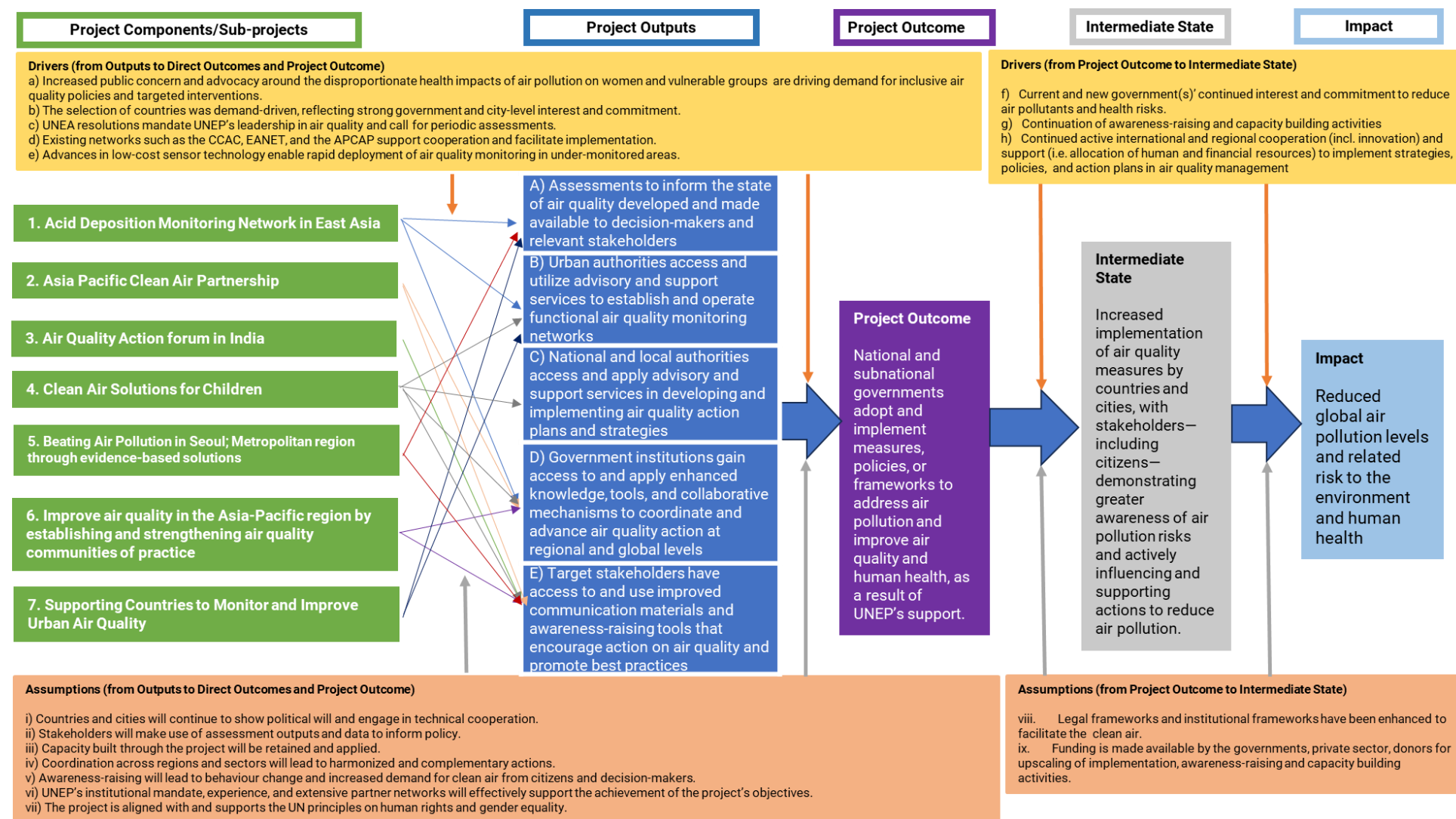
62. This coherent results chain illustrates the value of an integrated global approach, where each subproject reinforces different stages of the results pathway, increasing the probability of long-term **Impact** of *reduction in global air pollution and associated risks to the environment and human health*, that 50% of the world's population lives in areas meeting [WHO Air Quality Guidelines](#) (which is updated in 2021²⁴).

63. The revised TOC at TE is presented in Figure 2.

²³ [Cleaner Air Worth Five Months of Life](#): A landmark U.S. study across 51 major cities found that a 10 µg/m³ reduction in PM_{2.5} levels led to an increase of approximately seven months in average life expectancy, contributing up to five months of life gained per person across decades of air quality improvements; [Potential Cardiovascular and Total Mortality Benefits of Air Pollution Control in Urban China](#): In urban China, temporary measures (e.g. during the 2008 Beijing Olympics) demonstrated that PM_{2.5} reductions of 20 µg/m³ resulted in measurable reductions in cardiovascular and respiratory mortality, with sustained improvements projected to avoid hundreds of thousands of premature deaths by 2030; [Health and economic benefits of meeting WHO air quality guidelines, Western Pacific Region](#). In the Western Pacific region, meeting WHO guidelines for PM_{2.5} (10 µg/m³ or 5 µg/m³) could avert millions of annual deaths and yield economic benefits equivalent to significant portions of national GDP—especially in China, Mongolia, and Viet Nam; [Reducing global air pollution: the scope for further policy interventions](#). At a global scale, models suggest that through ambitious air pollution control and climate action, annual exposure to PM_{2.5} could be reduced by ~75% by 2040, preventing a large share of the current 3–9 million premature deaths linked to air pollution worldwide. [Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants, Reducing short-lived climate pollutants](#)—like black carbon and methane—could avert **over 2 million premature deaths per year**, while also preserving crop yields and improving climate outcomes.

²⁴ The **2021 WHO Air Quality Guidelines (AQGs)** introduce significantly stricter limits compared to the 2005 version, particularly for PM_{2.5}, NO₂, and CO, based on stronger evidence of health impacts at lower exposure levels. New metrics were added, such as 24-hour and 8-hour averaging times, addressing previous gaps in pollutant monitoring. While both versions include Interim Targets (IT-1 to IT-4) to support gradual implementation, the 2021 targets were recalibrated to reflect updated scientific understanding. Notably, the guideline for SO₂ was relaxed, acknowledging new findings that short-term effects may be less severe than previously assumed.

Figure 2: Theory of Change at evaluation



4 EVALUATION FINDINGS²⁵

4.1 Strategic Relevance

4.1.1 Alignment to UNEP MTS, POW and Strategic Priorities

64. The project is fully aligned with UNEP MTS (2018–2021) and (2022–2025), and POW (2020–2021) and (2022–2023), and Bali Strategic Plan for Technology Support and Capacity Building and South-South Cooperation (detail assessment is available in [Annex VI](#)). It directly supported UNEP’s mandate to reduce pollution—particularly air pollution—by strengthening science-based monitoring systems, policy and regulatory frameworks, institutional capacities, and regional cooperation. The project’s emphasis on capacity building, technology transfer, partnerships, and inclusive approaches reflected UNEP’s core operational modalities across both MTS and POW cycles. In addition, its facilitation of peer learning and technical exchange among developing countries through regional platforms and networks reinforced South–South Cooperation and advanced the Bali Strategic Plan’s objectives of empowering countries with the knowledge, tools, and technologies needed for effective environmental governance.

4.1.2 Alignment to Donor Strategic Priorities

65. The project demonstrated strong cross-cutting alignment with global agendas and donor priorities. Its integrated approach to reducing short-lived climate pollutants (SLCPs) and delivering greenhouse gas (GHG) co-benefits supports the climate–air quality nexus central to the strategies of Sweden, Norway, the United States, and CCAC. By strengthening national policy frameworks, institutional capacities, and regional cooperation, the project responds to a core priority shared by all bilateral and multilateral partners. Its emphasis on science-based policymaking, standardized monitoring, and robust data systems aligns closely with the priorities of Japan, EANET, and WMO. Furthermore, the project’s focus on reducing air pollution impacts on women, children, and vulnerable communities reflects the mandates of UNICEF and Sida. Finally, its promotion of multi-level partnerships across national, subnational, and non-state actors supports SDG 17 and reflects the collaborative approaches championed by UNECE, CCAC, PayTM, and Korean subnational governments (detail assessment is available in [Annex VIII](#)).

4.1.3 Relevance to Global, Regional, Sub-regional and National Priorities

66. The project demonstrates strong alignment with global, regional, sub-regional, and national environmental priorities (detail assessment is available in [Annex VII](#)). At the global level, it contributes directly to the 2030 Agenda for Sustainable Development (notably SDGs 3, 7, 11, 12, and 17), the Paris Agreement (black carbon, methane), and UNEA resolutions (1/7, 3/8, 6/10) on air pollution by advancing integrated approaches to improve air quality, reduce short-lived climate pollutants, and deliver co-benefits for climate mitigation and public health. Its emphasis on evidence-based policymaking and exposure reduction is consistent with WHO Global Air Quality Guidelines, while its support for urban action planning reflects the principles of the New Urban Agenda (lower-emission urban forms) and the Sendai Framework (on Wildfires, dust storms, and haze).

67. Regionally, the project aligns with strategies such as the Asia Pacific Clean Air Partnership (APCAP) Roadmap, EANET Medium-Term Plan, and UNESCAP Regional Action Framework by strengthening monitoring networks, fostering cooperation, and promoting policy harmonization. Sub-regionally, it complemented efforts like the ASEAN Agreement on Transboundary Haze Pollution. At the national level, the project supports countries in

²⁵ Refer to the TOR for descriptions of the nature and scope of each criterion.

developing and implementing air quality management strategies, improving institutional capacity, and integrating air quality management with climate and development policies, thereby reinforcing national commitments such as Japan's Basic Environment Plan and Korea's Green New Deal. Through this multi-level alignment, the project enhanced coherence across environmental agendas and strengthens the global response to air pollution challenges.

4.1.4 Complementarity with Existing Interventions/ Coherence

68. Air pollution has significant transboundary impacts alongside severe local health and environmental harms. Numerous practitioner-led initiatives, such as platforms, networks, technical assistance projects, and investment programmes, operated in parallel to address these challenges. The UNEP project complemented these efforts by strengthening institutional capacities, improving access to tools and data, and supporting the development and implementation of clean-air policies and action plans. Complementarity was bidirectional: existing initiatives created enabling conditions for project implementation (details in [Annex IX](#)), while the project's outputs reinforced and operationalized the objectives of those initiatives. It also leveraged synergies with initiatives promoting clean energy, energy efficiency, climate mitigation, circular economy approaches to waste management, and knowledge-sharing platforms targeting diverse user groups.

Findings Statements on Strategic Relevance and Complementarity

69. The project demonstrated very high strategic relevance by directly responding to UNEP's mandates on pollution reduction and aligning closely with donor and country priorities. Its design addressed clear institutional and technical gaps in air-quality monitoring and policymaking, which explained the strong ownership and uptake observed across regions. This close alignment enabled the project to meaningfully advance global and national clean-air commitments.

70. The project achieved highly effective complementarity by integrating with existing regional and national initiatives, creating a mutually reinforcing ecosystem of action. Its outputs strengthened the work of platforms such as APCAP, EANET, CCAC, Forum of Ministers of Environment of LAC, WHO, and UNESCAP, while these initiatives provided enabling conditions that amplified project impact. This bidirectional coherence reduced duplication, enhanced efficiency, and significantly increased the project's overall influence.

Rating for Strategic Relevance: Highly Satisfactory

Rating for Alignment to UNEP MTS, POW and Strategic Priorities: *Highly Satisfactory*

Rating for Alignment to Donor Strategic Priorities: *Highly Satisfactory*

Rating for Relevance to Global, Regional, Sub-regional and National Priorities: *Highly Satisfactory*

Rating for Complementarity with Existing Interventions/Coherence: *Highly Satisfactory*

4.2 Quality of Project Design

71. The project's design demonstrated several **key strengths**. It was strongly aligned with UNEP's mandate, donor priorities, and the technical expertise of its partners in air quality and pollution management. The design effectively integrated air pollution into broader national priorities, including health, clean energy, and the SDGs, while aligning with UN Reform and the UN Sustainable Development Cooperation Frameworks (UNSDCF). The project reflects a solid understanding of regional and country-specific needs, supported by partners with high

technical readiness and established networks. Its demand-driven selection of countries enhanced ownership and sustainability, while its communication strategy ensured targeted outreach and replication. The design also built on lessons from past initiatives, complemented international conventions, and responded directly to UNEA resolutions. Overall, it consolidated UNEP's air quality work into a coherent, outcome-oriented framework that promoted cross-regional coordination and learning.

72. However, several **weaknesses** constrained its effectiveness. The absence of costed subproject-level work plans limited financial transparency and clarity on activity scope. Coordination between components was underdefined, weakening synergies and overall impact. Gender and vulnerability considerations were not sufficiently embedded in activity design, and the attribution of global versus local contributions remained unclear. Roles across UNEP entities need clearer definition, and several indicators lacked specificity or measurable baselines. Additionally, the Theory of Change did not fully link milestones to activities, and monitoring coverage did not align with the full project duration. These issues collectively reduced the project's coherence, accountability, and evaluability. The summary of the quality of project design assessment ratings is presented in Table 11, and more details are provided in [Annex X](#).

Table 11: Summary of quality of project design assessment ratings

	SECTION	RATING (1-6)	Summary Assessment
A	Project Preparation	4	1.0
B	Risk identification and Safeguards	5	0.8
C	Governance and Supervision Arrangements	4	1.0
D	Partnerships	5	1.0
E	Strategic Relevance	6	0.4
F	Logical Framework and Causality	4	1.5
G	Financial Planning	4	0.8
H	Efficiency	5	0.4
I	Monitoring	4	0.8
J	Sustainability / Replication and Catalytic Effects	5	1.5
K	Learning, Communication and Outreach	6	0.8
Total (Weighted) Score:			4.61

Rating for Project Design: Satisfactory

4.3 Nature of the External Context

73. The project was implemented during a period marked by significant external disruptions, most notably the global COVID-19 pandemic (2020–2023). Lockdowns, travel restrictions, and airport closures delayed planned activities, forced in-person trainings and consultations to shift to online formats, and postponed the deployment of air sensors such as to San José and Lima due to logistical and customs constraints. In addition, as reported, in a few countries, such as civil unrest in Ethiopia further hindered progress on monitoring and strategy-development activities in that country. While these external shocks were outside the project's control, they nonetheless constrained timelines and reduced opportunities for direct engagement with stakeholders.

Rating for Nature of the External Context: Moderately Unfavourable

4.4 Effectiveness

4.4.1 Availability of Outputs

74. Given the nature of the ‘umbrella’ project, the project contributed multiple informative deliverables, including assessment reports, guidelines, and country-level actions on air quality management policy development and action plan design throughout the project lifecycle. Additional efforts were also invested in supporting global air pollution management needs. The project deliverables were categorised and reported primarily at the Output level. The attribution of activities across the 7 project components was not clearly defined in the project design or subsequent revision, nor consistently reflected in project reporting. This limited the ability to assess the contribution of individual sub-components to the reported Outputs. As a result, additional qualitative information—outside the formal quantitative results framework—was collected to demonstrate Output delivery in the TE.

75. The majority of planned outputs were delivered (details of assessment are listed in Table 12 below), with several exceeding their original targets. Nevertheless, some output indicators could not be fully traced through project progress and closure reports due to weaknesses in the initial project design and incomplete data availability following the transition from PIMS to IPMR. These limitations included unclear indicator scope and definitions, insufficient or inconsistent means of verification, limited detail in activity documentation, and weak attribution between implemented activities and planned indicators. For example, outreach achieved through major global events—such as the International Day of Clean Air for Blue Skies—was not captured under the project’s output indicators. To address these gaps, the evaluation mapped available evidence and triangulated information across multiple sources, while also identifying overlaps and gaps among indicators, particularly those related to access to knowledge under Output B1 (training participant numbers) and Output E4 (reach of knowledge-sharing events).

76. The ‘umbrella’ project approach was not fully leveraged. Subproject titles, components, and activities varied considerably in scope and nature—ranging from report development and capacity-building activities to partnership coordination—reducing the overall visibility of the project structure for some partners and stakeholders. As a result, not all contributors, especially external partners, had a clear understanding of how their activities and contributions should be reported within the project framework.

Table 12: Availability of outputs

Performance against Indicator(s) and Target(s)	Narrative Assessment	Sources of Information/Evidence
Output A: Assessments to inform the state of air quality developed and made available to decision-makers and relevant stakeholders • OA.1: Number of reports developed and made available (Target 6) • OA.2: Number of decision makers and relevant stakeholders that report having access to air quality reports (Target 30)	Level of delivery: fully(over) delivered -Output A was achieved in accordance with the designed indicators. -The related reports are available on UNEP and partner websites, with several published in multiple UN languages; visual feature, and executive summaries. These outputs are widely accessible and were disseminated through UNEA meetings, regional forums and networks, as well as to national and city governments, researchers, and the general public through outreach activities, including webinars, International Day of Clean Air for blue skies, and World	Sources of Information/Evidence - Project reports/PIRs - Online resources - Interviews with project teams and stakeholders - Project Logframe for monitoring - Field visit/observation OA1: Fully (over) delivered. 8 main reports (with 15 sub-reports) included below: 1. UNEP Actions on Air Quality Report (June 2021), available in Arabic, Chinese, English, French, Russian, Spanish, including 6 regional reports. 2. Executive Summary of UNEP Actions on Air Quality Report for Policymakers (Feb. 2021) 3. 4th Periodic Report on the State of Acid Deposition in East Asia (PRAD4)(2000-2019) (Dec. 2021) (Part I: Regional Assessment, Part II: National Assessments, and Part III: Executive Summary) 4. UNEP/CCAC Integrated Assessment of Air Pollution and Climate Change for Sustainable Development in Africa(Nov.2021) 5. Summary of modelling results for the Seoul Metropolitan Region Air Quality Assessment (Nov.2021) 6. Final Seoul Metropolitan Region Air Quality Assessment Report printed and available online (Achieving clean air for blue skies in Seoul, Incheon and Gyeonggi, Republic of Korea, 16 May 2023). 7. Global Methane Assessment, Preliminary Results (Nov.2019) 8. Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions, (06 May 2021) 9. Global Methane Assessment Summary for Decision Makers(2021) 10. Global Methane Assessment: 2030 Baseline Report(2022) In addition, following reports are mentioned by the project activities: 11. Together for warm homes and clean air - Joint action on air pollution from domestic heating in Serbia (2022)

	Environment Day (Beat Air Pollution). -The reports provided information on the levels and sources of air pollutants, identified priority solutions, presented cost estimations methodologies and projections, and highlighted co-benefits with climate-related pollution mitigation.	12. Wasted Air: Impact of Landfill Fires on Air Pollution and People's Health in Serbia - Working Paper. Air Pollution Series (March 2024. This publication is considered as result of draft of Milestone 5 of Output A conducted in 2022) 13. Air Quality in Bishkek: Assessment of Emission Sources and Road Map for Supporting Air Quality Management 14. Regulating Air Quality: The First Global Assessment of Air Pollution Legislation (2021) OA2: Fully (over) delivered. The verification means for this indicator was not clearly defined in the project's monitoring framework. The evaluation found that this indicator had been overreached, based on the statistic number²⁶ of report downloads and visits, as well as participant lists from dissemination and training events targeting policy makers and other key stakeholders. -Through multiple project activities, including capacity-building workshops, regional coordination events, stakeholder seminars, and public communication efforts, the project significantly expanded decision-makers' and relevant stakeholders' access to air-quality assessments, modelling tools, and management guidelines. -Key technical products such as the <i>UNEP Actions on Air Quality Report</i> and its <i>Summary for Decision Makers</i> were disseminated at high-level forums, including UNEA 5.1 (2021) and EU–North America consultations on the <i>Global Methane Assessment</i>. -In Africa, the <i>UNEP/CCAC Integrated Assessment of Air Pollution and Climate Change</i> was presented during modelling seminars and coordination meetings attended by 21 and 25 participants respectively. -Similar outreach occurred in Latin America through regional events in Costa Rica, Lima, and Panama (2022), where the <i>Actions on Air Quality – LAC Regional Report</i> reached around 30 national and subnational decision-makers, including invited countries such as Argentina, Bolivia, Guatemala, Panama, Paraguay, and Uruguay. -Regular platforms such as the International Day of Clean Air for Blue Skies (2020–2023) and the Clean Air Weeks (2021–2023) in Asia and the Pacific further amplified dissemination to a broad network of policymakers and stakeholders.
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²⁶ For example [917 visitors](#) for Integrated Assessment of Air Pollution and Climate Change for Sustainable Development in Africa.

Output B: Advisory and support services provided to establish functional urban air quality monitoring networks • OB1: Number of people trained in air quality monitoring, or related issues (Target 80) • OB2: Number of guidance documents made available to city air quality managers (Target 8)	Level of delivery: fully(over) delivered -Output B was achieved in accordance with the designed indicators. -Based on partially available event reports, the evaluation found that the indicator was overachieved. At least 370 participants took part in training and capacity-building activities across Africa, Latin America, and Central Asia, covering air quality monitoring, modelling, and policy-related topics. These activities demonstrate a strong contribution to institutional and technical capacity building. -17 guidance documents (including sub-doc), tools, and technical guidelines were developed and disseminated to city air quality managers, covering areas such as child-centred clean air solutions, air quality monitoring, modelling,	OB1: The verification means for this indicator was not clear in the project monitoring. The evaluation found this indicator was overreached, considering the event reports (although partially available). Total of 370 participants (from partially available reporting) took part in training and capacity-building activities across four regions. These combined efforts demonstrate the project's strong contribution to building institutional and technical capacity on air quality across Latin America, Central Asia, and Africa. -According to the project's progress report, 101 individuals were trained on air quality issues, covering both monitoring and policy perspectives (e.g. Addis Ababa Air Quality Monitoring Capacity Building Workshop 23-25 September 2019 in Ethiopia). -In November 2021, a training workshop on air quality monitoring was organized for 20 participants from Costa Rica and Peru, including officials from environment and health ministries, academia, and local government. -In March 2022, the first Central Asian Regional Air Quality Dialogue Platform conference was held in Bishkek, Kyrgyzstan, co-organised by UNEP with local and international partners. This two-day hybrid event engaged over 135 participants (61 in person, 74 online) from Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan. -On September 27th of 2022, a dissemination workshop under the project <i>Supporting Countries to Monitor and Improve Urban Air Quality</i> was held for the Latin America and Caribbean (LAC) region. It involved 24 participants (16 women, 7 men) from eight countries. -On March 31st of 2021, The modelling seminar for the Waste sector was attended by 41 participants, for analysis Municipal Solid Waste, including methane emissions from landfill sites, and GHG, SLCP and air pollutant emissions associated with waste incineration and open burning of waste; Liquid Waste, including methane emissions from domestic wastewater. -On February 24th of 2021, the modelling seminar for the Agriculture sector was held and attended by 49 participants, for i) the core modelling team to provide an overview of the range of emission scenarios that will be developed that reflect different development pathways for Africa, and the 'key decisions' that need to be agreed to determine how a particular sector is expected to develop into the future, and ii) participants in the seminar will have the opportunity to discuss and provide guidance and advice on each of the 'key decisions'. -Additional technical visits and capacity-building support were provided to Costa Rica and Peru through the Clean Air Institute, as well as to five African countries (Ethiopia, Uganda, Kenya, Rwanda, and Tanzania) through regional workshops and knowledge-sharing sessions. OB2: Fully (over) Delivered
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	emissions inventories, legislation, SLCP mitigation, and integrated climate–air pollution planning.	1. “Africa Assessment Modelling Guidelines” were introduced in First Modelling Coordination Group Meeting of the UNEP/CCAC/SEI Integrated Assessment Air Pollution, Climate Change and Development in Africa” (12th August 2020 via Zoom) 2. Emission Inventory and Modelling of Air Pollution Sources in Agra Region in India 3. Finalization of the technical guidance Practical Considerations for Real World Air Quality Instrument Siting, Calibration and Reporting (2020), for sensor siting, data analysis and calibration of measurements, on air quality monitoring was made available to policy makers in Africa and LAC countries under the project. The document was sent to Kampala, San Jose and Lima 4. Guide on Ambient Air Quality Legislation - Air Pollution Series (May 2023) 5. GEMS/Air Strategy (Version.1.2022) 6. The Long Range Energy Alternatives Planning system-Integrated Benefits Calculator (LEAP-IBC Modelling) Approach was used to calculate human health, vegetation and climate benefits for a target country resulting from addressing short-lived climate pollutants (SLCPs) 7. Supporting National Action and Planning on Short-Lived Climate Pollutants (SNAP)- Guidance for national planning to reduce short-lived climate pollutants and promote integrated air pollution and climate mitigation strategies (2021) 8. GHG and Air Pollution Emissions Modelling from Agricultural Production and Consumption Africa were presented in the training of “Africa Assessment Modelling Guidelines” (Oct. 2021) 9. Strengthening Air Quality Management Guidance: Achieving Scale and Impact developed a shared understanding of the key steps and actions critical to AQM guidance in specific regions and contexts – and a mechanism to deliver it – global partners can support an increase in the scale and impact of AQM. 10. Addis Ababa City Air Quality Policy and Regulatory Situational Analysis (2022) 11. Assessment Of the Cost of Inaction of Tackling Air Pollution in Cambodia (June 2023) 12. Leveraging the Benefits of non-CO₂ Pollutants and Air Quality in NDC 3.0 (<i>Guidance on Including Methane in NDCs; Guidance on Black Carbon and other Air Pollutants in NDCs; Guidance on Including N₂O in NDCs; Guidance on Sustainable Cooling Approaches for Enhanced NDCs</i>). The guidance offers recommendations for goals and measures that can enhance NDC 3.0, covering mitigation, adaptation, means of implementation, and how to comply with reporting requirements under the Enhanced Transparency Framework and upcoming Biennial Transparency Report (BTR).
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		13. Child-centred clean air solutions - A guide for Asia and the Pacific region (2021) to promote 20 child-centred clean air solutions and ultimately help realize children's fundamental rights to breath clean air and live in a stable climate.
Output C: Advisory and support services provided in action planning and air quality strategy development and implementation • OC1: Number of sectoral air quality action plans developed (Target 9) • OC2: Number of institutions with improved capacity to assess or address air quality issues supported (Target 6)	Level of delivery: fully delivered -Output C was achieved in accordance with the designed indicators. -10+ sectoral and city-level action plans and regulatory frameworks were developed or supported (e.g. Uganda, Costa Rica, Cambodia, Peru), alongside substantive contributions to national and regional policy processes in India (NCAP), China (2023 Air Quality Action Plan), and Thailand (Clean Air Bill). -Capacity was strengthened across more than 6 national and subnational institutions through training, technical assistance, and regional platforms in Africa, Asia, and Latin America, West Asia and Central Asia	OC1: Fully (over) Delivered At least 10 sectoral air quality action plans were developed, adopted, or implemented under the project. Key achievements include: 1. ratification of the Clean Air Plan by the Kampala Capital City Authority (Uganda) 2. review and release of the San José (Costa Rica) City Clean Air Plan 3. development of a Clean Air Action Plan with mitigation measures for Cambodia (2021) 4. preparation of the Lima (Peru) Air Quality Action Plan 5. formulation of Uganda Ambient Air Quality Standards (adopted in 2024) and related action plans 6. development of fuel standards and vehicle emission limits for Uganda 7. development of Palestine Pathways to cleaner air -situation analysis and strategy 8. 3 comprehensive analyses of the impacts of the COVID-19 pandemic on air quality in Sri Lanka, Indonesia, and Japan provided robust evidence of significant emission reductions across manufacturing, power generation, and commercial sectors, contributing to increased ambition for clean air and climate action. -In addition, city governments in Addis Ababa (Ethiopia) and Nairobi (Kenya) used air quality data supported by UNEP to inform regulatory and policy decisions. In both cities, the data were applied to: (i) demonstrate improvements in air quality following truck restrictions in urban areas; and (ii) enforce compliance orders on industrial facilities exceeding emission thresholds. -While many EANET member countries and others continued to regularly update their air quality standards, the project facilitated the following initiatives, for instance: i) Thailand: Clean Air Bill process, a comprehensive air quality control legislative framework advancing through parliament toward structured emission controls (adopted in 2023). The Thai government also initiated steps to implement the Draft Clean Air Act, a citizen-driven legislative tool designed to serve as the cornerstone of the legal framework for addressing air pollution. ii) India: National Clean Air Programme (NCAP) (2019), including city-level Clean Air Action Plans (CAAPs) for non-attainment cities with targets to reduce PM levels and expanded monitoring

	supporting air quality assessment, planning, and implementation.	infrastructure. India's NCAP guided hundreds of action plans at state and city levels and after the project ended in June 2023, became a major national strategy through 2024–26. iii) China: National Action Plan for Continuous Improvement of Air Quality (2023) with 2025 National targets: PM2.5 down $\geq 10\%$ vs 2020; stronger regional controls (Beijing-Tianjin-Hebei, the Fen-Wei Plain, and the Yangtze River? Delta) OC2: Fully(over) Delivered. -The project reached a large number of national institutions through workshops, trainings, professional networks, capacity-building activities, and regional platforms. Engagement levels varied according to institutions' respective roles in AQM. Key examples include national authorities such as the Central Environmental Authority in Sri Lanka; the Ministry of Environment/Environmental Management Agency of the Republic of Indonesia; and institutions in Japan engaged through analysis of the COVID-19 pandemic's impacts on air quality and related policy responses. At the subnational level, the project supported the Kampala Capital City Authority (Uganda) in developing a Clean Air Action Plan, and assisted institutions in Cambodia, India, and Ethiopia in formulating national and city-level clean air actions that strengthened their capacity to monitor and manage air quality. -The project also facilitated targeted technical support and partnerships. IIT Kanpur supported UNEP in quantifying industrial air pollutant emissions in Agra, while in Cambodia, UNEP supported the Ministry of Environment in completing mitigation-scenario analyses and advancing the drafting of a national Clean Air Plan. In addition, the project supported 7 countries (Costa Rica, Ethiopia, Uganda, Kenya, Peru, Rwanda, and Tanzania) and 4 cities (Jakarta, Kampala, San José, and Lima) across Africa and Latin America and the Caribbean. More over, the RES Foundation organised an online workshop on "Air Pollution and Public Health in the Republic of Serbia", engaging public health institutions at national, provincial, and local levels to assess institutional capacity to recognise and respond to the health impacts of air pollution. Through these activities and the development of communities of practice, more than 24 countries and their institutions—including ministries of environment, meteorological agencies, ministries of health, environmental protection agencies, and universities—gained access to analytical reports and targeted capacity-building, such as the training manual on Designing Regulatory Programmes for Clean Air in African Cities.
Output D: Governments' institutions demonstrate increased knowledge, and coordination/collaboration on air quality action	Level of delivery: fully delivered -Output D was largely delivered.	OD1: Fully (over) Delivered. A total of 5 key regional and global meetings were convened for coordination and knowledge sharing on air quality. These included: UNECE Convention on long-range transboundary air pollution (CLRTAP) Forum for International Cooperation on Air Pollution (2019)

enhanced at regional and global level • OD1: Number of meetings convened for coordination and knowledge sharing at the regional level (Target 4) • OD2: Number of annual meetings of Intergovernmental Network (Target 5) • OD3: Number of people and/or governments institutions that have gained knowledge on air quality action (Target 10) • OD4: Number of regional action plans developed by regional Economic Bodies/Intergovernmental Network (Target 1)	-The project successfully enhanced regional and global coordination and knowledge exchange on air quality action. Multiple regional coordination and knowledge-sharing meetings and Intergovernmental Network annual meetings were convened, meeting or exceeding targets. Capacity gains were evident across a range of government institutions, which—consistent with the TE approach—were assessed at the institutional level rather than individual level under OD3. -The project also contributed to the development and strengthening of regional action planning processes through intergovernmental and economic bodies, reinforcing collaboration and harmonisation of air	2. UNCCC COP 27 in Egypt (2022), with multiple events linking air pollution and climate change 3. 7th Session of the Committee on Environment and Development (CED7) in Asia-Pacific, supported by UNESCAP and UNEP 4. 3rd Asia Pacific Clean Air Partnership (APCAP) Joint Forum (2021), which gathered over 500 participants from 60 countries 5. World Environment Day 2019 (How the world united to #BeatAirPollution) OD2: Fully(over) Delivered. The intergovernmental network convened Four EANET Intergovernmental Meetings during the project period: IG21 (Nov 2019, Beijing, China), IG22 (November 2020, virtual), IG23 (November 2021, virtual), and IG24 (November 2022, hybrid, Manila, Philippines). In addition, the project contributed to high-level AQM policy dialogue through participation in the XXII Forum of Ministers of Environment of Latin America and the Caribbean (1–2 February 2021, Barbados) and the Climate and Clean Air Conference 2023 (29 May–2 June 2023). OD3: Fully(over) Delivered. The indicator combines individuals and government institutions, which are not compatible within a single indicator. -Through UNEP support in Asia-Pacific, Africa, and LAC, more than 24 counties and 6 cities gained knowledge on air quality actions, including 13 EANET member countries, 33 members of Forum of Ministers of Environment of LAC, and project targeted cities. -At the public level, World Environment Day focused on raising public awareness of actions to reduce air pollution. The practical guide was viewed 44,482 times, and 2,879 events were registered worldwide. Major national activities included car-free days in Kigali, awareness dialogues in Addis Ababa, and events engaging over 2,500 participants in Bangkok. Online engagement was strong, with 185,114 unique users visiting the event registration pages and 47,128 page views on air pollution information content, indicating high public interest and outreach. -Disseminated Key message Document for International Day for Clean Air for blue skies in 2021 and 2022. OD4: Fully(over) Delivered.
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	quality actions across regions.	Two regional action plans on air quality were developed: 1. Asia-Pacific Regional Action Programme on Air Pollution (RAPAP) was adopted in 2022 by the UNESCAP Member States in Asia-Pacific. 2. Africa Regional air quality Programme prepared during 2022-2023, was endorsed by AMCEN (African Ministerial Conference on the Environment) in 2025 under Africa Agenda 2063. 3. LAC Regional Action Plan on Air Quality 2022-2025 was launched in 2022 with resource mobilization strategy.
Output E: Enhanced communication and awareness-raising tools to encourage action and promote best practices Performance against Indicator(s) and Target(s) • OE1 Number of knowledge sharing mechanisms developed (for instance communities of practice, conferences, online platforms, case study reports) (12) • OE2 Number of India Air Quality Forum/Solution Center established (1) • OE3 Number of action-based solution reports launched (2) • OE4 Number of people engaging and sharing	Level of delivery: Partially delivered -Output E was largely delivered. -The project developed more than 10 knowledge-sharing mechanisms, including regional forums, communities of practice, webinars, workshops, case studies, and online platforms, although the definition of “mechanisms” was not clearly specified and overlapped with other deliverables. -The India Air Quality Forum/Solution Center was successfully established through the Air Quality Action Forum Annual	OE1: Fully(over) Delivered. <i>The definition of “mechanisms” was not clearly specified, which may result in overlap with other deliverables, e.g. report, and online plate forms)</i> A total of 10+ knowledge-sharing mechanisms (event, forum, workshop, webinar) were developed, including: 1. Fourth APCAP Joint Forum (2022) 2. East Africa Community of Practice (2022) 3. Air Quality Management Communities of Practice online platform 4. 4 Clean Air Solution webinars (595 participants total) 5. 4 case studies on air quality management (Viet Nam, Thailand, Philippines, and e-mobility) 6. Online workshop Air Pollution and Public Health in the Republic of Serbia 7. Latin America & Africa Air Quality Community of Practice encompasses 93 total members across 6 countries (Mexico, Colombia, Ghana, Kenya, Senegal, and Uganda). It covers multiple governance levels, including 3 cities and 1 metropolitan area in Mexico, Bogotá (Colombia), 4 African cities (Accra, Kampala, Nairobi, Mombasa), and 6 Mexican states, reflecting broad regional and subnational engagement 8. Southeast Asia Air Quality Community of Practice 9. Inaugural Meeting of the Southeast Asia Community of Practice: Climate and Clean Air Conference (June 01, 2023•Bankok, Thailand) 10. Community of Practice Air Quality Africa OE2: Fully Delivered

best practice through communities of practice (disaggregated by sex) (900)	Conference in New Delhi (2023), and two action-based solution reports on air quality management in the Seoul Metropolitan Region were launched. -Participation in communities of practice and knowledge-sharing events reached 819 people, slightly below the target of 900, with partial sex-disaggregated data available.	Air Quality Action Forum Annual Conference (27 - 28 February 2023, New Delhi). The Resource Centre was introduced as a response to AQ challenges, and industry, transport, and air quality technology platforms were discussed as specific solutions. OE3: Fully Delivered. 1. Achieving clean air for blue skies in Seoul, Incheon and Gyeonggi, Republic of Korea (2023) in English and Korean. 2. Beating air pollution in Seoul Metropolitan Region (SMR) through evidence-based solutions in Republic of Korea (2023) OE4: Partially Delivered (partial sex-disaggregated data available) A total of 819 people engaged in communities of practice and knowledge-sharing events. This includes, as per the available records, 69 participants (49% women, 47% men, 5% not specified) at the 2nd Technical Meeting on hybrid monitoring systems, plus 595 participants across four Clean Air Solution webinars, and 155 participants across three community-specific webinars.
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77. Overall, the project delivered a broad and substantial set of outputs that were largely available and accessible to the intended beneficiaries, with only a few delays attributable to external factors. Outputs were produced across all five output areas (A–E). Most targets were fully achieved (2) or overachieved (11), while only one target was partially achieved (1)²⁷. Knowledge products, assessment, technical guidance, action plans, and knowledge sharing mechanisms were delivered throughout the project lifecycle and disseminated through UNEP and partner platforms, regional and global forums, and targeted capacity-building activities. While some indicators lacked clearly defined verification means, triangulation of project reports, online analytics, and stakeholder interviews confirmed wide availability and uptake.

78. The scale and quality of outputs were particularly strong for Outputs A–C. Output A exceeded targets, with more than eight major assessment reports (and multiple sub-reports) produced, many available in multiple UN languages and designed with executive summaries and visual features to enhance usability. These assessments provided decision-makers with robust evidence on pollutant levels and sources, mitigation priorities, cost estimation methodologies, and climate co-benefits, and were actively disseminated through UNEA sessions, regional forums, and global awareness events. Output B similarly overperformed, delivering extensive training and guidance for urban air quality monitoring, reaching at least 370 participants across four regions and producing a wide range of high-quality technical guidelines that supported monitoring, modelling, legislation, and integrated air–climate planning. Output C translated evidence into practice through the development and support of sectoral and city-level action plans and regulatory frameworks, alongside contributions to major national and regional policy processes.

79. Outputs D and E strengthened coordination, knowledge exchange, and awareness, though with some limitations. Regional and intergovernmental coordination platforms were effectively convened, regional action plans were developed or advanced, and government institutions across more than 24 countries gained knowledge on air quality action, supporting harmonisation and collaboration. Communication and awareness-raising outputs were extensive, with more than 10 knowledge-sharing mechanisms established, an India Air Quality Forum/Solution Center launched, and action-based solution reports disseminated. However, participation targets for communities of practice were slightly underachieved, and the definition of “mechanisms” overlapped with other deliverables, affecting clarity in reporting.

80. At the output level, the project produced assessments, guidance, monitoring tools, and knowledge-sharing mechanisms that were likely to benefit disadvantaged populations—such as low-income communities, women, and children—who face disproportionate air pollution exposure, particularly through strengthened monitoring in under-served cities and health-oriented clean air planning. However, outputs were not systematically designed or tracked using equity-focused indicators, and sex- or vulnerability-disaggregated data were only partially available in a few project activities (e.g. training or seminar). As a result, while indirect equity benefits were plausible, differential impacts on disadvantaged groups could not be fully evidenced at the output level.

81. Despite these issues, the outputs were widely accessible, relevant, and useful to policymakers, technical institutions, and practitioners, contributing meaningfully to improved air quality management at national, regional, and global levels.

4.4.2 Achievement of Project Outcome

82. Through the delivery of 34 output-level milestones across 7 project components, the project achieved all 7 planned outcome milestones (refer to Table 4: Summary of project’s

²⁷ This may have been partially caused by incomplete reporting records.

latest approved results framework). These outcomes demonstrate that participating cities and national governments strengthened core AQM capacities, including the establishment of data and monitoring infrastructure (e.g. low-cost monitoring sensors, and reference stations), enhanced analytical capabilities (calibration of data, modelling of emissions), and improved use of evidence to inform air quality policy development and the enforcement of measures to ensure cleaner air and reduce negative impact for public health. The concrete cases can be found in Table 13 below.

83. The selected target regions, countries, and cities benefited from UNEP support through the uptake and application of key knowledge products, including the *UNEP Actions on Air Quality Report*. This support included training on modelling tools (such as the *Africa Assessment Agriculture Modelling Framework*, its initial results, and key decision points for developing agricultural scenarios), the dissemination of technical guidelines, and direct assistance in developing AQM policies, procedures, and institutional frameworks.

84. The AQM measures supported by the project produced observable outcomes, with evidence of uptake at national and regional levels. These measures informed policy decisions and contributed to improved understanding, tracking, and mitigation of air-pollution-related health risks, including those linked to climate change.

85. At the regional level, the project established cooperation and knowledge-sharing mechanisms that elevated AQM as a critical issue across participating countries, increasingly recognized as a priority for both public health and environmental protection.

Table 13: Achievement of project outcomes

Outcome:	National and subnational governments adopt and implement measures, policies, or frameworks to address air pollution and improve air quality and human health, as a result of UNEP's support.
Performance against Indicator(s) and Target(s): OCI 1: Number of governments that are developing, adopting and/or applying measures and policies contributing to improve environmental quality and human health and well-being (Target 14) OCI 2: Number of governments that have developed or are using publicly accessible monitoring data and information for inventories or assessments (Target 6)	OCI 1: Fully achieved The project made a clear contribution to government action on air quality and health across multiple countries. From project report, at least seven (7) national governments—Ethiopia, Uganda, Costa Rica, Peru, India, Cambodia, and Thailand—developed, adopted, or applied measures addressing air pollution and its health impacts with UNEP support. These actions included policy development, regulatory measures, and integration of air quality considerations into national planning and sectoral responses. At the subnational level, Kampala Capital City Authority (Uganda) finalized and operationalized a Clean Air Action Plan in December 2021, mainstreaming air quality management into city strategies and strengthening monitoring and implementation mechanisms. In addition, Indonesia, Sri Lanka, and Japan applied analytical evidence from UNEP-supported COVID-19 air quality assessments to inform policy discussions on clean air, health protection, and green recovery. The Jakarta case demonstrated significant emissions reductions across manufacturing, power generation, and commercial sectors between 2019 and 2020, reinforcing the policy relevance of integrated air quality and climate measures. Concrete cases included: Uganda – Kampala Capital City Authority ratified and implemented a Clean Air Action Plan; national Ambient Air

	Quality Standards and vehicle/fuel emission standards were developed to reduce health risks from air pollution. Costa Rica – The San José City Clean Air Plan was reviewed and released, strengthening urban air quality governance and public health protection. Cambodia – The government developed a national Clean Air Action Plan (2021) with mitigation scenarios addressing key pollution sources and health impacts. Peru – The Lima Air Quality Action Plan was prepared to guide emissions reduction and improve population health outcomes. India – The National Clean Air Programme (NCAP) and city-level Clean Air Action Plans (CAAPs) were implemented nationwide, targeting PM reduction and expanded monitoring in non-attainment cities. China – Adoption of the National Action Plan for Continuous Improvement of Air Quality (2023), setting national and regional PM_{2.5} reduction targets and strengthening multi-pollutant control. Thailand – Advancement and adoption of the Clean Air Bill, establishing a comprehensive legislative framework for air pollution control and health protection. Ethiopia & Kenya – City governments in Addis Ababa and Nairobi applied air quality data to enforce truck restrictions and industrial compliance measures, demonstrating health-relevant regulatory action. Japan, Indonesia, Sri Lanka – Governments used COVID-19 air quality impact analyses to inform policy dialogue on emission reductions in industry, transport, and power generation. Central Asia (Kazakhstan, Kyrgyzstan, Uzbekistan) – Governments engaged in regional air quality dialogue platforms and monitoring cooperation to inform policy development and public health protection. EANET member countries (e.g., Viet Nam, Philippines, Republic of Korea, Mongolia, Malaysia) – Regular updates of air quality standards, participation in regional assessments, and application of monitoring data to support health-oriented air quality management. OCI2: Fully achieved The project contributed to strengthening the use of publicly accessible air quality monitoring data by at least 5 governments across Africa, Latin America, and Central Asia. In Ethiopia (Addis Ababa) and Kenya (Nairobi), UNEP-supported sensor networks continued to generate air quality data used by city and national authorities for assessments and decision-making, improving the evidence base for inventories and policy action. In Costa Rica, the project facilitated collaboration between the National University of Costa Rica and the Ministry of Environment, resulting in the deployment of 13 air quality sensors in San José. These sensors provide publicly accessible data that support
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	national and city-level air quality assessments and institutional capacity for monitoring and reporting. Beyond these country cases, UNEP partnered with MoveGreen to deploy air quality monitoring networks and build air quality management capacity in the Kyrgyz Republic and Kazakhstan. These interventions expanded access to monitoring data and strengthened the ability of governments to use such data for inventories, assessments, and public information. Additional cases included: • Republic of Korea – National and city authorities used publicly available monitoring and modelling data for the Seoul Metropolitan Region Air Quality Assessment, informing inventories, health impact analysis, and policy responses. • China – Government agencies relied on an extensive public national air quality monitoring network to support emissions inventories, regional assessments, and implementation of the 2023 National Action Plan for Continuous Improvement of Air Quality. • India – Central and state governments used data from the National Air Quality Monitoring Programme (NAMP) and Continuous Ambient Air Quality Monitoring Stations (CAAQMS) to inform emissions inventories and city-level Clean Air Action Plans (CAAPs) under the NCAP. • Uganda – Kampala Capital City Authority applied monitoring data supported by UNEP to develop its Clean Air Action Plan and inform regulatory and enforcement actions. • Ethiopia – Addis Ababa authorities used air quality monitoring data to assess emission sources, demonstrate impacts of truck restrictions, and support regulatory compliance. • Kenya – Nairobi City County applied monitoring data to enforce compliance orders on industrial facilities exceeding emission thresholds. • Cambodia – The Ministry of Environment used monitoring and assessment data to develop emissions inventories and mitigation scenarios under the national Clean Air Action Plan. • Peru – National and municipal authorities in Lima used monitoring data to inform air quality assessments and the development of the Lima Air Quality Action Plan. • EANET member countries (e.g., Japan, Thailand, Viet Nam, Philippines) – Governments routinely used publicly accessible EANET monitoring data for national reporting, inventories, and regional assessments of acid deposition and air pollution. Overall, the project demonstrably advanced government use of open-air quality data systems to support evidence-based environmental management.
Sources of Information /Evidence:	These are primary sources showing how outputs (reports, guidelines, assessments) were disseminated and accessed by policymakers and practitioners:

- Field visit in Uganda and Bangkok/observation - Interviews/FGDs with beneficiaries (trainees, government, and communities) - Internet - Project PIRs & internal dissemination reports - UNEP/CCAC Regional Assessment publications - Government policy documents / air quality plans - EANET monitoring reports and data portals - National air quality data platforms (CPCB, AirKorea, China AQ Platform) - Event reports (APCAP, UNEA side events, Clean Air Forums) - Project Reports / UNEP PIRs / Official Output Documents	• UNEP Actions on Air Quality Report (June 2021) Provides evidence of high-level uptake via dissemination at UNEA and regional forums. (Project documentation) • Executive Summary of UNEP Actions on Air Quality Report for Policymakers (Feb. 2021) Targeted product for decision-makers showing uptake intentions. (Project documentation) • UNEP/CCAC Integrated Assessment of Air Pollution and Climate Change for Sustainable Development in Africa (Nov. 2021) - Cited and presented at regional seminars with participant lists and feedback. (Project documentation) • Periodic Report on the State of Acid Deposition in East Asia (PR SAD4, Dec. 2021) - Regional assessment used by EANET member governments for policy and national reporting. (EANET/Project reports) • Latin America Regional Report on Air Quality Action (2022) - Distributed at workshops and to national decision-makers in LAC region. (Project reports) • Project PIRs (Project Implementation Reports)-Contain dissemination metrics, beneficiary feedback, and uptake summaries across indicators. (Internal UNEP/PIR documentation)
Narrative Assessment:	Overall, the evidence confirms that the project contributed to government-level policy development and application in at least seven countries, with additional catalytic effects at city level and through evidence-based policy dialogue, thereby advancing environmental quality and human health outcomes. The Outcome was fully achieved, demonstrating meaningful changes in government action and institutional practice on air quality and health across a wide geographic scope. The project contributed to policy development, regulatory action, and evidence-based decision-making in at least 7 national governments and multiple subnational authorities across Africa, Asia, and Latin America. These actions ranged from the development and adoption of national and city-level clean air action plans and standards (e.g., Uganda, Costa Rica, Cambodia, Peru, India, Thailand, China) to the application of analytical evidence to inform sectoral and recovery policies (e.g. Japan, Indonesia, Sri Lanka). The depth of engagement varied by country but consistently extended beyond awareness-raising to concrete planning, regulatory, or implementation measures with clear relevance to environmental quality and human health. The project's contribution to these Outcome-level changes is credible and well evidenced. UNEP's technical assistance, assessments, modelling, and capacity-building activities directly supported governments in developing action plans, standards, and mitigation scenarios, while regional platforms and intergovernmental processes facilitated policy alignment and learning. Subnational cases, such as Kampala, Addis Ababa, Nairobi, San José, and Lima, illustrate how UNEP-supported data

	and analysis were applied in practice to operationalise air quality management, enforce compliance, and integrate air quality considerations into urban strategies. While national policy processes are influenced by multiple actors, the project's role as a technical convener, data provider, and facilitator establishes a strong association between project outputs and observed policy and institutional outcomes. The scale of the Outcome is further reinforced by strengthened government use of publicly accessible air quality data for inventories and assessments. At least 5 governments demonstrably expanded or applied open monitoring data systems with project support, including through sensor deployment, partnerships with academic institutions, and regional cooperation. Governments in Africa, Latin America, Central Asia, and EANET member countries increasingly relied on publicly available monitoring data to inform emissions inventories, assessments, and policy decisions, improving transparency and evidence-based environmental management. Collectively, these changes indicate that the project contributed substantively to enhanced institutional capacity, coordination, and sustained government action on air quality and health at national, regional, and global levels, with likely long-term benefits for populations most at risk from air pollution exposure. However, the project did not systematically apply disaggregated indicators, equity-focused monitoring frameworks or explicitly highlight equity-related deliverables, limiting the ability to quantitatively demonstrate differential benefits for disadvantaged groups.
Level of Achievement:	Fully achieved

4.4.3 Likelihood of Impact

86. The project targeted the impact of *reducing global air pollution and associated risks to the environment and human health*, and the evidence shows that measures such as vehicle fuel and emission controls, restrictions on open biomass and waste burning, black carbon mitigation, improvements in industrial emission standards, promotion of clean household energy, strengthened air quality monitoring, and measurement-driven abatement model have directly contributed to reductions in key pollutants²⁸, including PM_{2.5}, PM₁₀, NO₂, SO₂, ozone precursors (NO_x and VOCs), methane, and other short-lived climate pollutants²⁹. As a success

²⁸ While the project was not designed to directly measure ambient pollutant reductions at a consistent global scale, the evaluation concludes that it made a credible contribution to longer-term air quality improvements through strengthened monitoring systems, evidence-based policy development, and implementation of mitigation measures across multiple contexts. In several cities and countries, project-supported data and modelling informed regulatory actions such as vehicle and fuel emission controls, restrictions on open burning, industrial compliance measures, and clean air action planning, which are widely recognised drivers of reductions in PM_{2.5} and other harmful pollutants. **The project's impact is therefore best understood as indirect and enabling:** by improving the availability of monitoring data, institutional capacity, and policy readiness, it helped create conditions for sustained emission reductions and health benefits beyond the project lifecycle. **However, given the uneven Theory of Change across national, regional, and global levels, the absence of systematic outcome-level pollutant tracking, and the strong influence of climatic and meteorological variability on ambient pollution concentrations, the extent of attributable pollution reduction cannot be fully quantified within the evaluation timeframe.**

²⁹ Some evidences: i) WHO reports clean fuels can **cut PM_{2.5} dramatically (often far more than "improved" biomass stoves)**, providing direct evidence that clean household energy reduces harmful PM_{2.5} exposures. ii) In South Korea, [triangulated evidence](#) from AirKorea monitoring and satellite constraints shows sustained declines in key primary pollutants (including SO₂ and NO₂) through 2023, consistent with policy-driven emissions reductions from industry and transport controls supported by strengthened monitoring. iii) In India, post-2020 [BS-VI fuel and vehicle standards](#) (including a shift to 10-ppm sulfur fuels enabling DPF/SCR) are supported by evidence of reductions in traffic-related emissions such as NMVOC, OC and BC when comparing 2021 to 2017, indicating a measurement-consistent pathway to reduce PM_{2.5}/PM₁₀ and ozone precursors, even where ambient concentration trends are confounded by COVID-period activity changes.

example Beijing has achieved remarkable improvement in ambient air quality in the past decade by air pollution co-management by coordinating efforts of carbon-neutrality and air pollution control (from 2013 to 2022, the annual average concentrations of major air pollutants decreased significantly: [PM2.5 decreased 66.5%](#); [SO2 decreased 88.7%](#); [NO2 decreased 58.9%](#); and [PM10 decreased 50%](#), with a nearly six-fold increase in expenditures on air pollution control from 2013 to 2017), as a result, there are now 21.8 million residents in Beijing breathing substantially cleaner air and reduced the related disease and health cost.

87. The project achievements were uptake and replicated in many cases. Such as Kampala city air quality management plan development and implementation lesson has been used in other cities (Jinja, Fort Portal, Kabale and Gulu) in Uganda, and scaled up to Uganda [2024 National Environment \(Air Quality Standards\) Regulations](#), which prohibit the emission of objectionable substances into the air from any source, including smoke, gases, fumes or dust. Moreover, the government has committed to reducing SLCP emissions through the development of a [national SLCP plan and a national methane roadmap](#). Uganda's air quality has greatly improved over the years with mean average [PM_{2.5} of 35 µg/m³ PM2.5](#) which is consider health although it still lies above WHO guidelines.

88. Several project drivers and assumptions remain only partially in place or on hold, which may constrain long-term sustainability. While examples such as Chile demonstrated that substantial progress is achievable—[evidenced by a 40% reduction in PM_{2.5} levels](#) over the past decade through legally binding measures, cross-sector coordination, and sustained investment in monitoring and emission sources tracking—scaling and replicating such results elsewhere (another city in same countries, sub-regions, and other countries) will depend on continued data availability, strengthened analytical capacity, effective translation of evidence into policy and action plans, and sustained mobilisation of climate and green finance. Continued public and private investment³⁰ will therefore be critical to sustaining and scaling positive impacts on environmental quality and human health.

89. Despite the project's contributions to strengthened air quality governance and capacity, global air pollution trends underscore the scale of the challenge and the risk that progress at project level may be overshadowed by broader deteriorating conditions. The WHO Air Quality Guidelines revised in 2021 set very stringent thresholds; globally, around 99% of the population lives in areas where these guidelines are not met. In 2023, only 10 out of 134 reporting countries and regions achieved the WHO annual PM2.5 guideline value of 5 µg/m³, and just 9% of globally reporting cities met the guideline³¹. While these figures highlighted the magnitude of the global air pollution challenge, the project nevertheless contributed to progress in beneficiary countries and cities through movement toward WHO interim targets and incremental improvements in monitoring systems, regulatory frameworks, early reductions in key pollution sources and awareness-raising. Nonetheless, overall ambient air quality in many contexts remained far above recommended health thresholds, underscoring the structural and systemic nature of air pollution drivers and the need for sustained, large-scale interventions beyond the project's scope to translate governance and capacity gains into measurable improvements in population-level air quality outcomes.

³⁰ Unfortunately, [lack of financing is one of the major barriers to effective air pollution action](#). Despite the significant harm air pollution causes to economies, the planet and to people's health, clean air efforts remain chronically underfunded. There is a need to mobilize large scale investment for sector-specific mitigation measures that can reduce air pollution and greenhouse gas emissions at local levels.

³¹ [2023 World Air Quality Report Region & City PM2.5 Ranking](#)

Table 14: Likelihood of Impact

Factors influencing likelihood of impact	Assessment	Justification
Drivers to support transition from Outputs to the Project Outcomes	In place	The project was driven by several key factors, as examples below: a) Increased public concern and advocacy regarding the disproportionate health impacts of air pollution—particularly on vulnerable groups such as children—drove demand for action; however, gender-specific actions addressing women’s exposure and impacts were not strongly evident. b) The selection of countries and cities (regions) was demand-driven, such as China, Uganda, Republic of Korea, India reflecting strong government and city-level interest and commitment. c) The project responded to UNEA resolutions and continued to operate under UNEP’s mandated global leadership in air quality, including calls for periodic assessments (e.g. Air Quality in Termez, Uzbekistan - Assessment of Key Emission Sources and Recommendations for Enhancing Air Quality Monitoring and Management, Global Methane Status Report). d) The global and regional cooperation and implementation were facilitated through existing networks such as CCAC, EANET, APCAP, and Africa Clean Air Network. e) Advances in low-cost sensor technology improved the potential for expanded air quality monitoring; however, limited availability, insufficient coverage of under-monitored areas, and a lack of reference stations meant that large-scale deployment and data validation continued to lag.
Assumptions for the change process from Outputs to Project Outcomes	Hold	i) Countries and cities continued to demonstrate political will and engaged in technical cooperation, such as Airqo for Africa, which signed an MOU with UNEP to extend the cooperation and to support Africa countries in capacity building, air quality index data sharing, and join efforts on the AQM actions, and Member States participated in Air Quality Improvement Program in ASEAN in developing appropriate and comprehensive public policies for improving air quality. ii) Stakeholders made use of assessment outputs and data to inform policy, such as Nationwide monitoring data supported revisions of the Ambient Air Quality Standards (GB 3095-2012) and subsequent tightening of PM_{2.5} controls under the Air Pollution Prevention and Control Action Plan in China. Source apportionment identified domestic coal heating as the dominant source of PM_{2.5} in Ulaanbaatar, leading to a ban on raw coal in households. Chile Air quality modelling showed co-benefits of coal phase-out and renewable energy deployment, supporting integrated air

		quality and climate policies. South Korea Integrated assessment modelling informed policies linking air pollution control, energy transition, and transport electrification). In some counties, limitations in data quality, including gaps in calibration methodologies and incomplete monitoring station data, were observed, primarily due to the constrained budget in AQM. iii) Capacity building through the project was retained and applied. Such as UNESCAP inclusive platform enabled continued capacity building to adopt innovative technologies for city air pollution control, and (Bangkok Metropolitan Administration) increasing awareness and technical capacity of local BMA staff and communities. BMA was to introduce tools, such as burn checks, to the community and provide guidelines and rules for controlling open burning. Innovative residue management practices should be studied and set up (processes to transport wastes from farms to power plants and other factories). iv) Coordination across regions and sectors led to harmonized and complementary actions. such as: Regional coordination under the ASEAN Agreement on Transboundary Haze Pollution aligned national actions on land management, fire prevention, and monitoring. Beijing-Tianjin-Hebei (Jing-Jin-Ji); environment, industry, energy, transport, coordinated emission reduction targets and synchronized emergency response measures during pollution episodes. and integrated industrial restructuring, coal reduction, and vehicle controls, significantly resulted in regional PM_{2.5} reductions through aligned policies across provinces. Latin America – Regional Air Quality Cooperation (CCAC / LAC Clean Air) integrated measures across energy, waste, and transport sectors, complemented national actions delivering both air quality and climate benefits. v) Awareness-raising led to behaviour change and increased demand for clean air from citizens and decision-makers. Real-time AQI publication via apps, websites, and media, such as in China and India, and citizen-led monitoring and data sharing mechanism in Nairobi, Increased public understanding of pollution levels led to reduced outdoor activity during high-pollution episodes, public pressure for stricter emission controls and emergency measures, Increased mask use, altered travel behaviour, citizen advocacy, Policy response by Stronger clean air regulations and enforcement, led to increased political attention and inclusion of air quality in urban planning discussions. vi) UNEP's institutional mandate, experience, and extensive partner networks effectively supported the achievement of the project's objectives, while technical staff needs to be deployed and capacity required strengthening. vii) The project aligned with and supported the UN principles on human rights and gender equality, while
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		the concrete actions were not consistently specific focused and highlighted.
Proportion of Project Outcomes	Fully achieved <i>(as per the planned monitory quantitative indicator)</i>	While the project's quantitative outcome indicators were largely achieved—particularly in terms of the number of countries and cities adopting or applying measures, policies, or frameworks to address air pollution and improve human health—the depth and pace of implementation varied significantly across contexts. Differences were influenced by national economic conditions, available investment, and each country or city's stage of air quality management development. For example, cities such as Kampala benefited substantially from low-cost sensor deployment, which improved data availability and directly supported the development and implementation of Clean Air Action Plan. At the national level, Uganda advanced ambient air quality standards, and emission source analyses with UNEP support. In more advanced contexts, such as the Seoul-Incheon-Gyeonggi metropolitan region, the project strengthened implementation quality by delivering high-resolution datasets, improving inter-agency data sharing, and applying sectoral modelling to quantify PM_{2.5} contributions—particularly from buildings and transport. However, budget constraints limited the translation of emissions modelling results into concentration-level impacts (e.g., ambient PM_{2.5} reductions).
Drivers to support transition from Project Outcomes to Intermediate States, and to Impact	In place	f) The Asia-Pacific, Latin America and the Caribbean (LAC), and Africa regional platforms for air pollution management were successfully established, with clear buy-in and action pledges from participating countries and cities. Through regional air quality forums, networks, and capacity-building activities, sustained political interest and commitment to reducing air pollution and associated health risks were reinforced, including among newly constituted governments. For example, Brazil is advancing the development of a national SLCP plan that integrates policies across the energy, transport, waste, and agriculture sectors, while Mexico is progressing toward endorsing a Strategic Plan to improve the air quality for the Monterrey metropolitan area, including establish institutional and legal frameworks. g) Continuation of awareness-raising and capacity building activities provided by UNEP and partner's following up projects and initiatives supported long term transition and impact of AQM, such as following UNECE's 2024–2025 air quality capacity-building programme focused on strengthening technical competencies (emission inventories, GIS data, BATs), regional cooperation and peer learning, and multi-stakeholder policy dialogue. These activities enhanced the ability of countries in Eastern Europe, the Caucasus,

		Central Asia and South-East Europe to develop robust air quality data systems, align air pollution and climate reporting, and implement integrated strategies consistent with international Convention on Long-range Transboundary Air Pollution protocols. h) Continued international and regional cooperation, including innovation and sustained human and financial support, remains critical for implementing air quality strategies, policies, and action plans. This assumption is supported by concrete developments during the project period, such as UNEP's establishment of the Global Air Quality Cooperation Network under UNEA resolution 6/10, which strengthens international collaboration on air pollution. Similarly, the World Bank's "Accelerating Access to Clean Air for a Liveable Planet" initiative highlights governance reforms and financing needs to scale clean air investments, while the APEC project on Improving Air Quality Monitoring Solutions for Environmental Governance promotes innovative, IoT (Internet of Things)-based monitoring systems to enhance urban and industrial air quality governance. Together, these initiatives demonstrated sustained global momentum, resource mobilization, and innovation that underpin the long-term impact and scalability of air quality management efforts.
Assumptions for the change process from the Project Outcomes to Intermediate States, and to Impact	Hold From Outcomes to Intermediate States Partially Hold From Outcomes to Intermediate States to intended impact	viii) Legal and institutional frameworks to facilitate clean air have been strengthened across regions, although progress and outcomes vary by context. In East and Northeast Asia (China, Japan, Republic of Korea), sustained regulatory reforms and long-standing institutional capacity have contributed to overall improvements in PM_{2.5} in many urban areas, with recent legal and policy frameworks increasingly shifting toward multi-pollutant control, including ozone; China's 2023 national air quality action plan exemplifies this continued strengthening. In South and Southeast Asia, countries such as India, Sri Lanka, Indonesia, Thailand, and Cambodia have adopted national programmes, city clean air action plans, and regional coordination mechanisms, but persistent PM_{2.5} exceedances—often driven by transport, industry, and seasonal biomass burning—highlight uneven institutional capacity and enforcement. Central Asia has expanded monitoring and policy attention in countries such as Kazakhstan, Kyrgyzstan, Uzbekistan, and Mongolia, yet legal and institutional frameworks remain at an early stage, with improvements often localised and seasonal rather than systemic. In Africa, including Ethiopia and Uganda, governments are still building foundational legal frameworks, monitoring systems, and institutional arrangements for air quality management, resulting in limited trend certainty but clear progress in governance readiness. In Latin America, countries such as Costa Rica and Peru benefit from comparatively stronger regulatory frameworks and urban air quality institutions, although outcomes depend on the completeness and transparency of monitoring systems. In Europe and Eurasia, including Serbia and Russia, mature legal

		frameworks and monitoring institutions have supported gradual long-term improvements, but persistent winter PM_{2.5} challenges underline the need for continued regulatory enforcement and institutional adaptation. ix) Funding is made available by the governments, private sector, donors for upscaling of implementation, awareness-raising and capacity building activities Funding to scale up air quality implementation, awareness-raising, and capacity-building activities is increasingly being mobilised from governments, donors, and the private sector, reflecting the growing recognition of air pollution as a priority for health, climate, and economic development. National governments are allocating budgetary resources to strengthen monitoring networks, implement clean air action plans, and enforce emission standards, often integrating air quality objectives into climate, transport, energy, and urban development strategies. International donors and multilateral institutions—such as UNEP, the World Bank, regional development banks, and bilateral agencies—have provided targeted financial and technical assistance to support policy reform, institutional strengthening, data systems, and pilot interventions, with an increasing focus on short-lived climate pollutants and co-benefits for climate mitigation. In parallel, private sector engagement is expanding through investments in cleaner technologies, low-cost monitoring solutions, digital platforms, and public–private partnerships, particularly in transport, energy, waste management, and industry. Together, these funding streams have enabled the scaling of successful pilots, sustained awareness-raising campaigns, and continued capacity development, although long-term impact will depend on predictable financing, domestic resource mobilisation, and alignment of investments with national and regional air quality priorities.
Proportion of Intermediate States	Partially achieved	The project contributed to increased implementation of air quality measures by several project covered countries and cities, alongside improved awareness among stakeholders—including government institutions, civil society, and citizens—of air pollution risks and the need for action. In many cases/countries and cities, the knowledge and awareness were translated into greater support for policy development, monitoring, and selected mitigation measures. However, progress was uneven across countries and cities. Still over a third of the population in Africa is unable to access air quality information. In some contexts, implementation remained at an early or pilot stage due to capacity constraints, financing gaps, or evolving political and institutional conditions, indicating that intermediate outcomes were only partially achieved overall.

Findings Statements on Effectiveness:

90. The project was largely effective in strengthening AQM capacities at national and city levels, as evidenced by the delivery of all planned outcome milestones and the implementation of key policy, planning, and monitoring outputs across multiple regions. Through 34 output-level milestones delivered under 7 components, participating governments and cities improved their ability to generate, analyse, and use air quality data to inform decision-making. Concrete results included the development or adoption of clean air action plans (e.g., Kampala, San José, Lima, Cambodia), progress on national standards and regulations (e.g. Uganda fuel and vehicle emission standards), and expanded use of monitoring data to support enforcement actions in cities such as Addis Ababa and Nairobi. These achievements demonstrate a clear contribution to improved institutional effectiveness in addressing air pollution.

91. Effectiveness was further reinforced through strong regional and global engagement mechanisms. The project successfully leveraged and strengthened regional platforms in Asia-Pacific, Africa, and Latin America and the Caribbean through UNEP regional office-led activities, enabling knowledge exchange, peer learning, and coordinated action on transboundary air pollution. Analyses such as the COVID-19 air quality assessments in Sri Lanka, Indonesia, and Japan provided timely, policy-relevant evidence that informed national discussions on clean air and climate ambition. Communication and awareness-raising efforts—particularly through flagship reports and global campaigns such as the International Day of Clean Air for Blue Skies—amplified project results, increased stakeholder awareness, and helped build political momentum for air quality action beyond the immediate project beneficiaries. National governments solidify plans to deliver the WHO’s voluntary target to halve the health impacts of air pollution by 2040, and effective monitoring of progress towards this goal³².

92. However, the effectiveness of the project was uneven across countries and thematic areas. While quantitative targets related to outputs and engagement were largely met, the depth and sustainability of implementation varied depending on national capacity, availability of financing, and the maturity of existing AQM systems. In some countries, measures remained at pilot or planning stages, and limitations in the project’s original indicator design and monitoring framework constrained the ability to fully demonstrate outcome-level change and attribution. Despite these constraints, the overall evidence indicates that the project made a meaningful and positive contribution to improving air quality governance, capacity, and awareness, achieving effectiveness at a generally high but not uniform level across contexts.

Rating for Effectiveness: Satisfactory

Rating for Availability of Outputs: *Satisfactory*

Rating for Achievement of Project Outcomes: *Satisfactory*

Rating for Achievement of Likelihood of Impact: *Likely*

4.5 Financial Management

93. The project received total cash contributions of USD 71,669,797.18 from donors³³. Of this amount, USD 6,517,924³⁴ was formally allotted to the project, against which USD 6,236,788.29 was actually expended. The remaining balance of donor cash contribution USD

³² <https://www.cleanairfund.org/news-item/wins-2025/>

³³ The USD 71,669,797.18 included the corporate funds which was also shared with other projects.

³⁴ Total cash contribution USD is 6,517,924=USD 105,1000.00 from Environment Fund + USD 6,412,924 from donor cash contribution

521,874.21³⁵,—primarily from the Republic of Korea and U.S. State Department (for South Africa) budget lines—was reallocated to a follow-up project ‘*UNEP-wide project on Improving Air Quality*’, (SMA 156083) in accordance with donor agreements and UNEP financial procedures.

94. The project’s financial documentation and records confirmed that all 12 grants were accounted for, with actual allocations and expenditures recorded by activity category and component level. However, several financial management challenges were identified for such ‘umbrella’ project. These included limitations in the level of detail available following the transition from PIMS to IPMR, which constrained expenditure traceability. In some cases, certain budget lines (e.g. S1-32CPL-000379) were over-utilised, reflecting the need for more timely financial monitoring and review. In addition, expenditures under Sub-grant and Small-Scale Funding Agreements (SSFAs) were not always clearly aligned with expenditure reporting categories and time scope, and project revision on additional budgets were not consistently linked to financial component summaries. This resulted in accounting gaps when aggregating total project expenditures against results at the output level, as project monitoring was conducted primarily at the aggregated output level rather than by individual components or subprojects. The project closure process, including the identification and financial reconciliation of activities up to the project end date (April 2024), could have been completed more promptly right after the project operational closure (June 2023).

4.5.1 Adherence to UNEP’s Financial Policies and Procedures

95. No evidence was found to suggest that the project failed to comply with UNEP’s financial policies and procedures. Financial management was conducted in accordance with donor agreements and approved allotments, and allocations to UNEP Regional Offices, Divisions, and implementation partners were fully recorded.

96. Overall expenditures were consistent with approved budget planning and aligned with the execution of planned project activities. While a small number of actual expenditure lines³⁶ exceeded initial allocations, these variances were subsequently adjusted and absorbed within the overall available project budget, without affecting total approved expenditures or project delivery.

4.5.2 Completeness of Financial Information

97. Summary financial data, as of 12 April 2024, were provided by UNEP’s Fund Management Officers at a level of detail adequate for the purposes of this evaluation. Additional clarifications—particularly concerning budgets based on actual donor allotments and staff cost allocations—supported the assessment of overall financial performance, despite limitations in accessing fully disaggregated, output-level financial records.

98. The project financial recording was affected by UNEP’s transition from PIMS to IPMR, which resulted in incomplete availability of historical financial data for evaluation, including records related to SSFAs and corresponding partner reports. In addition, some provided SSFAs were signed outside the formal project implementation period, further limiting data completeness, traceability, and the ability to fully assess financial performance across all activities. Notwithstanding these limitations, UNEP’s financial and narrative reports to donors were prepared and submitted in line with contractual requirements and demonstrated full commitment and delivery against agreed obligations.

³⁵ i.e. USD 71,669,797.18 minus USD 6,412,924.19

³⁶ Such as FT30_CLASS_140: Transfer/Grant to IP, and FT30_CLASS_125: “Operat Oth Costs” (ref/ Expense Report 23 04 2024)

99. Budget tracking was structured around donor contribution lines and 7 sub-project/component expenditure lines rather than by Outputs and Milestones as defined in the project design and Revision and its monitoring. This misalignment constrained the evaluation's ability to assess cost-efficiency and link financial expenditures directly to results and outputs.

Table 15: Financial management

Financial management components:		Rating	Evidence/ Comments
1. Adherence to UNEP's/Donor's policies and procedures:		S	
Any evidence that indicates shortcomings in the project's adherence ³⁷ to UNEP or donor policies, procedures or rules		No	Available donor funding agreements, SSFAs, and financial reports and recordings
Was first disbursement carried out within 9 months of UNEP's project approval date.		Yes	Financial report dated the activities for components 1, 2, and 6 were advanced to the project implementation. The rest were one year after the project started.
Were the procurement policies of UNEP and the donor(s) followed? (where applicable)		N/A	
2. Completeness of project financial information³⁸:		MS	
Provision of key documents to the evaluator (based on the responses to A-H below)		MS	
A.	Co-financing and Project Cost's tables at design (by budget lines)	Yes	ProDoc: Extra Budgetary Funding were categorised by donors, and years. In-kind Environment fund and Regular budget post cost were anticipated and planned.
B.	Revisions to the budget	Yes	Budget Revision dated on Jan. 5 th of 2022.
C.	All relevant project legal agreements (e.g. SSFA, PCA, ICA)	Partially Yes	Partial available for the evaluation. The SSFA numbering and date of signing and expiration are available, while the signature (such as CAI, SEI, AIT) date were after the project operational closure.
D.	Proof of fund transfers	Yes (by indirect supporting documents)	The expenses report dated April 23, 2024, outlines all fund transfers in the accounting records, including the corresponding accounting codes and the purpose (by activity) of each transfer. The details of concrete recipients were not provided.
E.	Proof of co-financing (cash and in-kind)	N/A	Co-financing is not applied in this project.
F.	A summary report on the project's expenditures during the life of the project (by budget lines, project components and/or annual level)	Yes	Financial information table: A comprehensive project financial table, detailing expenditures categorized by donor allotment and year, type of activities, and staff costs, is available. While the full summary of SSFAs for implementation partners is not available.
G.	Copies of any completed audits and management responses (where applicable)	N/A	Project closure report dated on March 07, 2024. Signed off by the head of Branch on March 13, 2024.
H.	Procure documents ³⁹ , including the approved requisition document and Source Selection Plan (where applicable)	N/A	

³⁷ If the evaluation raises concerns over adherence with policies or standard procedures, a recommendation maybe given to cover the topic in an upcoming audit, or similar financial oversight exercise.

³⁸ See also document 'Criterion Rating Description' for reference.

³⁹ Relevant for procurement action over USD 10,000 in value.

I.	Any other financial information that was required for this project (list):	N/A	
Overall rating			Satisfactory

Findings Statements on Financial Management:

100. While financial records confirmed that all 12 grants and expenditures were accounted for, weaknesses were observed in expenditure traceability, particularly following the PIMS–IPMR transition, as some historical financial data were not retrospectively reconstructable. In addition, financial planning was not consistently structured by outputs or components in design, and project revisions did not fully address this limitation. As a result, the linkage between revised component budgets, SSFA reporting, and financial summaries remained inconsistent, limited the ability to fully align expenditures with results at the component and output level.

101. Overall financial accountability was maintained across all grants; however, improvements in structuring financial planning around outputs and components, strengthening expenditure traceability, and better integrating system transitions would enhance transparency, improve results-based financial reporting and strengthen the evaluability of cost-efficiency in future projects.

Rating for Financial Management: Satisfactory

Rating for Adherence to UNEP’s Financial Policies and Procedures: *Satisfactory*

Rating for Completeness of Financial Information: *Moderately Satisfactory*

4.6 Efficiency

102. Project activities built on the foundations established by previous initiatives, with scientific data, technical resources, and institutional frameworks continuing to be utilised and strengthened. Existing partner capacities and cooperation mechanisms enabled efficient implementation, strong stakeholder engagement, and alignment with national, regional, and global priorities, contributing to the timely delivery of most project outputs. Although the COVID-19 pandemic necessitated adjustments to implementation modalities—particularly the shift of meetings, trainings, and assessments to virtual formats and caused some delays—the project adapted effectively without compromising overall performance.

103. Given that the project did not anticipate substantial consumption of water, energy, or other natural resources (see [Section 4.2, Quality of Project Design](#)), no additional environmental mitigation measures were deemed necessary during implementation. While no specific mechanisms were incorporated to proactively reduce the project’s environmental footprint, the transition to online modalities significantly reduced travel- and event-related activities and, consequently, contributed to a lower overall environmental footprint.

104. Project implementation was dynamic and influenced by the periodic availability of donor funding, which in some instances lagged behind planned activities and required adaptive scheduling. In parallel, additional activities were incorporated in response to emerging UNEA mandates, as well as evolving regional and city-level needs. These adjustments were coordinated and led by UNEP’s Industry and Economy Division, PHU, whose leadership played a critical role in maintaining strategic coherence and responsiveness throughout implementation.

105. Project outputs largely relied on technical expertise, platforms, and networks of partners such as CAI, WRI, ECI, SEI, FMI, Clean Air Asia, EANET, UNESCAP, and national government institutions. This multi-stakeholder approach enabled the project to address diverse priorities identified by partners while aligning with global and regional agendas. However, the breadth of partnerships also increased coordination demands; stronger strategic coordination would have further improved cost-efficiency and reduced the risk of overlap or duplication across activities (e.g., survey/data collection initiated by both WHO and UNEP project in air quality assessment).

106. Air quality data collection, monitoring, and public dissemination, including such as GEMS/Air, WHO Air Quality Database, OpenAQ, IQAir, CAMS, EANET, SACEP, APCAP, AirQo, SINCA (Chile), NAMP(India) etc., were hosted across multiple platforms operated by different counterpart institutions, each targeting distinct user groups. Greater integration of these information resources would have improved system interoperability, strengthened information sharing, and reduced long-term maintenance and operational costs (e.g. overlapped survey/data collection initiated both by WHO and UNEP in air quality assessment).

107. Best practices identified through the project (e.g. China's experience in integrating air quality monitoring with climate policy implementation) demonstrated strong potential for replication. However, wider dissemination and scaling of these practices would have required additional co-financing and structured knowledge-transfer mechanisms.

Findings Statements on Efficiency:

108. The project leveraged existing scientific datasets, institutional frameworks, and partner platforms to minimise duplication and reduce start-up costs, enabling most outputs to be delivered on schedule despite COVID-19 disruptions. The rapid shift to virtual delivery helped sustain implementation while containing transaction and travel costs.

109. UNEP's Industry and Economy Division/ Pollution and Health Unit demonstrated adaptive planning to respond to funding timing constraints, emerging UNEA mandates, and evolving country needs. Efficiency gains were partly constrained by fragmented air-quality data platforms (limiting interoperability and economies of scale) and limited co-financing to replicate and scale proven practices, increasing longer-term operational and maintenance costs.

Rating for Efficiency: Satisfactory

4.7 Monitoring and Reporting

4.7.1 Monitoring of Project Implementation

110. The project progress and monitoring reports generated through PIMS documented the achievement of output milestones and tracked output- and outcome-level indicator progress on a six-monthly basis. However, monitoring was conducted only at the aggregate output level, with no systematic tracking at the component or sub-project level. This limited the ability to assess the performance of individual components and subprojects, as well as to attribute results across specific sub-project interventions. The verification means were not always systematically provided, and statistical inconsistencies (e.g. disaggregation data by country, institution, or gender) were observed. These gaps indicated that monitoring did not consistently adhere to the project's monitoring plan, limiting the robustness and comparability of performance data, and resulting in the failure to comprehensively track the results at Outcome level.

111. For a ‘umbrella’ project of this scale, involving a large volume of documentation provided by multiple partners and sub-project managers, the coding and organisation of supporting documents in PIMS should have been more systematically established and consistently applied. Improved document tracking would have strengthened traceability, facilitated verification of results, and enhanced the overall efficiency and reliability of project monitoring.

4.7.2 Project Reporting

112. The project did not establish a Project Steering Committee (PSC). Instead, strategic oversight and decision-making were coordinated at the UNEP divisional level. Supervision was provided by the Head of Division through the Head of Unit and Branch—specifically the Pollution and Health Unit within the Chemicals and Health Branch of UNEP’s Industry and Economy Division. While this governance arrangement enabled coordination and synergies with other UNEP-implemented projects, supporting UNEP internal strategic alignment, the lack of a formal PSC limited opportunities for external oversight and structured stakeholder engagement in project-level governance. This was particularly significant given the project’s extensive engagement with a wide range of donors, technical and institutional partners.

113. Project reporting was conducted on a six-monthly basis through PIMS. Progress updates, performance highlights, and emerging lessons were systematically documented, along with adaptive management suggestions, such as COVID-19 disruptions prompted a shift to virtual implementation, which worked well in Latin America and Asia–Pacific but was less effective in parts of Africa due to digital constraints. The reporting therefore emphasized the need for flexible, context-specific engagement strategies to maintain country participation and implementation momentum.

114. Reports to the donor were submitted in accordance with the donor-provided templates and the required level of detail. According to interviews, the donor expressed satisfaction with both the quality and timeliness of the reporting, including the information provided within the scope of the Grant and Donor Agreement (also see also [Section 4.5.2, Completeness of Financial Information](#)).

115. Due to the monitoring gaps identified above ([Section 4.2, 4.4.1, and 4.7.1](#)), project reporting was not consistently able to present subproject-, output- and outcome-level results with sufficient detail. In particular, for outcome indicators such as *the number of governments adopting or applying air quality measures*, baseline values (pre-existing measures) and target achievements attributable to the project were only partially documented. As a result, while overall progress and achievements were reported, some conclusions in the project reports were not fully supported by verifiable indicator-level evidence, for example, the cumulative reporting of 20 countries under Outcome Indicator 1 in December 2022 without adequate supporting detail.

116. Findings Statements on Monitoring and Reporting:

117. Project monitoring systems documented activity progress and milestone achievement on a regular basis; however, weaknesses in indicator definitions, verification methods, and document traceability limited the robustness of performance measurement. Inconsistent provision of means of verification and uneven disaggregation of data (by country, institution, or gender) reduced the comparability and evidentiary strength of reported results, particularly at outcome level.

118. Despite the absence of a formal Project Steering Committee, project reporting through PIMS was regular and supported adaptive management, notably in responding to COVID-19 disruptions. However, monitoring gaps (including absence of gender-aggregated

data in most activity reporting) constrained the ability of reports to clearly distinguish baseline conditions from project-attributable results, meaning that some reported outcomes—such as the number of governments influenced—were only partially substantiated by verifiable indicator-level evidence.

Rating for Monitoring and Reporting: Moderately Unsatisfactory

Rating for Monitoring of Project Implementation: *Moderately Unsatisfactory*

Rating for Project Reporting: *Moderately Satisfactory*

4.8 Sustainability

4.8.1 Socio-political Sustainability

119. At the global level, UNEP's leadership on air quality management has been sustained beyond the project period, supported by continued donor engagement and follow-up initiatives led across UNEP divisions (including UNEP Finance Initiative and the Climate Change Division) and through partnerships such as the CCAC. The project contributed to strengthening political momentum that culminated in the adoption of *UNEA Resolution 6/10 (March 2024)* on promoting regional cooperation to improve air quality globally and *UNEA 7/7 (Dec. 2025)* on strengthening the global management of wildfires. This trajectory is further reinforced in *UNEP's MTS 2026–2029*, which prioritizes improving air quality through strengthened government capacities, intergovernmental cooperation networks, multi-stakeholder partnerships (including CCAC and the Global Methane Pledge), and increased awareness of the health, climate, and economic benefits of clean air. The new MTS also emphasizes a source-to-sea approach to pollution prevention and the creation of enabling environments and market incentives to attract investment in low-pollution products and services. In parallel, the establishment of the *UNEP Intergovernmental Science-Policy Panel on Chemicals, Waste and Pollution (ISP-CWP)*, approved at UNEA6, provides a new institutional mechanism to sustain science–policy linkages relevant to air pollution governance (such as POPs).

120. Socio-political sustainability is further supported by the continued engagement and complementary mandates of key partner organizations. For instance, WHO has reinforced global political commitment through the *Second WHO Global Conference on Air Pollution and Health*, which mobilized commitments from more than [50 countries](#), cities, and organizations to address air pollution and protect public health. WMO contributes through its *Global Atmosphere Watch (GAW) Programme* and the *Global Air Quality Forecasting and Information System (GAFIS)*, which provide globally consistent air quality information from global to urban scales to support health and policy communities. UNICEF has sustained advocacy on equity dimensions of air pollution through initiatives such as “*Growing up in the Haze*”, calling for coordinated government, private sector, and community action to reduce air pollution impacts on children in East Asia and the Pacific. These initiatives reinforce the project's objectives and help sustain political attention to air quality across sectors.

121. At the regional level, socio-political sustainability is strengthened, such as by [Regional Action Programme on Air Pollution \(RAPAP\)](#), adopted in 2022 as the first region-wide, government-negotiated framework on air pollution. RAPAP provides a durable platform for continued cooperation by promoting science-based and policy-oriented collaboration, facilitating the exchange of best practices, supporting domestic actions alongside regional cooperation, mobilizing technical and financial resources, and fostering sustained policy dialogue and technical cooperation. This regional architecture aligns closely with the project's approach and provides an institutional foundation for sustaining and scaling air quality actions beyond the project lifecycle.

122. In addition, the [Forum of Ministers of Environment of Latin America and the Caribbean](#) was unveiled as the Intergovernmental Network on Atmospheric Pollution has been reinforced with the aim of building a cooperation framework at the national and sub-national levels. [Africa Clean Air Network](#) has advanced an inclusive and transparent governance model that brings together policymakers, technical experts, civil society, academia, and the private sector to facilitate *data-driven air quality management* across Africa. And Regional Air Quality Network for West Asia are developed by [Regional Cooperation for Better Air Quality in West Asia](#) for joint planning, sharing data and best practices at the regional level.

123. At the national level, countries demonstrated strong commitment to implementing AQM plans, raising public awareness, and engaging both public and private stakeholders. In Kyrgyzstan, this commitment was reflected through coordinated action involving more than 15 development partners under the *Development Partner Coordination Committee (DPCC)*, including a dedicated sub-working group on air quality. High-level national policy dialogues on clean air action were convened, addressing not only technical and policy measures but also framing clean air as a *human right*, in partnership with the Office of the High Commissioner for Human Rights (OHCHR).

4.8.2 Financial Sustainability

124. The project contributed to a strong and growing programme environment for air quality management by demonstrating the economic benefits of action⁴⁰, showing that abatement costs are far lower than the costs of inaction (up to twenty times than the costs of inaction). It helped mainstream air quality within climate, chemicals, and waste agendas and reinforced sustained political and financial commitment through regional networks such as EANET, Clean Air Fund⁴¹, and ASEAN-led initiatives⁴². Complementary programmes from World Bank and ADB⁴³, and in the Mekong subregion and Southeast Asia⁴⁴ further strengthened transboundary cooperation, technical capacity, and scalable mitigation measures, creating a coherent and enabling regional framework for continued air quality and climate action.

125. In Africa, continued financial support was placed to drive progress toward cleaner air and a sustainable, resilient future for Africa. For instance, as announced by Nigeria at the CCAC Super Pollutant Ministerial in September 2024, CCAC has pledged USD 1 million to support the ACAP startup phase. This funding will scale up country-led initiatives, strengthen institutional capacities, and promote collaboration across Regional Economic Communities (RECs).

⁴⁰ A joint [IIASA–UNEP](#) analysis quantifying the cost of inaction for the [ASEAN states](#) warns that if current trends continue, countries like Indonesia, Thailand and Cambodia could see up to [2.1% of their GDP lost by 2030](#) due to rising health costs and declining workforce productivity caused by air pollution. In Jakarta alone — a city of more than [10.7 million people](#) — air pollution is estimated to [cause over 10,000 premature deaths](#) each year, along with [5,000 hospitalizations and 7,000 adverse](#) health outcomes in children, based on 2019 data. Across Indonesia, the economic cost of air pollution has been estimated by the World Bank at [\\$220 billion annually — equivalent to 6.6% of its 2019 GDP](#).

⁴¹ [Breathe Cities](#) supports cities around the world to cut their air pollution and climate emissions by 30% by 2030. [Action on Black Carbon programme](#). A \$12.9 million programme to generate scientific research, build coalitions and implement solutions to cut emissions of the climate super pollutant, black carbon.

⁴² **Air Quality Improvement Programme in ASEAN** (EUR 2.5 million, Expertise France, 2023–2025), which supports ASEAN Member States in developing comprehensive air quality policies

⁴³ *World Bank [cost-effective approaches](#) to address outdoor air pollution and the Asian Development Bank's [New Toolkit providing practical guidance for development finance institutions](#) to integrate air quality improvements across sectors.*

⁴⁴ The programme **“Improving Air Quality and Climate Protection in Mekong Riparian States”** (EUR 2.09 million for preparatory phases, with EUR 6 million committed for implementation from 2024–2028); in parallel, the **German–Swiss funded Southeast Asia Climate and Clean Air Initiative (SEACAI)** further complements the project by targeting reductions in SLCPs, with a particular focus on black carbon and PM2.5 in the Greater Mekong Subregion. SEACAI promotes regional monitoring, source apportionment, modelling, and policy exchange through an evidence-based, interdisciplinary, and transboundary approach.

126. As a result of the project, air quality considerations were increasingly integrated into national and regional policy dialogues and investment planning, creating significant opportunities to leverage co-benefits between clean energy transitions and clean air objectives. Interview findings indicate, however, that several countries still require sustained technical and financial support to translate policy intent into implementation. For example, Uganda continues to face needs related to comprehensive emission source assessments, expansion and maintenance of low-cost air quality sensor networks, and improved access to technologies, technical know-how, and data management systems. Continued support is also needed to promote and adopt alternative solutions that reduce and prevent pollutant emissions over the longer term in many low-income countries.

4.8.3 Institutional Sustainability

127. At the UNEP level, the Pollution and Health Unit, in collaboration with UNEP Early Warning and Assessment Division, the Climate Division, and Regional Offices, together with Communication and Law divisions has been responsive to UNEA resolutions to advance AQM at global and regional levels through hosted platforms such as CCAC, EANET, and APCAP. UNEP is establishing the new *Global Air Quality Cooperation Network* under UNEA resolution 6/10 to strengthen international collaboration on air pollution. The Network will empower governments at different levels and other key stakeholders to reduce air pollution through enhancing air quality management capacities, increasing the uptake of solutions to reduce air pollution from high-impact sectors, and improving access to finance, funding, and other forms of support.

128. In addition, the *Air Quality Management Exchange Platform (AQMx)* host by CCAC will serve as its central hub for global cooperation and knowledge-sharing. [Air Quality Central Asia Platform](#) (AQCA) has strengthened regional cooperation by fostering constructive partnerships among governments, academia, civil society, the private sector, media, and scientific institutions. The platform brings together more than 30 member organisations, including national hydrometeorological services, and supports regular capacity-building activities such as trainings, media campaigns, and an annual in-person conference. UNEP supported the establishment of AQCA and continues to provide financial and institutional support, contributing to sustained regional dialogue and collaboration on air quality management.

129. At national and city levels, capacities built within focal agencies have largely remained functional, with training materials, technical guidelines, assessment reports, and public awareness tools continuing to be used to engage stakeholders and the public. However, high staff turnover within institutions remains a challenge, constraining institutional memory and reducing the long-term retention and sustainability of project-supported knowledge and practices.

130. As upcoming commitments place increasing demands on UNEP—particularly regarding scientific research on newly identified diseases, emerging pollutants, and prevention mechanisms—strengthening expert staffing and providing targeted on-the-job training are recognized as necessary to sustain institutional capacity.

Findings Statements on Sustainability:

131. The project demonstrates strong socio-political sustainability, underpinned by sustained global, regional, and national commitment to air quality management beyond the project lifecycle.

132. Financial and institutional sustainability prospects are assessed as moderately likely and to likely sustainable, supported by growing integration of air quality into climate,

chemicals, and development finance agendas and by follow-on funding commitments. Institutionally, UNEP has strengthened global and regional platforms and supported regional mechanisms such as AQCA, helping sustain cooperation and capacity-building. At country and city levels, project-supported tools and capacities remain in use; however, high staff turnover and continued needs for technical and financial support, particularly in low-income contexts, pose ongoing risks to long-term sustainability unless accompanied by predictable financing, strengthened institutional capacity, and targeted staffing support within UNEP and partner institutions.

Rating for Likelihood of Sustainability: Moderately Likely

Rating for Socio-political Sustainability: *Highly Likely*

Rating for Financial Sustainability: *Moderately Likely*

Rating for Institutional Sustainability: *Likely*

4.9 Factors Affecting Performance and Cross-Cutting Issues

4.9.1 Quality of Project Management and Supervision

4.9.1.1 UNEP/Implementing Agency:

133. A Project Steering Committee (PSC) was not formally established. Project supervision was conducted through existing UNEP institutional structures and coordinated by the Project Manager (in PHU) with support from focal points in the Divisions and Regional offices. Project coordination took place regularly through PHU monthly meetings and, as needed, through ad-hoc digital communications. Correspondence with UNEP Policy and Programme Division was documented and tracked, confirming compliance with completion and reporting requirements.

134. As shown in Table 16, project implementation relied on a small number of engaged staff, most of whom contributed only a modest share of their overall workload each year, reflecting lean staffing throughout the project period. Given that air pollution management is a key mandate of UNEP's environmental governance work and requires engagement across multiple sectors (such as support from the UNEP Law Division in developing the AMQ policy guidelines and reviewing related policies and reports) and sub-projects, leadership and staffing arrangements for such a complex project within UNEP were relatively limited and should be strengthened.

Table 16: Project Staffing and Individual Time Allocation

No. of Staff	Level of staff	Original Prodop	Actual inputs by year (project share of each staff member's total workload)			
			2019	2020	2021	2022
1	P4	90%	90%	90%	90%	90%
2	P5	10%	10%	10%	10%	10%
3	P2	30%		30%	30%	30%
4	P4	30%	30%	30%	30%	
5	P2	30%	30%	30%	30%	
6	P5	5%		5%	5%	
7	P5	10%		10%	10%	10%
8	P4	10%		10%	10%	
9	P4	10%	10%	10%	10%	
10	P3	15%	15%	15%	15%	15%
11	P3	5%		5%	5%	

12	P4	10%	10%	10%	10%	10%
13	P4	10%			10%	10%
14	P4	100%				
15	Consultant 1	100%	100%	100%	100%	100%
16	Consultant 2	100%	100%	100%	100%	100%

135. While the evaluation was unable to interview senior-level management overseeing the project, feedback from UNEP regional offices, project counterparts, the donor, as well as the signed off project completion report indicates overall satisfaction with communication, project management, and adaptive change management throughout project implementation.

4.9.1.2 Partners/Executing Agency:

136. Partners were appropriately identified at the design stage, enabling the mobilisation of high-quality technical expertise and the delivery of specialised outputs in line with agreed workplans. Their contributions enhanced the credibility and relevance of assessments, tools, and capacity-building activities. Collaboration remained constructive despite COVID-19 and contextual disruptions, with adaptive management—particularly the shift to virtual modalities—supporting continuity of implementation and sustained partner engagement.

137. However, the absence of a formal project-wide coordination mechanism (e.g., a dedicated Steering Committee or structured kick-off process) led that some partners had limited visibility of the overall ‘umbrella’ project structure, results framework, and cross-component linkages. This reduced clarity regarding how individual contributions aligned with higher-level outputs and outcomes and limited opportunities for more strategic cross-partner coordination and integration.

4.9.2 Stakeholders Participation and Cooperation

138. Project implementation relied heavily on a diverse group of executing partners engaged either through institutional mandates (e.g. UNESCAP, UNICEF) or through Small-SSFAs (e.g. Finnish Meteorological Institute, Environmental Compliance Institute). These partners contributed substantive technical expertise across assessments, policy development, data analysis, capacity building, and the organisation of regional webinars and knowledge products. While partners generally submitted expenditure reports and activity summaries (e.g. conference reports, concept notes, modelling validation notes), comprehensive technical reporting was not consistently available for the evaluation, limiting full verification of partner-level contributions and results.

139. The project did not convene a formal kick-off meeting, and partner engagement was largely embedded within the broader ‘umbrella’ project processes. As a result, several partners were not fully aware of the project’s overall structure, outputs, or sub-project linkages. This limited their ability to explicitly reference or align activities with project-level outputs and outcomes. Consequently, while synergies across related initiatives were actively coordinated by UNEP internally, opportunities for broader, partner-led coordination and cross-project synergy were not fully realised across the entire stakeholder landscape.

4.9.3 Responsiveness to Human Rights and Gender Equality

140. The project addressed human rights considerations primarily through its focus on reducing inequalities in exposure to air pollution and improving access to clean air as a public health good. By supporting countries and cities to generate and disclose air quality data, develop policies and action plans, and implement mitigation measures, the project contributed to improved awareness, prevention, and protection related to air-pollution-related health risks. These interventions benefited populations (especially for children with proposed

20 solutions) affected by multiple pollution sources, including transboundary pollution, and supported more equitable access to information and evidence for decision-making on environmental health.

141. The project demonstrated some efforts to consider women (alternative fuel for “cleaner” cooking) and vulnerable groups—such as youth and children—particularly through inclusive participation in trainings, workshops, and community-level knowledge dissemination activities. Training reports indicate female participation, and some outreach activities noted higher engagement of women due to their availability at community level. However, there is limited evidence that the project systematically integrated gender or human rights analysis into policy design, monitoring frameworks, or targeted interventions. Gender and vulnerability dimensions were more visible at the activity and participation levels than at the strategic or results levels. As such, while these considerations were partially addressed during implementation, they were not consistently translated into explicit policy focus, indicators, or measurable outcomes within the result framework. This gap also reflected the insufficient embedding of gender and vulnerability considerations in the design of project activities themselves.

4.9.4 Environmental and Social Safeguards

142. The project was assessed as low risk in terms of environmental and social safeguards (EES). At design stage, several ESS issues were identified through screening, but all were considered of low significance given the project’s focus on data monitoring and assessment, capacity-building, policy development, and knowledge dissemination. No safeguard incidents were triggered during implementation, and there was limited evidence of active ESS monitoring, justified by the absence of formal screening and monitoring requirements in the PRC (project review committee) process. The Project made efforts to ensure representation from different stakeholder groups and to avoid reinforcing existing inequalities, particularly through its regional dialogues and awareness raising to vulnerable groups. UNEP management also acknowledged project’s equity considerations, especially the heightened vulnerability of women and children to air pollution exposure, and incorporated participatory approaches to mitigate potential social risks and promote inclusiveness, although more systematic gender-differentiated actions could have further strengthened these efforts. Further details on ESS assessment at the design stage, during implementation, and on management responses are provided in [Annex XI](#).

143. There is no evidence of adverse environmental or social impacts arising from the Project’s interventions. Its core aim was intrinsically aligned with broader environmental priorities, such as reduce pollution and waste, promote sound management of chemicals and circular economy approaches, and climate mitigation. Many of the implemented activities, such as training on open door burning and support to sustainable transportations, were designed to generate positive environmental externalities.

4.9.5 Country Ownership and Driven-ness

144. The Project’s decentralised delivery support empowered regional, country and city teams and partners to tailor activities in alignment with national priorities (see Section 4.1.3 *Relevance to Global, Regional, Sub-regional and National Priorities*), demonstrating strong orientation toward enabling country ownership by design. Evidence of country ownership is reflected in several contexts, as discussed in Section 4.4 (*Availability of Outputs and Achievement of Project Outcomes*). In addition, at the regional level, the project strengthened cooperation and peer learning through established platforms and networks, supporting coordinated action and reinforcing shared ownership of air quality management priorities across participating countries.

145. In Asia and Pacific, EANET expanded its scope to cover wider air pollution issues with the adoption of [the Annex](#) to the [EANET Instrument](#), in response to the challenges and needs identified by the member countries for the next five years: enhanced capacity building, technical support, and financial assistance to strengthen their air quality monitoring and management efforts. Key priorities include among others improving emission inventories methodology, upgrading monitoring networks, increasing capacity in information and methodology exchange of new technologies such as AI, low-cost sensors and satellite, and enhancing data analysis capabilities to better assess pollution trends. There is also a strong demand for policy development support, particularly in formulating and implementing effective air pollution control measures. Additionally, some countries highlight the importance of raising public awareness and enhancing international cooperation and multi-stakeholder engagement to drive action.

146. In Africa, the launching the [CLEAN Air Africa Network](#) spearheaded Africa-led partnerships and enhanced regional cooperation to support sustainable interventions for mitigating air pollution. [West Asia Air Quality Network](#), was launched following regional consultations in 2023, and has become an effective platform for regional collaboration and joint action planning.

147. In LAC region, the new [Regional Action Plan on Air Quality 2022-2025](#) follows work undertaken on atmospheric pollution at the [XXII Forum of Ministers of Environment of Latin America and the Caribbean](#), and was unveiled as the Intergovernmental Network on Atmospheric Pollution has been reinforced with the aim of building a cooperation framework at the national and sub-national levels. As part of its work, UNEP has been supporting countries in the region on air quality monitoring with low-cost alternatives, while also organizing [a series of technical webinars on air quality and health with the support of the Pan-American Health Organization](#), together with in-depth trainings on [air quality management priorities](#).

4.9.6 Communication and Public Awareness

148. The project launched several platforms (e.g. hosted by UNEP - [Actions on Air Quality](#), [Global Environment Monitoring System for Air](#), [Global Methane Assessment](#); [UNEP Pollution Action Note](#) , and presented by CLRTAP - [Costs of Inaction on air pollution](#), etc) to share knowledge, tools, and data with government authorities and the public. These platforms were regularly updated to reflect newly generated knowledge, evolving policy needs, and emerging public concerns, supporting continued access to relevant and timely air-quality information. Such as in Kampala, citizens and communities were informed about air quality conditions through public displays, community information systems, and other communication channels (community champions). This enabled timely protective actions, such as wearing masks or temporarily suspending school and work activities during periods of severe air pollution.

149. The UNEP Communication Division played a supporting but important role in amplifying the project's visibility and public awareness impacts, although it was not directly involved in project design or implementation. Its contributions focused on the dissemination of flagship knowledge products—most notably the *Actions on Air Quality* report—through UNEP's global communication channels. These outputs were strategically timed with major global observances such as *World Environment Day 2019 (Beat Air Pollution)* and the *International Day of Clean Air for Blue Skies*, ensuring high global visibility, multilingual reach, and alignment with UNEP's corporate communication calendar. Campaigns leveraged digital platforms, press outreach, videos, and practical guides to target governments, practitioners, and the general public, contributing to heightened awareness and policy attention on air quality issues.

150. Project communication effectiveness was strongest at the global advocacy level, generating broad media coverage and political momentum, with reach and engagement tracked through campaign-specific monitoring systems (details in [Section 4.4.1](#), [4.4.2](#)). Collaboration with regional public information officers enabled contextualized and localized dissemination. However, coordination with technical teams was often ad hoc and initiated late in the project cycle, limiting the ability to embed communication strategically across the full results chain. Gender and equity dimensions were reflected indirectly in messaging—particularly on indoor air pollution and women’s exposure—but were not systematically monitored through gender-disaggregated communication indicators. Overall, while communication and awareness-raising significantly reinforced UNEP’s role as a global knowledge generator and propagator on AQM, earlier and more integrated engagement of communication functions could have strengthened storytelling, attribution of results, and learning impacts.

Findings Statements on Factors Affecting Performance and Cross-Cutting Issues:

151. Project results are anchored in sustained UNEP leadership and global and regional governance frameworks, including UNEA Resolution 6/10, UNEP’s MTS 2026–2029, and new cooperation mechanisms. Continued engagement by key partners (e.g. WHO, WMO, UNICEF, UNESCAP, CCAC) and regional platforms has maintained political momentum and cross-sectoral attention to air quality beyond the project period.

152. The project strengthened the economic case for air quality action, helping mobilize follow-up investments through regional and thematic programmes in Asia, Africa, and Latin America. While this creates a favourable environment for scaling, long-term sustainability will depend on predictable domestic financing and sustained donor alignment.

153. Regional platforms and national institutions retain and apply project-supported capacities, tools, and guidelines. However, high staff turnover and uneven institutional capacity across countries pose ongoing risks to long-term continuity and scaling.

Rating for Factors Affecting Performance and Cross-Cutting Issues: Satisfactory

Rating for Quality of Project Management and Supervision: [Satisfactory](#)

- Partners/Executing Agency: [Satisfactory](#)

- UNEP/Implementing Agency: [Satisfactory](#)

Rating for Stakeholders Participation and Cooperation: [Satisfactory](#)

Rating for Responsiveness to Human Rights and Gender Equality: [Moderately Satisfactory](#)

Rating for Environmental and Social Safeguards: [Satisfactory](#)

Rating for Country Ownership and Driven-ness: [Satisfactory](#)

Rating for Communication and Public Awareness: [Satisfactory](#)

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

154. The evaluation concludes that the project achieved an overall **Satisfactory** level of performance, underpinned by **high strategic relevance and complementarity** and a multi-level design that was strongly aligned with UNEP mandates and global commitments, and responsive to country and city demand—factors that drove ownership, uptake, and effective delivery of a broad portfolio of outputs and outcomes. While the quality of project design is assessed as **Satisfactory**, reflecting the robustness of the problem analysis, strategic alignment, and structured intervention logic, the complexity of the Theory of Change in a global project operating simultaneously at national, regional, and global levels, results chains were uneven across contexts, making it difficult to assess and conclude impact at a consistent level across project components and subprojects.

155. The evaluation concludes that the project's ability to *demonstrate and attribute results* was constrained by the limitations in the formulation of results-based indicators at design stage and **moderately unsatisfactory monitoring and reporting**, including weak indicator definitions, inconsistent verification, and limited disaggregation, which reduced comparability and limited evidence of outcome-level change across components despite **generally strong effectiveness**. Project implementation took place in a **moderately unfavourable external context** (COVID-19 disruptions, civil unrest and logistical delays), but adaptive management helped mitigate major negative impacts and sustain delivery momentum. Financial management complied with requirements, yet due to the transition from PIMS to IPMR, some historical data could not be retrospectively reconstructed and traced⁴⁵ and limited output/component-level financial information available to TE reduced evaluability for cost-efficiency analysis.

156. The evaluation further concludes that **gender equality and human rights integration remained uneven across the results chain**: while participation of women and vulnerable groups was reflected in some activities and capacity-building efforts, these considerations were not sufficiently operationalised through dedicated indicators, targets, or systematic monitoring, limiting evidence of targeted outcomes.

157. Overall, evaluation findings concludes that the project was strategically well-positioned and delivered substantial outputs through strong partnerships and demand-driven implementation, with sustainability prospects assessed as **moderately likely**. However, weaknesses in the results framework and monitoring systems limited the project's ability to clearly demonstrate attributable outcomes, generate systematic knowledge, maximise impact, and evidence progress on gender equality and human rights beyond activity-level participation. Brief evaluation conclusions per criterion are provided below:

Strategic Relevance and Complementarity

158. The project demonstrated **high strategic relevance**, directly addressing air pollution as a globally recognized environmental and public health priority. Its multi-level design—spanning global, regional, national, and city levels—was well aligned with UNEP's mandate, UNEA resolutions, and international commitments including the SDGs, WHO Air Quality Guidelines, and the Paris Agreement. Interventions were strongly demand-driven and

⁴⁵ Early financial reporting used UNEP's PIMS system, which did not track expenditures at the output or component level. After the transition to the IPMR system, reporting became better aligned with the results framework, but earlier expenditures cannot always be retrospectively mapped. This corporate system transition limited the availability of detailed project-level financial data for the evaluation.

responsive to country and city priorities, which contributed to high levels of ownership and uptake.

159. The project complemented existing initiatives and platforms by strengthening institutional capacities, improving access to tools and data, and supporting policy development and implementation. Complementarity was mutually reinforcing: existing regional networks and initiatives created enabling conditions for project implementation, while project outputs operationalised and strengthened these initiatives through assessments, guidance, and capacity-building support.

Quality of Project Design

160. The project adopted a **comprehensive ‘umbrella’ design**, enabling UNEP to address the transboundary and multi-dimensional nature of air pollution while retaining flexibility to respond to diverse country and city needs. The design facilitated delivery across a wide range of thematic areas, including assessments, monitoring, policy support, capacity building, and regional and global coordination.

161. However, the complexity of the structure—characterised by loosely defined components, output-based organisation, and relatively weak indicator definitions—limited clarity, attribution, and evaluability. The absence of a formal steering or coordination mechanism further constrained strategic integration and systematic cross-learning across components. Gender and equity considerations were acknowledged in the design but were not sufficiently operationalised through dedicated indicators, targets, or monitoring arrangements. The evaluation concludes the project design quality as **Satisfactory**.

Nature of External Context

162. The external context is assessed as **Moderately Unfavorable**. The COVID-19 pandemic significantly disrupted implementation modalities, limiting travel, in-country engagement, and the timely delivery of certain activities. In addition, episodes of civil unrest and logistical challenges—including customs-related delays affecting air sensor deployment in some countries (San José and Lima)—further constrained implementation progress. Despite these constraints, the project applied adaptive management measures that helped mitigate major negative impacts and maintain overall delivery momentum. While outputs were largely achieved, external disruptions affected efficiency and implementation dynamics, supporting an overall assessment of a moderately unfavourable context.

Effectiveness (Outputs, Outcomes, and Likelihood of Impact)

163. The project achieved a **Satisfactory** level of effectiveness. All 7 planned outcome milestones were delivered through 7 subprojects/components and 34 output-level milestones. Of the 14 key output indicators, most were fully achieved or overachieved, with only one partially achieved due to data limitations.

164. Key achievements included strengthened air quality monitoring and data systems (including deployment of low-cost sensors), enhanced analytical capacity through assessments and modelling tools, support for clean air action plans and regulatory frameworks, and reinforced regional and global cooperation through platforms such as EANET, APCAP, and CCAC. These results contributed to improved institutional readiness and informed policy action.

165. Nevertheless, weaknesses in indicator design, verification methods, and reporting limited the ability to fully trace some outputs and outcomes, particularly across components.

As a result, the evaluation relied on additional qualitative evidence and triangulation to substantiate results and assess contributions to change.

Financial Management

166. Financial management is assessed as **Satisfactory**. It complied with UNEP policies and donor requirements, and donor- and grant-based accounting was clear and well documented. However, the transition from PIMS to IPMR resulted in historical financial data that were not retrospectively reconstructable, constraining expenditure traceability. Output- and component-level financial data available to the TE were limited, reducing the ability to systematically link expenditures to each level of results and assess cost-efficiency at a more granular level.

Efficiency

167. The project achieved cost and time efficiencies at a **Satisfactory** level through the use of existing data, platforms, and partnerships, and through adaptive management in response to COVID-19 and funding timing constraints. Efficiency gains were nevertheless constrained by overlapped data collection and survey, fragmented air quality and emission data systems, limited co-financing for scaling and maintenance, and the absence of structured output- or component-level financial tracking partly due to weakness in financial planning in project design and UNEP corporate system transition from PIMS to IPMR.

Monitoring and Reporting

168. Monitoring and reporting systems supported regular progress tracking and adaptive management but were assessed as **Moderately Unsatisfactory** overall. Weaknesses in indicator design, inconsistent verification approaches, limited disaggregation, and gaps in data availability reduced the robustness of performance measurement and reporting. These limitations affected the clarity with which project-attributable results—particularly at component and outputs level—could be demonstrated.

Sustainability

169. The likelihood of sustainability is assessed as **Moderately Likely**. Sustainability is supported by strengthened institutional and legal frameworks, continued operation of regional platforms, follow-up UNEP initiatives, and growing recognition of air quality as a public health and development priority. However, long-term sustainability will depend on sustained domestic financing, effective enforcement, stronger cross-sectoral coordination, and continued capacity development, particularly in lower-capacity/income contexts.

Cross-Cutting Issues (Gender, Equity, Capacity Development)

170. The project made a strong contribution to capacity development and South–South cooperation by enhancing technical skills, institutional coordination, and peer exchange. While gender and vulnerable groups were recognised as important, consideration of these dimensions was not applied systematically across implementation and monitoring. The absence of dedicated gender-sensitive indicators and consistent disaggregated data collection limited evidence of targeted outcomes for women and other vulnerable groups.

Responses to Key Strategic Questions

SQ (a): In what ways, and to what extent, have the needs and interests of differentiated groups been considered in the implementation and monitoring of the project?

171. The project addressed the needs and interests of differentiated groups primarily through broad, inclusive stakeholder engagement and a strong public-health framing of air quality management. It engaged government institutions, NGOs, research institutes, UN agencies, and national and subnational partners across beneficiary countries. Engagement mechanisms—including public consultations, technical trainings, modelling tool demonstrations, and regional knowledge-sharing platforms—enabled diverse actors to contribute to and benefit from project activities, reflecting country- and city-specific priorities.

172. Gender and vulnerable groups were recognised as important, given the disproportionate health impacts of air pollution. However, consideration of these groups was not applied systematically across implementation and monitoring. The project did not consistently integrate gender- or equity-specific approaches—such as the use of gender-sensitive indicators, partnerships with organisations with gender expertise, gender-informed policy reviews, expenditure analyses, or gender-responsive actions—nor did it establish dedicated gender-sensitive indicators or routinely collect disaggregated data. As a result, while differentiated needs were implicitly addressed through health-oriented objectives and awareness-raising, explicit evidence of targeted outcomes for women and other vulnerable groups remains limited (Refer details to [Section 4.4.1](#), and [4.9.3](#)).

SQ (b): What innovative financing mechanisms can be explored to sustain air quality initiatives beyond the project's lifecycle?

173. The project highlighted a range of financing pathways to sustain air quality initiatives beyond its lifecycle, including public–private partnerships, international donor funding, and philanthropic support. It underscored the importance of mobilising green and climate finance from international financial institutions, national development banks, and climate funds to SLCPs and maximise climate–air quality co-benefits. Air pollution reduction was consistently framed as a “triple win” for health, climate stability, and economic development. Examples such as Japan’s Joint Crediting Mechanism and the Clean Air Fund Toolkit for DFIs illustrate how integrating air quality into climate and development finance can help bridge financing gaps and scale impact (Refer details to [Section 4.8.2](#)).

SQ (c): How can the project's data and findings be leveraged to influence policy changes at the national regional and global levels?

174. The project's data and analytical outputs were leveraged to influence policy change by systematically translating technical evidence into policy-relevant products tailored to decision-makers at different levels. At the national and city levels, validated air quality data, assessments, and modelling results directly informed the design, revision, and enforcement of clean air action plans, regulatory standards, and sectoral policies (e.g. sectoral modelling was applied to quality PM_{2.5} contributions in Seoul–Incheon–Gyeonggi metropolitan region – particularly from buildings and transport—supporting targeted mitigation measures in comprehensive national fine dust management policy; and Addis Ababa (Ethiopia) and Nairobi (Kenya) used UNEP-supported air quality data to inform regulatory and policy decisions, including demonstrating improvements following truck restrictions in urban areas and enforcing compliance orders on industrial facilities exceeding emission thresholds; etc. Also see more examples in [Table 14](#)). Regionally, harmonised datasets and comparative analyses supported peer learning, regional policy alignment, and coordinated responses to transboundary air pollution through established platforms such as [Airqo](#) provides data tools aiming at Clean air for all African cities. At the global level, synthesised evidence is feeding into UNEA deliberations, WHO guideline implementation, SDG monitoring, and climate–air quality co-benefits advocacy, strengthening UNEP's normative role and helping anchor air quality priorities within broader climate, health, and sustainable development agendas (Refer details to [Section 4.4.2](#)).

SQ (d): How can the project's successes and innovative approaches be scaled up and replicated in other regions facing similar air quality challenges?

175. Project results are being carried forward primarily through the UNEP successor project "UNEP-wide Project on Improving Air Quality (2023-05-15–2026-12-31, SMA ID 156083)"; scaled and replicated by institutionalising proven tools, methodologies, and capacity-building packages within UNEP's regional and global follow up programmes (such as AQMx training in Regional Air Quality Network Meeting for West Asia). Standardised monitoring frameworks, policy toolkits, and clean air action planning approaches were adapted to regional contexts and disseminated through platforms such as APCAP, EANET, CCAC, and UN regional offices. Replication was promoted by combining technical assistance with sustained financing by financial institutes (WB, ADB, etc.), South–South cooperation (e.g. *Latin America & Africa Air Quality Community of Practice*), and peer-to-peer learning, and by embedding these approaches into national development plans, donor-funded programmes, and UN Sustainable Development Cooperation Frameworks (UNSDCFs) (Refer details to Section [4.1.1](#), and [4.4.3](#)).

SQ (d): How can the project's successes and innovative approaches be scaled up and replicated in other regions facing similar air quality challenges?

176. The Mid-Term Review (conducted in 2022 June) recommendations were partially actioned, mainly within UNEP execution arrangements. Once COVID-19 disruptions eased, project coordination improved through more frequent virtual and hybrid meetings and stronger use of regional platforms. Unspent travel budgets were reallocated to tools development, online trainings, and capacity-building, improving efficiency and reach. Local capacity for air quality sensor use was strengthened through additional guidance and training. However, the recommendation to knowledge management and systematically integrate gender mainstreaming through an explicit action plan was not fully implemented, and gender considerations remained largely implicit and inconsistently reported.

177. The table below provides a summary of the ratings and finding discussed in Chapter 4. Overall, the project demonstrates a rating of '**Satisfactory**'.

Table 17: Summary of project findings and ratings⁴⁶

Criterion	Summary assessment	Rating
Strategic Relevance	- The project addressed a globally recognized environmental and public health priority—air pollution—through a multi-level (global, regional, national, city) approach. - Interventions were strongly demand-driven and responsive to country and city needs, UNEA mandates, and emerging global agendas. - The project maintained high relevance throughout implementation, including during COVID-19 disruptions.	Highly Satisfactory

⁴⁶ Most criteria will be rated on a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability and Likelihood of Impact are rated, also on a six-point scale, from Highly Likely (HL) down to Highly Unlikely (HU) and Nature of External Context is rated from Highly Favourable (HF) to Highly Unfavourable (HU).

Criterion	Summary assessment	Rating
1. Alignment to UNEP MTS, POW and Strategic Priorities	- Fully aligned with UNEP's mandate on air quality, pollution reduction, and health–environment linkages. - Directly supported UNEA resolutions (e.g., 1/7, 3/8, 6/10) and contributed to priorities reflected in UNEP MTS 2022–2025 and 2026–2029. - Strengthened UNEP's normative, convening, and technical leadership on air quality.	Highly Satisfactory
2. Alignment to UNEP Donor/Partner strategic priorities	- Strong alignment with donor priorities on clean air, climate co-benefits, health, and sustainable cities. - Complemented partner strategies (e.g., WHO, CCAC, UNESCAP, EANET) and leveraged their comparative advantages. - Enabled co-financing, follow-up programmes, and sustained partner engagement beyond the project.	Highly Satisfactory
3. Relevance to global, regional, sub-regional and national environmental priorities	- Addressed transboundary air pollution, urban air quality, SLCPs, and health impacts across diverse regions. - Supported national and city-level priorities through tailored assessments, action plans, and capacity building. - Responded to region-specific challenges (e.g., haze, transport emissions, solid fuel use).	Highly Satisfactory
4. Complementarity with existing interventions/ Coherence	- Built on and reinforced existing initiatives (e.g., CCAC, EANET, APCAP, regional action plans). - Avoided duplication by leveraging partner platforms, datasets, and networks. - Contributed to a coherent global and regional air quality architecture.	Highly Satisfactory
Quality of Project Design	- Broad and comprehensive 'umbrella' project design. - Complex structure based on outputs, loosely defined components, and weak indicator definitions limited clarity, attribution, and evaluability. - Gender and equity considerations were not sufficiently operationalized at design stage.	Satisfactory
Nature of External Context	- COVID-19 pandemic disrupted implementation modalities, travel, and in-country engagement. - Civil unrest case and postponed air sensor deployment (San José & Lima) due to logistics and customs - Despite constraints, adaptive management mitigated major negative impacts.	Moderately Unfavourable
Effectiveness	- The project delivered a broad portfolio of outputs and achieved all planned outcome milestones. - Effectiveness varied across countries and cities depending on capacity, financing, and AQM maturity.	Satisfactory
1. Availability of outputs	- Most outputs were fully or overachieved and widely disseminated to intended users. - The intended beneficiaries were reached and made use of project deliverables (e.g. reports, tools and best practices) to guide and support AQM knowledge exchange, action planning, and policy-making processes. - Some indicators lacked clear verification, requiring triangulation during evaluation.	Satisfactory

Criterion	Summary assessment	Rating
2. Achievement of project outcomes	- Governments and cities adopted or applied policies, plans, standards, and data-driven measures, and knowledge sharing mechanisms and public events results, attain the intermediary statement: <i>A significant increase in actions on air pollution by countries, cities. Stakeholders, including citizens, increasingly aware of risks of air pollution and influence actions towards cleaning the air.</i> - The drivers were in place and assumptions were held. - Depth of implementation varied, with some outcomes remaining at planning or pilot stages.	Satisfactory
3. Likelihood of impact	- Strong evidence of contribution to improved air quality governance, data use, and policy action. - Drivers were in place and assumptions (e.g., finance, and capacity attained) were partially held. - Long-term impact depends on sustained financing, enforcement, and institutional capacity.	Likely
Financial Management		Satisfactory
1. Adherence to UNEP's financial policies and procedures	- No evidence of non-compliance with UNEP financial rules or donor agreements. - Expenditures aligned with approved budgets and activities.	Satisfactory
2. Completeness of project financial information	- Transition from PIMS to IPMR resulted in incomplete historical financial data. - Clear and well documented donor- and grant-based financial accounting. - Limited (e.g., availability and relevance) output- and component-level financial tracking, constraining efficiency analysis.	Moderately Satisfactory
Efficiency	- Cost- and time-efficiency achieved through use of existing data, platforms, and partnerships. - Adaptive management enabled timely delivery despite funding and COVID-related constraints. - Efficiency gains were constrained by fragmented data systems and limited co-financing for scaling, maintenance, and cross-platform integration.	Satisfactory
Monitoring and Reporting		Moderately Unsatisfactory
1. Monitoring of project implementation	- Weak indicator design, inconsistent verification means, and limited disaggregation reduced robustness of results measurement. - Unclear articulation of linkages between outputs across components. - Gender aggregated data was limited recorded, mainly in capacity building activities.	Moderately Unsatisfactory
2. Project reporting	- Regular six-monthly reporting through PIMS captured progress and lessons learned. - Reporting quality constrained by monitoring limitations and data gaps (e.g. by sub-projects/components).	Moderately Satisfactory
Sustainability		Moderately Likely

Criterion	Summary assessment	Rating
1. Socio-political sustainability	- Strong political momentum sustained through UNEA resolutions, regional action plans, and partner commitments. - Continued global and regional leadership by UNEP and partners.	Highly Likely
2. Financial sustainability	- Growing recognition of economic benefits of clean air and increasing donor engagement. - Long-term sustainability depends on domestic resource mobilisation and predictable financing.	Moderately Likely
3. Institutional sustainability	- Capacities, platforms, and networks remain functional and in use, and further developed. - High staff turnover and resource constraints pose ongoing risks.	Likely
Factors Affecting Performance		Satisfactory
1. Quality of project management and supervision	- Adaptive leadership and coordination by UNEP PHU enabled responsiveness to emerging needs. - Absence of a formal PSC was mitigated by strong divisional oversight.	Satisfactory
1.1 UNEP/Implementing Agency:	- <i>UNEP effectively convened partners, provided technical leadership, and ensured coherence.</i> - <i>Workload and staffing pressures were evident.</i>	Satisfactory
1.2 Partners/Executing Agency:	- <i>Partners provided high-quality technical expertise and delivery.</i> - <i>Some partners had limited visibility of the 'umbrella' project structure and their contribution to specific output.</i>	Satisfactory
2. Stakeholders' participation and cooperation	- Broad engagement across governments, institutions, and regions. - Strong buy-in at regional and city levels. - No formal kick-off meeting to communicate the overall project structure, results framework, and sub-project linkages to partners. Consideration of women was reflected mainly in capacity-building activities.	Satisfactory
3. Responsiveness to human rights and gender equality	- Health and equity framing was strong. - Gender mainstreaming and disaggregated monitoring were not systematically designed and operated.	Moderately Satisfactory
4. Environmental and social safeguards	- No significant negative environmental or social impacts identified. - Interventions supported positive environmental and health outcomes	Satisfactory
5. Country ownership and driven-ness	- Strong ownership in demand-driven countries and cities. - Variation in national capacity affected pace of implementation.	Satisfactory
6. Communication and public awareness	- High visibility through global campaigns and flagship reports. - Effective awareness-raising, attribute to direct behavioural change. - Advance communication function in project cycle was needed.	Satisfactory

Criterion	Summary assessment	Rating
Overall Project Performance Rating	- The project delivered meaningful, multi-level contributions to air quality governance and capacity. - Strong relevance, partnerships, and outputs offset weaknesses in monitoring design and financial traceability. - Overall performance reflects solid achievements with clear lessons for future programme design.	Satisfactory

5.2 Lessons Learned

Lesson Learned #1:	Strategic partnerships enable scaling and resilience in complex, multi-country air quality programmes
Context/comment:	UNEA resolutions [3/8 (2017), 6/10 (2024)] have consistently emphasised the importance of regional cooperation as an effective way to address air pollution. This project demonstrated and reinforced that leveraging long-standing partnerships with regional bodies (e.g. UNESCAP, EANET, APCAP), technical institutions (e.g. SEI, Clean Air Asia, CAI, FMI, WRI), and national authorities significantly enhanced delivery capacity, credibility, and reach. These partnerships allowed UNEP to build on existing datasets, platforms, and institutional mandates, reducing duplication and enabling rapid adaptation during disruptions such as COVID-19. However, the ‘umbrella’ project structure was not always clearly understood by partners, limiting visibility of synergies across sub-projects. This highlights the importance of coupling strong partnerships with clear articulation of project architecture and shared outcome logic. This lesson is relevant for future UNEP ‘umbrella’ or multi-donor programmes addressing transboundary or systemic environmental issues, where scale and diversity of actors are unavoidable. Early clarification of partnership roles within an overarching results framework can maximise both efficiency and coherence.
Cross-reference(s) to relevant paragraphs	Paras. 56–61, 78–81, 141–143, 151–153, 155–157, 167–169

Lesson Learned #2:	Integrating air quality objectives with climate finance frameworks strengthens sustainability and scalability
Context/comment:	The project showed that positioning air quality management as a “triple win” for health, climate, and economic outcomes helped attract political attention and align with broader climate and green finance agendas. Evidence on the high cost of inaction and co-benefits of reducing short-lived climate pollutants (SLCPs) supported integration with climate strategies and financing instruments. However, most financing mobilisation remained external or programme-based, and systematic linkage to climate finance mechanisms (e.g. IFIs, national green finance systems) was not fully operationalised during implementation. Future air quality initiatives can increase long-term financial sustainability by explicitly embedding AQM measures within climate

	mitigation, NDCs, and green investment pipelines from the outset, enabling access to climate funds and blended finance.
Cross-reference(s) to relevant paragraphs	Paras. 68–69, 78–81, 157–161, 165–166, 161–163

5.3 Recommendations

Recommendation #1	Improve results-based monitoring, indicator clarity, and strategic knowledge management systems across ‘umbrella’ air quality programmes UNEP project should revise and operationalise a results-based monitoring and knowledge management framework for ‘umbrella’ air quality projects to enable consistent outcome tracking, strategic coordination, cross-learning and institutional learning across sub-projects and partners, including: i) clearer and more measurable indicators at output and outcome levels, ii) defined means of verification and data sources, and iii) a structured digital knowledge management system linking activities, outputs, and outcomes. iv) light-touch mechanisms for ‘umbrella’ project-level coordination and learning to capture synergies and communicate how diverse activities collectively contribute to outcomes. The framework should be piloted in at least one new or ongoing UNEP air quality programme and applied consistently across sub-projects/components and partners.
Challenge/problem to be addressed by the recommendation:	The evaluation found that weaknesses in the original project design and monitoring framework—such as unclear indicator definitions, limited verification methods, inconsistent data disaggregation, and fragmented documentation systems—constrained the ability to fully demonstrate results, attribution, and learning. In addition, the ‘umbrella’ project structure lacked systematic mechanisms to capture synergies, consolidate learning, and communicate how diverse activities and outputs collectively contributed to higher-level outcomes, reducing strategic oversight visibility of synergies, cross-learning, and reuse of outputs across regions and partners.
Cross-reference(s) to relevant paragraphs	Paras. 95–99, 106–108, 153–155, 159–161, 169–170
Priority Level:	High
Type of Recommendation	Project Level
Responsibility:	UNEP Industry and Economy Division (Pollution and Health Unit), in coordination with Corporate PIMS/IPMR teams
Proposed implementation time-frame:	By middle of 2026

Recommendation #2:	Strengthen integration and interoperability of air quality data platforms UNEP, should develop and operationalise a lightweight interoperability framework (technical guidance + minimum data standards) that links existing national, regional, and global air quality platforms (e.g. GEMS/Air, EANET, APCAP, AQCA, national portals), enabling shared metadata, harmonised indicators, and cross-platform data access for policymakers and practitioners.
Challenge/problem to be addressed by the recommendation:	Fragmented air quality data platforms reduced efficiency, limited data comparability, and increased long-term maintenance costs, constraining the full use of monitoring and assessment outputs and limiting their policy relevance.
Cross-reference(s) to relevant paragraphs	Paras. 70, 91, 114, 143–146, 166
Priority Level:	High
Type of Recommendation	Project-Level
Responsibility:	UNEP Industry and Economy Division (Air Quality and Health Unit), in collaboration with GEMS/Air and Regional Offices
Proposed implementation time-frame:	by end-2026

Recommendation #3	Strengthen links between air quality management and climate finance mechanisms UNEP should develop and pilot a clean air–climate finance guidance note and advisory support package to help at least 5 countries or cities integrate air quality measures (especially SLCP mitigation) into NDCs, national investment plans, or proposals to climate and green finance instruments (e.g. GCF, MDBs, national green banks).
Challenge/problem to be addressed by the recommendation:	Although the project demonstrated strong economic and climate co-benefits of air quality action, systematic access to climate and green finance for scaling implementation remained limited.
Cross-reference(s) to relevant paragraphs	Paras. 161–162, 166–167, 151–153
Priority Level:	Medium
Type of Recommendation	Project-Level
Responsibility:	UNEP Industry and Economy Division, UNEP FI, Climate Division
Proposed implementation time-frame:	2025–2026

Recommendation #4:	Strengthen UNEP internal human resource capacity and leadership on air quality management in line with UNEP MTS 2026–2029
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	In line with the MTS 2026–2029, UNEP should strengthen its internal human resource capacity on air quality management to support strategic oversight, science–policy integration, and scaled delivery of air quality solutions. This should include: i) reinforcing senior leadership on air quality through the designation or consolidation of a senior-level coordination function (P5/D1 or equivalent) responsible for strategic oversight, science–policy integration, and inter-divisional coordination on air quality, including follow-up to UNEA resolutions (notably UNEA 6/10); and ii) expanding in-house technical expertise at headquarters and regional levels (e.g. air quality science, modelling, data systems, health linkages, and policy analysis) to support UNEP’s normative role, quality assurance, and scaled delivery of air quality solutions to governments.
Challenge/problem to be addressed by the recommendation:	The evaluation found that UNEP’s growing air quality mandate—reflected in UNEA resolutions, global assessments, regional platforms, and increased country demand—has outpaced available internal technical and leadership capacity. While UNEP effectively leveraged partnerships, limited in-house staffing constrains its ability to consistently deliver science-based policy support, integrated air–climate solutions, and sustained capacity development, as envisioned under the MTS 2026–2029 priority on improving air quality and reducing pollution.
Cross-reference(s) to relevant paragraphs	Paras. 138–142, 151–153, 177–179
Priority Level:	High
Type of Recommendation	Project-Level
Responsibility:	UNEP Senior Management; Industry and Economy Division; Corporate Services Division
Proposed implementation time-frame:	2025–2026

Recommendation #5:	Systematically operationalise human rights and gender equality in air quality interventions UNEP project should ensure that all new air quality projects approved from 2026 onward include a mandatory gender and human rights operational package, consisting of: i) at least one gender- or equity-specific indicator; ii) sex- and age-disaggregated participation and outcome data; and iii) support for the development of methodologies and technical capacity to analyse differentiated exposure or health impacts, including strengthening internal and partner capacities and enabling the progressive integration of such analyses into UNEP monitoring and reporting systems.
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Challenge/problem to be addressed by the recommendation:	While health and equity were implicit objectives, gender and human rights considerations were not systematically designed, monitored, or evidenced, limiting accountability and learning.
Cross-reference(s) to relevant paragraphs	Paras. 136–138, 162–163, 152–155, 169–170
Priority Level:	High
Type of Recommendation	Project Level
Responsibility:	UNEP Programme Management Officers, Industry and Economy Division, in coordination with UNEP Gender and Safeguards Units
Proposed implementation time-frame:	From 2026 project cycle onwards

Recommendation #6:	The Mid-Term Review (MTR) of the successor project “UNEP-wide Project on Improving Air Quality (2023-05-15–2026-12-31), SMA ID 156083” should consider, inter alia, the extent to which the recommendations from this Terminal Evaluation have been implemented and integrated into project design, implementation, and monitoring practices.
Challenge/problem to be addressed by the recommendation:	Interviews and feedback during the review of draft Terminal Evaluation Report of this project indicated that several recommendations have already been reflected in the design and early implementation of the successor project. Therefore, after more than two years of implementation, it is important for the Mid-Term Review to assess and provide evidence of how these improvements have been operationalised and to what extent they have strengthened project design, monitoring, and implementation practices.
Cross-reference(s) to relevant paragraphs	Interviews and feedback during the review of draft Terminal Evaluation Report of this project
Priority Level:	High
Type of Recommendation	Project Level
Responsibility:	Project Team of successor project
Proposed implementation time-frame:	MTR of successor project “UNEP-wide Project on Improving Air Quality

ANNEX I. RESPONSE TO STAKEHOLDER COMMENTS

Only include this annex if there were any stakeholder comments that were not (fully) accepted by the consultant. If all comments were accepted, delete this annex.

Response to stakeholder comments received but not (fully) accepted by the evaluator(s), where appropriate

Page Ref	Stakeholder comment	Evaluator(s) Response	UNEP Evaluation Office Response
	Xxx	Xxx	

ANNEX II. EVALUATION FRAMEWORK

NO	GUIDING (SUB-)QUESTIONS Per EVALUATION CRITERIA		METHOD (VERIFICATION WITH INDICATORS)	SOURCES OF INFORMATION
A. Strategic Relevance				
i	Alignment to the UNEP’s Medium-Term Strategy (MTS), Programme of Work (POW) and Strategic Priorities	- Is the project in line with UNEP’s mandate and how? - Is the project aligned with UNEP’s MTS and POW? - Is the project in line with the Bali Strategic Plan for Technology Support and Capacity Building and South-South Cooperation?	- Degree of alignment with UNEP MTS and POW - Degree of alignment with UNEP Bali Strategic Plan for Technology Support and Capacity Building (BSP) and South-South Cooperation (S-SC)	- UNEP publications (MTS, POW) - ProDoc - PIMS/IPMR reports/progress reports - Interviews with UNEP project coordinators - Interviews with Implementing Partners staff - UNEP publications (including BSP, S-SC)
ii	Alignment to Donor/Partner Strategic Priorities (Government of Sweden, United States, Japan, Republic of Korea, Norway, EANET member countries, etc as project donors; UN agencies, partners).	- Is the project in line with Donor/Partner Strategic priorities, and how?	- Degree of alignment with other UN/donor strategic policies	- ProDoc - PIMS/IPMR reports/progress reports - Interviews with UNEP project coordinators - Interviews with Implementing Partners staff - Interviews with donors
iii	Relevance to Global, Regional, Sub-regional and National/city Environmental Priorities	- Does the project respond to the stated environmental concerns and needs of the countries/sub- regions/regions, and align with their priorities and strategies? - To what extent are the project intervention areas still valid for all the beneficiary countries?	- Degree of alignment with: • SDGs and Agenda 2030 • UNDAF • National and (sub) regional plans, strategies, policies and agreements	- ProDoc - PIMS/IPMR reports/progress reports - Regional strategies and agreements - Interviews with UNEP project coordinators - Interviews with Implementing Partners staff - Interviews with government representatives, as necessary and feasible - Interviews with specific (scientific/technical) multi-groups advisory committee members
iv	Complementarity with Relevant Existing Interventions/Coherence	- To what extent did the project, at design and/or mobilization phase, take account of ongoing and/or planned initiatives (under the same sub-programme, other UNEP sub-	- Degree of potential synergies identified - Absence of duplication of efforts - Potential duplications identified at design stage	- Pro Doc - PIMS/IPMR reports/progress reports - Interviews with UNEP project coordinators - Interviews with Implementing Partners staff

NO	GUIDING (SUB-)QUESTIONS Per EVALUATION CRITERIA		METHOD (VERIFICATION WITH INDICATORS)	SOURCES OF INFORMATION
		programmes, or being implemented by other agencies)? - To what extent did the project team, in collaboration with Regional Offices and Sub-Programme Coordinators, make efforts to ensure that the project is complementary to other UNEP and UN interventions (UNDAF or One UN programming), and optimize any synergies?	- Degree of identified complementarities with other projects	- Interview with UNEP's Sub-programme coordinator on Air Pollution - Interview with UNEP ROs - Interviews with 1-2 selected government representatives, as feasible - Interviews with project managers of other UNEP Divisions, if possible
B. Quality of Project Design				
i	Relevance and logic of project Objectives, Activities, Outputs and Outcomes	- Templated questions (Project Quality Design) are provided by the UNEP Evaluation Office. - To what extent is the monitoring plan designed/adjusted to track progress against SMART indicators? - Are responsible persons/organizations specified for? - To what extent are the allocated funds adequate for monitoring purposes, and for the mid-term and terminal evaluations?	- Result of Overall Project Design Quality rating - Quality of monitoring plan - Number and quality of monitoring documents	- ProDoc, -Project Review Committee review sheet and responses to the review - Interviews with UNEP managers
C. Nature of External Context				
i	Aspects related to external operating context (considering the prevalence of conflict, natural disasters and political upheaval).	- Has the project faced an unusually challenging operational environment that negatively affected project performance, such as: - Conflicts or security issues? - Government instability? - Risks of natural disasters?	- Number of Project delays / extensions, ProDoc / log frame revisions and budget revisions	- ProDoc - Project progress reports - PIMS/IPMR reports - Project Revisions - Interviews with UNEP project managers - Interviews with Implementing Partners staff - Interviews with ROs staff - Interviews with government representatives, as necessary and feasible

NO	GUIDING (SUB-)QUESTIONS Per EVALUATION CRITERIA		METHOD (VERIFICATION WITH INDICATORS)	SOURCES OF INFORMATION
				- Internet research
D. Effectiveness				
i	Availability of Outputs Assessment in terms of quantity and quality, usefulness and timeliness of delivery	- Were Outputs and milestones delivered on time and as planned? If not, what were the reasons of delay/changes? - What is the quality of these Outputs? - To what extent do the Outputs contribute to their planned Outcomes? - How useful, relevant and appropriate did beneficiaries find the Outputs produced by the project? - Which factors contributed to the achievement of Outputs (and/or what were the reasons Outputs were not achieved)? Were the outputs attributable to the project intervention rather than to any external factors?	- Concrete examples of Outputs being used by end users - Approved project extensions / budget revisions - Involvement of stakeholders in the production of Outputs	- ProDoc - Project progress reports - PIMS/IPMR reports - Financial reports - Interviews with UNEP project managers - Interviews with Implementing Partners staff - Interviews with ROs staff - Interviews with government/CSOs/industries representatives, as necessary and feasible
ii	Achievement of Outcome Assessment of performance against the outcome as defined in the reconstructed Theory of Change (TOC), and verify the contribution of UNEP's intervention and the outcome	- What Outcome (as per the reconstructed TOC) have been achieved? - Are the Outcome a result of project intervention?	- Number and quality of national air pollution management strategies and their implementations - Number of downloads/visits of air quality assessment and documents/reports - Evidence of using available knowledge products, tools, assessments for decision making - Number and quality of training courses developed and offered within the project - Data showing the changes in Air Quality	- ProDoc - Project progress / PIMS/IPMR reports - Financial reports - Interviews with UNEP project managers - Interviews with Implementing Partners staff - Interviews with ROs staff - Interviews with specific (scientific/technical) multi-groups advisory committee members - Interviews with government/CSOs/industries representatives, as necessary and feasible - Interviews with ROs staff and UNEP sub-programme coordinator for Air Pollution - Site visit to the beneficiaries (national / local institutions, citizens, grant receivers)

NO	GUIDING (SUB-)QUESTIONS Per EVALUATION CRITERIA		METHOD (VERIFICATION WITH INDICATORS)	SOURCES OF INFORMATION
				-Database on Air Quality and linked health and environment facts - Survey of the beneficiaries, as necessary and feasible
iii	Likelihood of Impact Assessment of likelihood of achieving the planned (long term) impact and project objectives and their linkages to the project interventions and the contribution of the projects to high-level changes represented by inter alia, the UNEP's Expected Accomplishments, SDGs.	- What is the likelihood of expected positive impacts to be realized? - To what extent have any possible negative effects been identified in the project as risks or as part of the analysis of Environmental, Social and Economic Safeguards? - To what extent have there been any scaling up and/or replication of project results? - To what extent has the project played a catalytic role and/or promoted the scaling up or replication of project results? - Is the project likely to contribute to the long-lasting and broad-based changes represented by the SDGs, and/or the intermediate- level results reflected in UNEP's Expected Accomplishments and the strategic priorities of funding partner(s)?	- Number of new/updated Air Pollution management initiatives (policies, strategies, and management frameworks) at national and/or regional/international level	- Reconstructed TOC at Inception and at Evaluation - ProDoc - Project progress reports - PIMS/IPMR reports - Financial reports - Interviews with UNEP project managers - Interviews with Implementing Partners staff - Interviews with ROs staff and UNEP sub-programme coordinator for Air Pollution - Interviews with government/ CSOs/industries representatives, as necessary and feasible -Site visit to the beneficiaries (national / local institutions, citizens, grant receivers) - Survey of the beneficiaries, as necessary and feasible
E. Financial Management				
i	Adherence to UNEP's financial policies and procedures	- Is the project being implemented in compliance with UN financial management standards and procedures? - Was the fund transaction process undertaken and completed in a timely and consistent manner to meet the activity needs?	- Alignment of financial reporting with UNEP's format - Alignment of expenditures during project implementation with approved budget - Number of activity delays due to fund availability	- Project budget - Financial reports, audit reports - Interviews with UNEP project managers - Interviews with UNEP Fund Management Officer - Interviews with project partners that received financial support (Implementing Partners etc.)
ii	Completeness of financial information	- Has the financial documentation been accurate and complete?	- Alignment of financial reporting with UNEP's format	- Project budget - Financial reports, if any

NO	GUIDING (SUB-)QUESTIONS Per EVALUATION CRITERIA		METHOD (VERIFICATION WITH INDICATORS)	SOURCES OF INFORMATION
		- To what extent is the project's expenditure in line with the corresponding approved budget? - What changes, if any, have been made to the project's budget and why?	- Alignment of expenditures during project implementation with approved budget	- Interviews with UNEP project managers - Interviews with UNEP Fund Management Officer - Interviews with project partners/consultants that received financial support via SSFA engagement
iii	Communication between financial and project management staff	- To what extent did the quality of communication between project management and financial management staff affect project efficiency?	- Alignment of financial reporting with UNEP's format - Alignment of expenditures during project implementation with approved budget	- Project budget - Financial reports, if any - Interviews with UNEP project managers - Interviews with UNEP Fund Management Officer - Interviews with project partners that received financial support (Implementing Partners etc.)
F. Efficiency				
i	Cost-effectiveness and timeliness of project execution	- Are any cost or time-saving measures (being) put in place to maximise results within the secured budget and agreed project timeframe? - Is the project making use of / building upon pre-existing institutions, agreements and partnerships (specifically also other regional partners and UN agencies), data sources, etc. to increase project efficiency? How? - What factors have caused delays (if any) and have affected/are affecting project execution, costs, effectiveness and impact? How? - To what extent (if any) project extension could have been avoided through stronger project management? How? - What is the role of the project's governance structure and management approach on its efficiency?	- Number of project extensions, budget adjustments, revisions - Number of measures to mitigate delays - Timeliness of report submission	- ProDoc - Project progress reports - Steering Committee meetings - PIMS/IPMR reports - Financial reports - Interviews with UNEP project managers - Interviews with Implementing Partners staff - Interviews with ROs staff - Interviews with government/ CSOs/industries representatives, as necessary and feasible

NO	GUIDING (SUB-)QUESTIONS Per EVALUATION CRITERIA		METHOD (VERIFICATION WITH INDICATORS)	SOURCES OF INFORMATION
		- To what extent, does the UNEP's transition to MTS 2022-2025 affected the project implementation, both positively and negatively?		
G. Monitoring and Reporting				
i	Monitoring of project implementation	- To what extent is the monitoring plan operational? - Are staffing arrangements at UNEP Knowledge and Risk Unit sufficient to carry out adequate monitoring of project implementation? - To what extent does the monitoring system facilitate the timely tracking of results and progress towards project Objectives? - To what extent was/is the information, generated by the monitoring system, used to adapt and improve project execution, achievement of Outcomes and ensure sustainability? - To what extent are the allocated funds for monitoring actually used to support monitoring? - Did the project monitoring collect gender disaggregated data as appropriate?	- Number and quality of monitoring documents - Existence of mid-term review report of sub-project - Number of staff at UNEP involved in project monitoring	- ProDoc - Project budget - PIMS/IPMR reports - Financial reports - Monitoring reports - Interviews with UNEP project managers - Interview with UNEP Sub-Programme Coordinator for Chemicals, Waste and Air Quality - Interview with Head of UNEP Economy Division
ii	Project reporting	- Have the 6-monthly status reports been uploaded regularly in the Project Information Management System (PIMS/IPMR)? - To what extent have other UNEP and donor reporting requirements been fulfilled? - To what extent the project reports have been carried out with respect to the intervention effects on disaggregated stakeholder groups?	- Number and quality of reports delivered in line with reporting requirements - Number and quality of approved reports - Number and quality of reports delivered to the donors	- ProDoc - PIMS/IPMR reports - Project budget - Financial reports - Monitoring reports - Interviews with UNEP project managers
H. Sustainability				

NO	GUIDING (SUB-)QUESTIONS Per EVALUATION CRITERIA		METHOD (VERIFICATION WITH INDICATORS)	SOURCES OF INFORMATION
i	Socio-political sustainability	- What is the level of ownership, interest and commitment among governments and among other main stakeholders? - What is the likelihood that the project achievements will be taken forward at the national and/or regional/international level, by the government (including allocation of budgets) and by the main stakeholders (including industries and CSOs) in a long term? - What is the likelihood that capacity development efforts continue? - Has increased capacity in the country been sustained?	- Number of follow-up Air Pollution management initiatives and planning by governments (including associated budgets) and by other stakeholders (e.g. CSOs) - Examples of potential effects built on capacities from the project interventions	- ProDoc - Project progress reports - PIMS/IPMR reports - Interviews with UNEP project managers - Interviews with government/ CSOs/industries representatives, as necessary and feasible - Interviews with Implementing Partners staff - Interviews with ROs staff - Interviews with other stakeholders
ii	Financial sustainability	- To what extent are project Outcomes dependent on future funding for the benefits they bring to be sustained? - Is there any government funding secured to fund future Chemicals, Waste and Air Quality management activities? - What efforts are being made to secure funding for future complementary activities? - Have sustainable funding mechanisms been established to fund future Air Pollution management at the national and/or regional/international levels?	- Number of follow-up initiatives (planned or being planned) - Amount of funding available	- ProDoc - Project progress reports - PIMS/IPMR reports - Interviews with UNEP project managers - Interviews with government/ CSOs/industries representatives, as necessary - Interviews with Implementing Partners staff - Interviews with ROs staff - Interviews with other stakeholders
iii	Institutional sustainability	- To what extent are institutional frameworks, policies, and legal and accountability frameworks in place and robust enough to support the sustainability of project Outcomes?	- Number and quality of policies and legal and accountability frameworks - Number of follow-up activities initiated by UNEP/governments/CSOs/industries	- ProDoc - Project progress reports - PIMS/IPMR reports - Interviews with UNEP project managers - Interviews with government/ CSOs/industries representatives, as necessary - Interviews with Implementing Partners staff

NO	GUIDING (SUB-)QUESTIONS Per EVALUATION CRITERIA		METHOD (VERIFICATION WITH INDICATORS)	SOURCES OF INFORMATION
				- Interviews with ROs staff - Interviews with other stakeholders - Site visit to the beneficiaries (national / local institutions, citizens, grant receivers) - Survey of the beneficiaries, as necessary and feasible
I. Factors and Processes Affecting Project Performance and cross cutting issues				
i	Quality of Project Management and Supervision	- Was project management by UNEP proactive and responding timely and adequacy to any issues encountered within the project? - Are staffing and financing arrangements at UNEP sufficient to drive implementation? - How were the project relevance maintained within changing external and strategic contexts? - What was the nature of communication and collaboration with stakeholders? - What was the nature of communication and collaboration with UNEP staff and the UNEP coordinating staff? - How were risks managed? Did this require use of problem-solving and/or project adaptation? How?	- Number of issues complicating sound project implementation solved timely (as opposed to unsolved issues) - Staffing at UNEP - (Amount of) evidence of adaptive management being applied - Evidence of adaptive management (if any)	- ProDoc - Project progress reports - PIMS/IPMR reports - Interviews with UNEP project managers - Interview with UNEP Sub-Programme Coordinator for Chemicals, Waste and Air Quality - Interview with Head of UNEP Economy Division - Interviews with Implementing Partners staff - Interviews with ROs staff - Interviews with government/ CSOs/industries representatives, as necessary and feasible
ii	Stakeholder Participation and Cooperation	- Were all important project stakeholders properly identified at project design and duly involved in project implementation? - What consultation and communication mechanisms were put in place to ensure an active stakeholder engagement and ownership? Are these effective? - What was the level of support provided to maximise collaboration and coherence between stakeholders, including sharing plans, pooling resources and exchanging learning and expertise?	- Number of stakeholders identified and actively involved in project implementation - Number of stakeholders satisfied with the stakeholder participation - Number of staff at UNEP responsible for stakeholder management/ relationship management with partner organizations	- ProDoc - Project progress reports - PIMS/IPMR reports - Interviews with UNEP project managers - Interviews with Implementing Partners staff - Interviews with ROs staff - Interviews with staff of donors

NO	GUIDING (SUB-)QUESTIONS Per EVALUATION CRITERIA		METHOD (VERIFICATION WITH INDICATORS)	SOURCES OF INFORMATION
		- What measures were taken to ensure inclusion and participation of all differentiated groups, including gender groups? - Was a coordination mechanism in place for adequate stakeholder management /relationship management with partner organizations to ensure good cooperation for project implementation?		- Interviews with government/ CSOs/industries representatives, as necessary and feasible - Interviews with other stakeholders, as necessary and feasible
iii	Responsiveness to Human Rights and Gender Equity	- To what extent does the project intervention adhere to UNEPs policy and strategy for gender and human rights? - To what extent did project implementation and monitoring take into consideration: • Possible inequalities (especially gender-related) • Specific vulnerabilities of disadvantaged groups (especially women, youth, children) to environmental degradation or disasters • The role of disadvantaged groups (especially gender-related) in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation	- Number of gender and human rights stakeholders identified and actively involved in project implementation - Number of stakeholders satisfied with the stakeholder participation realized - Evidence that sensitivity in gender has been observed in project design, implementation and monitoring and evaluation activities, including gender distribution in participation in project activities and events	* UN Common Understanding on the Human Rights Based Approach (HRBA) * UN Declaration on the Rights of Indigenous People * UNEP's Policy and Strategy for Gender Equality and the Environment - ProDoc - Project progress reports - Steering Committee meeting minutes and/or Workshop reports - PIMS/IPMR reports - Interviews with UNEP project managers - Interviews with Implementing Partners staff - Interviews with ROs staff
iv	Environmental and Social Safeguards	- To what extent were UNEP's requirements, with respect to environmental and social safeguards, met (through the process of environmental and social screening at project approval stage, risk assessment and management) of potential environmental and social risks and impacts associated with project and programme activities? - To what extent are the following activities being carried out: • Review of risk ratings on a regular basis	- Frequency of review of risk ratings - Number of monitoring reports that include monitoring of safeguard issues - Evidence of adequate responses to safeguard issues - Evidence of adaptation measures - Degree of the mitigation effectiveness	- ProDoc - Project progress reports - PIMS/IPMR reports - Interviews with UNEP project managers - Interviews with Implementing Partners staff - Interviews with ROs staff - Interviews with other stakeholders, as necessary and feasible

NO	GUIDING (SUB-)QUESTIONS Per EVALUATION CRITERIA		METHOD (VERIFICATION WITH INDICATORS)	SOURCES OF INFORMATION
		- Monitoring of project implementation for possible safeguard issues - Providing responses to safeguard issues - To what extent did the project management minimise UNEP's environmental footprint? What measures, if any, were taken? - What changes were made to adapt to the effects of COVID-19, and how might any changes affect the project's performance?		
v	Country Ownership and Driven-ness	- To what extent was/is the government / public sector qualitatively involved with the project? (in respect to the need to embed the Outputs and Outcomes of project work in their respective institutions) - How did this contribute to embed changes in their respective institutions and offices? - To what extent do these representatives/agencies consider the needs or interest of all gendered and marginalised groups?	- Number of project Outputs and Outcomes entrenched in government /public sector institutions - Degree to which project results have been adopted and championed nationally and/or at city level - Degree to which countries have willingly resourced the project and its Outcomes and indicated on-going budgetary funding and capacity for Air Pollution management	- ProDoc - Project progress reports - PIMS/IPMR reports - Interviews with government representatives, as necessary and feasible - Interviews with other stakeholders (including private sector), as necessary and feasible - Interviews with UNEP project managers - Interviews with Implementing Partners staff - Interviews with ROs staff - Site visit to the beneficiaries (national / local institutions, citizens, grant receivers) - Survey of the beneficiaries, as necessary and feasible
vi	Communication and Public Awareness <i>Link to sustainability</i>	- Does the project have a communication strategy which works as intended? - How are learning and experience sharing communicated between project partners and interested groups, as well as the decision makers? - Which public awareness activities were undertaken during so far?	- Operative communication platforms - Number of published articles brochures, other communication material, etc. - Degree of awareness of stakeholders on prevention and reduction health risks from air pollution	- ProDoc - Project progress reports - PIMS/IPMR reports - Interviews with government representatives, as necessary and feasible - Interviews with other stakeholders (including private sector), as necessary and feasible

NO	GUIDING (SUB-)QUESTIONS Per EVALUATION CRITERIA		METHOD (VERIFICATION WITH INDICATORS)	SOURCES OF INFORMATION
		- To what extent did they influence attitudes or shape behaviour among industries and civil society at large? How? - To what extent were existing communication channels and networks used effectively, including meeting the differentiated needs of gendered or marginalized groups? And whether any feedback channels were established?		- Interviews with UNEP project managers - Interviews with Implementing Partners staff - Interviews with ROs staff
J. Strategic Questions				
a)	Factors Affecting Performance <i>Link to Stakeholder Participation and Cooperation</i> And <i>Responsiveness to Human Rights and Gender Equity</i> And <i>Environmental and Social Safeguards</i>	In what ways, and to what extent, have the needs and interests of differentiated groups been considered in the implementation and monitoring of the project?	- Disaggregation of beneficiaries by gender, age, socioeconomic status, disability, and other relevant criteria in monitoring data. - Number and type of activities or outputs specifically designed to address the needs of women, children, vulnerable and marginalized groups (e.g. awareness campaigns, health-focused interventions). - Inclusion of gender and social inclusion (GESI) considerations in project design documents, logframe indicators, and reporting templates - Extent of participation of differentiated groups in consultations, training, and decision-making processes. - Availability of targeted indicators in the M&E framework to track the impact on different groups. - Grievance mechanisms or feedback channels accessible and responsive to marginalized populations. - Adaptation of communication materials to reach underrepresented or disadvantaged groups (e.g., in local languages, with accessible formats).	- ProDoc, results framework, and M&E plans - Project progress/monitoring reports - PIMS/IPMR reports, with disaggregated data - Records of stakeholder consultations and meeting participant lists - Training and outreach materials tailored to specific groups - Interviews with project staff and representatives of affected groups - Feedback or grievance mechanism records - Mid-term review report commenting on inclusiveness - Gender and safeguards self-assessment tools or evaluations

NO	GUIDING (SUB-)QUESTIONS Per EVALUATION CRITERIA		METHOD (VERIFICATION WITH INDICATORS)	SOURCES OF INFORMATION
			- Evidence of course correction or adaptation of implementation based on feedback from marginalized groups.	
b)	Sustainability <i>Link to Financial Sustainability</i>	What innovative financing mechanisms can be explored to sustain air quality initiatives beyond the project's lifecycle?	- Number and type of financing mechanisms identified or piloted during the project (e.g., public-private partnerships, green bonds, climate finance, carbon markets, results-based financing). - Inclusion of financial sustainability strategies in project plans, exit strategies, or national air quality frameworks. - Evidence of engagement with financing institutions (e.g., development banks, private investors, government funds). - Interest or commitments from governments or private sector to support continued air quality actions post-project. - Identification of potential financing gaps and opportunities in project reports or stakeholder consultations. - Level of stakeholder awareness or capacity to access or mobilize innovative financing options for air quality.	- Project documents and exit strategies referencing sustainability or financing - Reports or studies on air quality financing commissioned by the project - Records of engagement with financial institutions, government ministries, or donors - Interviews with project partners, national governments, or UNEP staff - Case studies or pilot initiatives showing financing models - National policies or budget allocations post-project that reflect sustained investment - Workshop or stakeholder meeting reports discussing funding mechanisms
c)	Effectiveness <i>Link to Achievement of Outcomes</i>	How can the project's data and findings be leveraged to influence policy changes at the national regional and global levels?	- Evidence of uptake of project findings in national, regional, or global policy documents (e.g., strategies, plans, regulations). - Number of countries or cities referencing project data or outputs in official air quality action plans or reports. - Engagement of policymakers and government institutions in project	- National and city-level air quality policy documents and strategic plans - Meeting reports, policy briefings, and government minutes citing project data - Project dissemination records and workshop participant lists - References to project publications in policy or scientific documents - Interviews with government officials and institutional partners

NO	GUIDING (SUB-)QUESTIONS Per EVALUATION CRITERIA		METHOD (VERIFICATION WITH INDICATORS)	SOURCES OF INFORMATION
			- activities (e.g., workshops, briefings, technical consultations). - Citations of project assessments in peer-reviewed or governmental reports and publications. - Presence of project findings in regional or global environmental policy discussions (e.g., UNEA, CCAC, EANET). - Policy briefs or position papers developed based on project data and shared with decision-makers. - Feedback from stakeholders indicating increased awareness or influence of project data on policy decisions. - Integration of project tools, methodologies, or indicators into national monitoring or planning systems.	- UNEP and partner organization reports on advocacy and policy engagement - Media coverage or public statements by policymakers referencing project work
d)	Project design Sustainability <i>Linked to Socio-political Sustainability, Financial Sustainability, and Sustainability of the Institutional Framework</i>	How can the project's successes and innovative approaches be scaled up and replicated in other regions facing similar air quality challenges?	- Documented cases of replication of project methodologies, tools, or strategies in other countries or regions. - Demand from other countries or cities to adopt project-supported solutions (e.g., technical assistance requests, expressions of interest). - Inclusion of project models or innovations in regional or global guidance documents or frameworks (e.g., WHO, UNEA, CCAC). - Capacity-building activities targeting new regions or stakeholders for scale-up purposes. - Number of knowledge products and toolkits adapted or translated for broader use.	- ProDoc - Project progress reports - PIMS/IPMR reports - Interviews with UNEP project managers - Interviews with Implementing Partners staff - Interviews with ROs staff - Project reports on replication, knowledge transfer, or outreach activities - Official requests or MoUs from new countries or cities - Regional strategy documents referencing project tools or outputs - Training reports and participant feedback from scale-up workshops

NO	GUIDING (SUB-)QUESTIONS Per EVALUATION CRITERIA		METHOD (VERIFICATION WITH INDICATORS)	SOURCES OF INFORMATION
			- Institutional partnerships formed to facilitate replication or south-south learning. - Budget allocations or co-financing from governments or donors to replicate successful components. - Mentions of project approaches in international fora or networks (e.g., regional working groups, air quality summits).	- Translated materials, replication toolkits, or adapted guidance - Interview data from new stakeholders applying project lessons - Donor or government co-financing agreements or plans - Communications or social media showing interest in scaling the project
e)	Factors Affecting Performance <i>Linked to Quality of Project Management and Supervision</i>	In what ways, and to what extent, were the recommendations from the Mid Term Review actioned upon? I.e. - <i>Develop clear exit and transition plans for project goods and services.</i> - <i>Enhance knowledge management and local capacity for air quality sensor use.</i> - <i>Reallocate unspent travel funds to strategic priorities, including tools and training.</i> - <i>Review and update safeguards risks, including social risk management.</i> - <i>Systematically integrate gender mainstreaming with an explicit action plan.</i> - <i>Strengthen project coordination through more frequent stakeholder meetings.</i> - <i>Establish a formal mechanism for stakeholder engagement in planning and implementation</i>	- Number and percentage of MTR recommendations addressed by the project team (fully, partially, or not implemented). - Existence of an MTR response matrix or management action plan tracking recommendation implementation. - Integration of MTR feedback into revised work plans, project strategies, or operational approaches. - Changes in project implementation (e.g., delivery structure, partner coordination, monitoring systems) aligned with MTR recommendations. - Evidence of improvements or course corrections made in response to MTR (e.g., enhanced stakeholder engagement, clearer ToC, improved gender integration) - Stakeholder awareness of MTR recommendations and perception of their relevance and follow-up. - References to MTR recommendations in Steering Committee meetings or project review documentation.	- MTR report and corresponding management response or action plan - Updated project documents (e.g., revised ProDoc, work plans, budgets) - Project implementation reports (e.g., PIRs, PIMS/IPMR) noting changes made post-MTR - Meeting minutes from Steering Committees, technical task teams, or UNEP internal reviews - Interviews with project staff and stakeholders discussing changes after MTR - Evaluation analysis comparing MTR recommendations to subsequent project decisions/actions - Progress tracking tools or dashboards showing follow-up on MTR

ANNEX III. STAKEHOLDERS CONSULTED DURING THE EVALUATION

Stakeholders consulted during the evaluation

Organization	Title	Role in the project	Gender
UNEP	Air Quality Coordinator/OIC PHU	Project Execution Agency Overall Project manager P-C 6,7	Female
UNEP Europe Office	Regional Chemicals and Pollution Action Subprogramme Coordinator for Europe	Project Execution Agency for project activities across all outputs in Europe and Eastern Europe	Male
UNEP West Asia Office	West Asia Chemicals and Pollution Action Subprogramme Coordinator	Project Execution Agency for project activities across all outputs in West Asia	Male
UNEP Asia Pacific Office	Asia Pacific Chemicals and Pollution Action Subprogramme Coordinator	Project Execution Agency P-C 2, 4	Female
UNESCAP	Economic Affairs Officer Environment and Development Policy Section	Reginal AQ management platform and knowledge sharing	Male
UNEP Latin America Office	Latin America Chemicals and Pollution Action Subprogramme Coordinator	Project Execution Agency	Male
UNEP North America	North America Chemicals and Pollution Action Subprogramme Coordinator	Project Execution Agency	Female
UNEP EWAD Division	GCF Coordinator (previously focal point on Air Quality monitoring at EWAD)	Project Execution Agency	Male
UNEP	ex-focal point for AQ in Law Division	Project Execution Agency	Female
CCAC Secretariat	Science Affairs Coordinator CCAC	Project Execution Agency for Output related to Clean Air Day	Male
Communication Division, UNEP	Communication officer	Project Execution Agency for Output E and Clean Air Day	Male
UNICEF	EAPRO team	Project Implementing Partner at global level	Female
EANET	Communications and Institutional Support	Project Execution Agency	
Seoul Research Institute	Research Fellow	Project Implementing Partner	Male
Clean Air Institute	Chief Operating Officer		Female
Zoi Environment Network	Project management, analysis and communication		Female
Zoi Environment Network	Project development and management Central Asia		Male
Finnish Meteorological Institute (FMI)	Head of Air Quality and Energy Experts Services Group		Female
Kampala Capital City Authority (KCCA)	Head of Air Quality Monitoring		Male
	Medical Officer		Male
Uganda National Environment Management Authority (NEMA)	Head of Air Quality Inspection and Monitoring		Female
Makerere University/Airqo project	Team Leader		Male
Kawempe District of Kampala	AQ champions		Male

Organization	Title	Role in the project	Gender
Makerere University/Airqo project	Programme Manager		Male
Asia Centre for Air Pollution Research (ACAP)	Principal Researcher		Female
Asian Institute of Technology (AIT)	Associate Professor of the Environmental Engineering and Management		Male
Clean Air Asia (CAA)	Associate Program Director, Clean Air Asia		Female
Institute for Global Environmental Strategies (IGES)	Research Director		Male
Regional Resource Centre for Asia and the Pacific (RRC.AP of AIT)	Head, Air Pollution Cluster, Regional Resource Centre for Asia and the Pacific		Female
Pollution Control Department, the Ministry of Natural Resources and Environment of Thailand	Thailand EANET National Focal Point and APCAP counterpart		Female
Central Laboratory of Environmental Monitoring, Mongolia	Mongolia EANET National Focal Point		Female
Ministry of Agriculture and Environment, Lao PDR	Biotechnology and Ecosystem Institute (BEI)		Male
Ministry of Environment Japan	Japan APCAP counterpart	Donor	Female
Seoul Research Institute	Research Fellow	Project Implementing Partner	
Ministry of Natural Resources and Environment, Lao PDR	Deputy Head of Modelling Division, Natural Resources and Environment Research Institute,	Project Implementing Partner	Female
Ministry of Agriculture and Environment, Lao PDR	Biotechnology and Ecosystem Institute (BEI)	Project Implementing Partner	
Cambodia Ministry of Environment	Deputy Director, Air Quality and Noise Management General Directorate of Environmental Protection, Ministry of Environment, Cambodia	Co-Chair of the Issue-Based Coalition of Climate Change Mitigation and Air Pollution of APCAP Joint Forum Project Implementing Partner and Beneficiary	Male
German International Cooperation (GIZ)	Project Manager	Stakeholder of follow up initiatives	Male

ANNEX IV. KEY DOCUMENTS CONSULTED

Project planning and reporting documents

- Project design document (July 2019) and revision (Jan. 2022), Project Review Committee Report (May 2019)
- Project progress reports (abstracted from PIMS) and completion report (March 2024)
- Financial documentation, including:
 - Donor and grant agreements (e.g. with USDOS, Norwegian Agency for Development Cooperation, SIDA, etc.)
 - Small-Scale Funding Agreements (SSFA) with implementation partners (partially - ECI, MOVEGREEN, RES Foundation, Clean Air Asia, Seoul Research Institute, Incheon Research Institute, Cambodia Ministry of Environment, World Resources Institute)
 - Financial reports detailing expenditures by subproject (dated April 2024).

Project outputs – Overall

- Project deliverables (refer to the section 4.4: Effectiveness)
 - Scientific assessments
 - Air quality monitoring network documentation
 - Tools, models for monitoring air quality
 - Training materials, agendas, and training reports
 - Regional and global forum materials
 - Government policies and action plans developed with project support

Previous evaluations

- Project Mid-term Evaluation Report (2022)

Reference documents

- UNEP Medium-Term Strategy (MTS) and Programme of Work (PoW) covering the project period and during the Evaluation (*details in the Table 1 Project Identification Table*)
- Relevant UNEA resolutions on air quality and pollution management (*i.e. Res.3/8, 6/10*)
- International conventions and agreements related to air quality and its links to climate change, pollutants, and SDG [e.g. *Minamata Convention -2013, Stockholm Convention - 2001, Basel Convention-1989, CLRTAP-1979, EANET, RAPAP-2022-2030, GFC(SAICM)2023, CCAC, and SDG3.9,11.6,12.4,13 etc.*]
- Online resources (*refer to the footnotes in the main report*), including:
 - WHO global air quality guidelines (2005 and 2021 updates)
 - WHO Ambient Air quality database (Version 4th 2018, 5th 2022, 6th 2024)
 - Air pollution data portal (<https://www.who.int/data/gho/data/themes/air-pollution>)
 - Mandates and strategies of donors and implementation partners
 - Scientific literature on air quality, pollutant health risks, and environmental impacts
 - Findings relevant to project results and outcomes
 - Updates on international air quality governance
 - Mapping of innovative technologies
 - Publications, media posts, and communications on project outreach
 - Mandates and strategies of donors and implementation partners

- Scientific literature on air quality, pollutant health risks, and environmental impacts
- Additional documents provided by interviewees, project partners, or national/city/institutional counterparts.

ANNEX V. EVALUATION ITINERARY

Organization	Position	Time	Location
Kampala / Uganda (Oct.27-29, 2025)			
Kampala Capital City Authority (KCCA)	Head of Air Quality Monitoring	27 th Oct. 10-12 am	KCCA Offices City hall, Sir Apollo Kaggwa Road
National Environment Management Authority (NEMA)	Head of Air Quality Inspection and Monitoring	27 th Oct. 2 – 4 pm	NEMA Offices NEF hous, NEMA Baskerville street Kololo
Makerere University/Airqo project	Team Leader	28 th Oct. 10-12 am	AirQo offices, AirQo lab. Makerere University
KCCA	Medical Officer	28 th Oct. 2 – 4 pm	Field visit to air quality monitoring sites in Makerere University
Kawempe District of Kampala	AQ champions	29 th Oct 2– 4 pm	Kawempe District
Makerere University/Airqo project	Programme Manager	29 th Oct. 2 – 4 pm	online
Bangkok / Thailand (Nov.24-27, 2025), Clean Air Week 2025			
Asia Centre for Air Pollution Research (ACAP)	Principal Researcher	24 th -27 th Nov.2025	Venue of Clean Air Week 2025, Bangkok
Asian Institute of Technology (AIT)	Associate Professor of the Environmental Engineering and Management		
Clean Air Asia (CAA)	Associate Program Director, Clean Air Asia		
German International Cooperation (GIZ)	Project Manager		
Institute for Global Environmental Strategies (IGES)	Research Director		
Regional Resource Centre for Asia and the Pacific (RRC.AP of AIT)	Head, Air Pollution Cluster, Regional Resource Centre for Asia and the Pacific		
Pollution Control Department, the Ministry of Natural Resources and Environment of Thailand	Thailand EANET National Focal Point and APCAP counterpart		
Central Laboratory of Environmental Monitoring, Mongolia	Mongolia EANET National Focal Point		
Ministry of Agriculture and Environment, Lao PDR	Biotechnology and Ecosystem Institute (BEI)		
Ministry of Environment Japan	Donor		
UNESCAP	Economic Affairs Officer Environment and Development Policy Section Environment and Development Division		
UNEP	Coordinator		
EANET	Communications and Institutional Support		
EANET/ACAP	Deputy Director General of ACAP Asian Center for Air Pollution Research serving as the Network Center		
CCAC	Science Affairs Coordinator		
Tsinghua University	Professor of Division of Air pollution and control		

ANNEX VI. ALIGNMENT TO THE UNEP MEDIUM TERM STRATEGY (MTS), PROGRAMME OF WORK (POW), AND STRATEGIC PRIORITIES

UNEP strategic document	Alignment with UNEP's mandate and thematic priorities	Level of alignment <i>full, partial, or not at all</i>
MTS (2018–2021) and (2022–2025)	The project was fully aligned with UNEP's MTS (2018–2021 and 2022–2025), both of which prioritise reducing pollution—particularly air pollution—as a core organisational objective. By strengthening monitoring systems, supporting policy and regulatory frameworks, and promoting regional cooperation, the project directly contributed to UNEP's mandate on science-based environmental governance and pollution prevention. Its focus on capacity building, partnerships, and inclusive approaches further reflected UNEP's cross-cutting strategic commitments under both MTS cycles.	Full
POW (2020–2021) and (2022–2023)	The project was strongly aligned with UNEP's POW for 2020–2021 and 2022–2023, which identify air pollution reduction, improved environmental monitoring, and strengthened environmental governance as core priorities under the Chemicals and Pollution Action and Climate Action subprogrammes. By supporting countries and cities in developing air-quality assessments, monitoring systems, and policy frameworks, the project directly contributed to UNEP's mandate to address pollution, protect human health, and advance evidence-based environmental decision-making. Its emphasis on regional cooperation, capacity-building, and science-policy engagement reflects key operational modalities highlighted across both POW cycles.	Full
Bali Strategic Plan for Technology Support and Capacity Building	The project was well aligned with the Bali Strategic Plan for Technology Support and Capacity Building, which prioritizes strengthening national capacities, enhancing technology transfer, and improving countries' abilities to implement environmental policies. By supporting air-quality monitoring, institutional capacity-building, and the development of policy tools and technical assessments, the project directly advances the Plan's objectives of enabling countries—particularly developing nations—to access data, technologies, and knowledge needed for effective environmental management.	Full
South-South Cooperation	The project strongly aligns with the principles of South–South Cooperation by facilitating knowledge exchange, peer learning, and technical collaboration among developing countries facing similar air-quality challenges. Through regional platforms such as APCAP, EANET, and CCAC, as well as city-to-city and country-to-country exchanges, the project enabled the transfer of practical tools, monitoring approaches, and policy experiences such as across Asia, Africa, and Latin America. This approach enhanced regional ownership, built local capacities, and reinforced collective action consistent with the UN framework for South–South Cooperation.	Full

ANNEX VII. RELEVANCE TO GLOBAL, REGIONAL, SUB-REGIONAL AND NATIONAL ENVIRONMENTAL PRIORITIES

Strategic document or agreement <i>non-exhaustive list</i>	Alignment with global, regional, sub-regional, national environmental priorities	Level of Alignment <i>Full, partial, or not at all</i>
2030 Agenda for Sustainable Development (SDGs)	The project directly supports SDGs 3 (Good Health and Well-Being), 7 (Affordable and Clean Energy), 11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production), and 17 (Partnerships for the Goals) by reducing air pollution, promoting clean energy solutions, improving urban environments, and fostering multi-stakeholder partnerships.	Full
Paris Agreement (2015)	By integrating air quality management with climate action – including reductions in short-lived climate pollutants (SLCPs) and greenhouse gas co-benefits – the project contributes to global climate mitigation efforts and national commitments under Nationally Determined Contributions (NDCs).	Full
UNEA Resolutions on Air Pollution (e.g., UNEA-1/7, UNEA-3/8)	The project advances UNEA mandates by supporting national and city-level efforts to improve air quality, strengthening policy frameworks, promoting monitoring systems, and fostering cooperation in line with global calls for action on air pollution.	Full
WHO Global Air Quality Guidelines (2021)	Activities on monitoring, assessment, and capacity building align with WHO's guidelines for reducing air pollution exposure and associated health impacts, supporting evidence-based policymaking to protect human health.	Full
Regional Framework – Asia Pacific Clean Air Partnership (APCAP) and Regional Roadmaps	The project aligns with APCAP's strategy for promoting knowledge exchange, regional cooperation, and capacity building to address air pollution across Asia and the Pacific.	Full
EANET Medium-Term Plan (2021–2025)	Contributes to regional goals on atmospheric environment monitoring, data harmonization, and joint capacity building across East Asia, expanding beyond acid deposition to PM, ozone, and other pollutants.	Full
CCAC Framework and Regional Initiatives (2020–2030)	Aligns with CCAC priorities to reduce SLCPs, foster cross-sectoral approaches, and strengthen national capacity to link air quality and climate objectives.	Full
National Air Quality Strategies and Action Plans (various countries)	Strengthens national capacity to develop and implement air quality management strategies and action plans, supports legal and institutional frameworks, and promotes science-based decision-making aligned with national environmental and health priorities.	Full
Kigali Amendment to the Montreal Protocol (2019)	By addressing SLCPs and promoting integrated pollution control, the project complements global commitments to phase down HFCs and mitigate climate impacts.	Full
UNESCAP Regional Action Framework on Air Pollution (2019)	Contributes to ESCAP's call for coordinated regional responses to air pollution challenges, improving governance, data, and cooperative solutions across member states.	Full

National Climate and Environmental Policies (e.g., Japan Basic Environment Plan, Korea Green New Deal)	Aligns with national environmental priorities by promoting cleaner air, supporting policy innovation, and integrating air quality actions with climate and sustainable development goals.	Full
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ANNEX VIII. ALIGNMENT TO DONOR AND PARTNERS STRATEGIC PRIORITIES

Donor or partner strategic document (2019-2023) ⁴⁷	Alignment with donor or partner strategic priorities	Level of alignment full, partial, or not at all
Sweden (SIDA) Sida Environment Policy (2021) Strategy for Global Sustainable Environment, Climate and Oceans (2018–2022)	The project aligns closely with SIDA's strategic priorities on environmental sustainability, air pollution reduction, and climate action, particularly in low- and middle-income countries. It supports improved air quality and public health outcomes while integrating gender equality and social inclusion considerations. By strengthening institutional capacity, promoting evidence-based policymaking, and supporting cleaner production and sustainable urban development, the project contributes to the achievement of the Sustainable Development Goals (SDGs), especially SDGs 3 (health), 11 (sustainable cities), 12 (responsible consumption), and 13 (climate action).	Full
United States (USDOS / U.S. State Department) - United States' State Dept Joint Strategic Plan FY2018-2022 Climate Adaptation and Resilience Plan 2021 Climate and Environment section of the State Department's 2021–2025 policy overview	The project supports the United States' priorities in strengthening environmental governance, enhancing public health, and fostering regional cooperation. By building institutional capacity, improving air quality monitoring and planning in countries and facilitating policy reform, the project advances U.S. foreign policy objectives on health security and environmental diplomacy. The promotion of science-based decision-making and collaborative approaches aligns with U.S. efforts to tackle transboundary environmental challenges.	Full
Japan (Government of Japan) White Paper on the Environment in Japan (2020) White Paper on Development Cooperation 2019, 2020, 2021, 2022, 2023	The project contributes directly to Japan's strategic focus on regional environmental cooperation, science-based policymaking, and air quality monitoring in Asia-Pacific. Through support for EANET and the Asia Pacific Clean Air Partnership (APCAP), the project strengthens transboundary cooperation on air pollution and acid deposition, expands monitoring capacity, and integrates scientific data into policy processes. These actions reflect Japan's commitment to evidence-based solutions, capacity building, and regional leadership on air quality management.	Full
Republic of Korea (ROK) KOICA ⁴⁸ 's Governance Mid-Term Strategy, 2021-2025	The project reflects the Republic of Korea's priorities in advancing urban air quality solutions, regional leadership, and innovation at the subnational level. Through engagement with Seoul, Incheon, and Gyeonggi, the project promotes city-level policy dialogue, demonstrates best practices, and facilitates knowledge exchange across the region. These activities are aligned with Korea's focus on developing scalable air quality management	Full

⁴⁷ Evaluator prioritized official strategy/policy documents and authoritative pages that were **active and relevant across 2019–2023** (Sida environment policy and 2017–2020 action plans with 2019 integration documents; State Dept plans covering FY2018–2022 and 2021 climate action; KOICA mid-term 2021–25; Norad/Norway strategy updates; UNICEF strategic plans 2018–2021 and 2022–2025). Where donors updated strategies after 2023, it is noted that the primary documents covering the 2019–2023 window.

⁴⁸ official development cooperation agency of the Government of the Republic of Korea

	strategies and showcasing innovative approaches in urban environments.	
Norway Climate Change Act	Supports Norway's commitment to reducing air pollution as part of global environmental protection, ecosystem health, and climate co-benefits, emphasizing partnerships with multilateral institutions.	Full
UNICEF UNICEF's Strategic Plan (2018-2021, 2022-2025)	The project targets air pollution impacts on children and vulnerable groups, raises public awareness (e.g., BreatheLife), and strengthens institutional responses – aligning with UNICEF's mandate on child health and environmental justice.	Full
EANET (and Member Countries) Medium Term Plan for the EANET (2021-2025)	The project builds on and advances the priorities of EANET, which include regional cooperation on acid deposition monitoring, transboundary air pollution, and policy-relevant science. By integrating EANET's data and methodologies into broader policy frameworks. The project expands EANET's scope beyond acid deposition to include particulate matter (PM) and ozone. This contributes to the standardization of air quality monitoring and strengthens science-policy linkages in the region.	Full
CCAC (Climate and Clean Air Coalition) The Climate and Clean Air Coalition 2030 Strategy Global Methane Pledge CCAC Gender Strategy 2022	The project aligns strongly with CCAC's priorities on integrated air quality and climate solutions, SLCP reduction, and multi-stakeholder partnerships. It supports the development and dissemination of science-based interventions, promotes co-benefits approaches, and strengthens regional and global cooperation platforms. The project's emphasis on sectoral action planning and collaborative governance reflects CCAC's mission to reduce pollution and climate impacts simultaneously.	Full
PayTM Foundation Environment & Sustainability Initiatives	The project resonates with PayTM Foundation's priorities on philanthropic support for environmental and public health initiatives, particularly those leveraging technology and innovation.	Full
Subnational Governments (Seoul, Incheon, Gyeonggi) Green New Deal 2050 Carbon Neutral Strategy of Incheon Metropolitan City	The project advances the strategic goals of subnational governments in Korea by supporting urban air quality innovation, city-to-city cooperation, and the scaling of successful policies.	Full
Partners		
Asian Institute of Technology (AIT) https://ait.ac.th	Contributed to AIT's research and capacity-building agenda on environmental engineering and air quality solutions, including technical assistance and regional training.	Full
Asia Centre for Air Pollution Research (ACAP) https://www.acap.asia	n strengthening regulatory frameworks, policy compliance, and institutional capacity for air quality management at national and municipal levels. Reinforced ACAP's role in coordinating EANET activities, strengthening regional monitoring	Full

EANET MTP 2021–2025 (PDF)	networks, standardizing data collection, and facilitating intergovernmental cooperation.	
Cambodia Ministry of Environment https://www.moe.gov.kh	Helped advance Cambodia’s national strategy for air quality management, including policy formulation, capacity building, and stakeholder coordination.	Full
Clean Air Asia https://cleanairasia.org	Prioritised on atmospheric monitoring, modelling, and scientific capacity building. Advances Clean Air Asia’s priorities on sustainable urban development, policy development, and regional cooperation on air quality improvement.	Full
Clean Air Institute https://www.cleanairinstitute.org	Advanced its goal of promoting sustainable urban air quality management through policy support, stakeholder engagement, and capacity-building initiatives.	Full
Environmental Compliance Institute (ECI) https://eci-africa.org	Supported ECI’s mission to strengthen regulatory frameworks, enhance enforcement capacity, and build institutional capabilities for air quality monitoring and compliance.	Full
ESCAP (UN Economic and Social Commission for Asia and the Pacific) https://www.unescap.org	Supports ESCAP’s mandate on regional policy dialogue, sustainable urban development, and integrated approaches to air pollution management.	Full
Finnish Meteorological Institute (FMI) https://en.ilmatieteenlaitos.fi	Aligned with FMI’s focus on atmospheric science, air pollution monitoring, and modelling by deploying low-cost sensor networks and enhancing data quality and analysis capabilities.	Full
Gyeonggi Research Institute https://www.gri.re.kr	Contributed to city-level clean air action plans, policy innovation, data-based decision-making, and sharing best practices across municipalities.	Full
Incheon Research Institute https://www.ii.re.kr	Reflected shared goals of integrating science into policy, advancing evidence-based solutions, and supporting low-emission development pathways.	Full
Institute for Global Environmental Strategies (IGES) https://www.iges.or.jp	Supported subnational goals for air quality planning, innovation, and knowledge exchange, contributing to improved air quality action plans and emissions reduction policies.	Full
MOVEGREEN https://www.movegreen.org	Reinforced MOVEGREEN’s objectives of community engagement, awareness-raising, and local-level capacity building for air quality action and advocacy.	Full
RES Foundation https://www.resfoundation.org	Aligned with RES Foundation’s mission to support policy reform, strengthen governance, and integrate evidence-based approaches into national and local air quality strategies.	Full
Seoul Research Institute https://www.si.re.kr	Contributed to city-level clean air action plans, policy innovation, data-based decision-making, and sharing best practices across municipalities.	Full

Sri Lanka Ministry of Environment https://www.env.gov.lk	Aligned with its national environmental agenda on strengthening policy frameworks, implementing air quality strategies, and improving institutional capacity.	Full
Stockholm Environment Institute (SEI) https://www.sei.org	Supported SEI's agenda to integrate science into policy and decision-making and promote co-benefits between air quality, climate, and sustainable development.	Full
UNICEF https://www.unicef.org	Aligned with UNICEF's strategic priority to reduce environmental health risks, particularly air pollution's impact on children, women, and vulnerable communities.	Full
World Health Organization (WHO) https://www.who.int	Contributed to WHO's objectives on improving public health outcomes through cleaner air, policy integration, and reduced exposure to air pollutants.	Full
World Resources Institute (WRI) https://www.wri.org	Aligned with WRI's mission to use data and evidence for environmental decision-making, supporting air quality assessments and integrated solutions for emissions reduction.	Full
Zoï Environment Network (ZEN) https://zoienvironment.net	Supported ZEN expertise in communication, outreach, and capacity building by translating technical results into accessible knowledge products for policy and public audiences.	Full

ANNEX IX. COMPLEMENTARITY WITH EXISTING INTERVENTIONS / COHERENCE (PARTIALLY)

Other initiatives by UNEP or other organisations <i>non-exhaustive list</i>	Complementarity (including collaboration, coordination and overlap or duplication)	Level of Alignment <i>Full, partial, or not at all</i>
UNEP - Air Quality Policy and Programme Support (AQI Programme) 2021 Global Assessment of Air Pollution Legislation (GAAPL)	- Supported countries in air-quality legislation, clean air action plans, and monitoring systems. - Strengthened national legislation, clean air action plans, and monitoring systems that the project operationalizes through capacity building and tools.	Full
UNEP/WHO Joint Framework on Air Pollution and Health	Aligned health–air quality actions and reinforces the project’s emphasis on health impacts of PM reduction.	Full
UNESCO - Asia Pacific Regional Action Programme on Air Pollution (2020–2024) - Asia Pacific Clean Air Week (2021 & 2023)	- Facilitated regional knowledge exchange and supports coordinated air-pollution responses complementary to project activities. - Facilitates regional knowledge exchange and supports coordinated air-pollution responses complementary to project activities.	Full
WHO - WHO Global Air Quality Guidelines (2021) - AirQ+ Tool - WHO–UNEP–CCAC - BreatheLife Global Campaign	- Provides health-based thresholds that underpin project-supported policy advice and PM management. - Supports health-impact assessments that complement project analysis and advocacy. - Amplifies public awareness and clean air commitments aligned with project communication and outreach.	Full
Asian Development Bank (ADB) - ADB Regional Technical Assistance on Air Quality Improvement (TA-9576) - Country-level urban air quality projects (e.g., Mongolia, India, Pakistan)	Developed CAAPs and builds technical capacity in Asian cities, complementing the project’s support for monitoring, tools, and policy actions.	Partial
World Bank - Pollution Management and Environmental Health (PMEH) Programme - Clean Air and Climate Programme initiatives in Africa & South Asia.	Generated analytical evidence and city-level air-quality management plans that complement project capacity-building and policy support.	Partial
European Union (EU) Initiatives - EU–Asia Cooperation on Air Quality Governance (ongoing 2019–2023). - EU SWITCH Africa Green / SWITCH Asia Circular Economy programmes (with linkages to waste & emissions).	- Generated analytical evidence and city-level air-quality management plans that complement project capacity-building and policy support. - Promoted circular economy and waste-to-emission reduction measures aligned with the project’s PM reduction and pollution-prevention objectives.	Partial
National Policy and Reform Initiatives (Examples) - India – National Clean Air Programme (NCAP) - Uganda – Air Quality Regulations & Monitoring Network (2021–2023) - Thailand – Air Quality Governance & PCD Initiatives - China – Blue Sky Protection Campaign	- Created policy demand for tools and action plans similar to those supported by the project. - Builds regulatory and monitoring foundations that the project strengthens through institutional and technical support. - Advances emission controls and monitoring improvements aligned with the project’s Bangkok activities.	Full

• Mongolia – Ulaanbaatar Clean Air Programme • Kenya – Air Quality Regulations (EMCA)	– Drives strong national action on PM reduction that complements project guidance and analysis. – Provides a platform for applying project tools and clean air planning approaches. – Supports regulatory frameworks aligned with the project’s policy and capacity work in Africa.	
WMO • Global Atmosphere Watch (WMO-GAW) Programme	– Harmonizes atmospheric data and builds monitoring capacity aligned with the project’s technical support.	Full
OpenAQ Platform	– Expands access to open air-quality data that the project encourages countries to use.	Full
IQAir	– Provides complementary real-time PM2.5 data that supports project assessments and public awareness.	Full
Finland support in Central Asia • Projects: Strengthening Weather, Climate and Air Quality Services in Central Asia • Finnish Water Programme in Kyrgyzstan and Tajikistan – Water, Climate and Environment Security • Finland–Uzbekistan Environmental and Climate Cooperation	– Enhances monitoring systems, regional cooperation, and institutional readiness, directly complementing the project’s data, policy, and capacity-building efforts in Central Asia (Kyrgyzstan and Tajikistan, and Uzbekistan).	Full
CCAC • CCAC Municipal Solid Waste Initiative (MSW Initiative) • CCAC SNAP Initiative (National Planning for SLCPs)	– Supports cities to reduce SLCPs (short-lived climate pollutants) from open burning, waste handling, and landfill emissions, complementing the project’s work on PM reduction through improved waste management and policy guidance. – Supports countries to develop national SLCP mitigation strategies, strengthening policy frameworks that complement the project’s air-quality action plans and PM-reduction measures.	Partial Full
JICA • JICA–PCD Technical Cooperation (Bangkok Metropolitan Region)	– Improves monitoring networks, emission inventories, and institutional coordination that reinforce the project’s evidence-based air-quality management support.	Full

ANNEX X. COMPLETED ASSESSMENT OF THE PROJECT DESIGN QUALITY

A	Project Preparation	Consultant's Comments:	Section Rating ⁴⁹ :
	Consider whether the project document includes: - A clear problem and situation analyses - Complete stakeholder analysis (incl. marginalised/vulnerable groups)⁵⁰ - Consideration of human rights and equality issues and potential effects - Costed workplan - Procurement plan/documents	Ref.: ProDoc. 1 Problem and Situation Analysis; Annex C. Project workplan / Activities; Table 6 Stakeholder analysis - Air pollutant emission sources, associated gaps in mitigation and control, and their consequences are described and illustrated through a problem tree analysis. - A stakeholder analysis table is included; however, it does not explicitly account for marginalized or vulnerable groups. The project's gender analysis and the current status of air pollution management recognize that vulnerable populations include the elderly, women, individuals with pre-existing respiratory or cardiovascular conditions, and low-income communities with limited access to healthcare. - Human rights and equality considerations are addressed in Annex D (Environmental, Social and Economic Review Note) and Annex G (Gender Marker Self-Assessment). - The work plan is schedule-based but does not include cost estimates, as these were not required at the project design stage in accordance with the UNEP project document template. A procurement plan is not deemed necessary as per identified project activities.	Moderately Satisfactory
		Implications for the evaluation design <i>If the project document describes a commitment to addressing human rights and/or gender equality issues and this is not reflected in the results framework, this expectation should appear in the reconstructed TOC as a Driver</i>	
B	Risk Identification and Safeguards	Consultant's Comments:	Section Rating:
	Consider whether the project document includes: - A clear and complete Risk Log	Ref.: ProDoc. Risk Management & Safeguards, 8 Safeguards, Table 6 Project Risk Log; and II. Environmental Social and Economic Screening Determination	Satisfactory

⁴⁹ A number rating 1-6 is used for each section: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1.

⁵⁰ If yes, is there a description of stakeholder consultation during project design and were any key groups overlooked (e.g. private sector, civil society, gendered groups and those who will potentially be negatively affected)?

	- Consideration of potentially volatile operating context⁵¹ - Consideration of potential environmental, economic and social negative effects - Mechanisms to reduce environmental footprint	- The Risk Log is largely complete and addresses key risks and mitigation measures (e.g., the risk of insufficient engagement of vulnerable groups). - Potential operational disturbances (organizational and economic) are anticipated, with corresponding risk management actions outlined. - Negative environmental (e.g., risk of pollution shifting due to poorly designed mitigation), economic (e.g., increased costs for households and small businesses), and social impacts (e.g., public resistance to cleaner technologies) are not considered during the project design stage but are addressed within the project implementation objectives. - The project does not anticipate significant consumption of water, energy, or other resources; therefore, no specific mechanisms to reduce environmental footprint have been planned.	
		Implications for the evaluation design	
		<i>Evaluation to consider negative unintended effects under Effectiveness, especially Likelihood of Impact</i>	
C	Governance and Supervision Arrangements	Consultant's Comments:	Section Rating:
	Consider whether the project document includes: - Comprehensive and clear project governance and supervision model and features - Clearly defined roles and responsibilities within UNEP	Ref.: ProDoc. 4 Project implementation arrangements, 4.1 Governance - The overall Project Steering Committee is to be established to oversee project governance, with the project management team composition and reporting structure clearly outlined. - The roles of UNEP's regional offices and the Climate and Clean Air Coalition (CCAC) are described; however, the responsibilities of other stakeholders—given the broad involvement of various UNEP divisions and groups—are not fully detailed. - As a global project, the coordination mechanism for interlinkages between subprojects and activities is not clearly outlined. Although some outputs, such as Output 3 (Action planning and strategy development), are designed to build on Outputs 1 and 2, the overall integration remains insufficiently articulated.	Moderately Satisfactory
		Implications for the evaluation Design	

⁵¹ Address whether the operating context has been assessed, not the actual favourability of the operating context

		<i>Evaluation to check if:</i> - planned Steering Committee was established with full, appropriate representation, including from UNEP? - Regional Offices should be consulted prior to, and during, the evaluation	
D	Partnerships	Consultant's Comments:	Section Rating:
	Consider whether: - Capacities of partners have been clearly assessed - Roles and responsibilities of external partners are specified and are appropriate to their capacities	Ref.: ProDoc. Table 5: Partners' Information; Table 9: Project Work Plan - The partners' capacity and expertise are evident from their past cooperation with UNEP and their ongoing efforts to combat air pollution. - Their roles are identified and partially described.	Satisfactory
		Implications for the evaluation design	
		<i>Evaluation to check if:</i> - partner capacity was assessed during inception/mobilisation where partners were either not known or changed after project design approval - a comprehensive inception meeting was held and reported on	
E	Strategic Relevance	Consultant's Comments:	Section Rating:
	Consider whether the project document includes alignment and relevance to: - UNEP MTS, PoW and Strategic Priorities (including Bali Strategic Plan and South-South Cooperation) - Donor strategic priorities - Regional, sub-regional and national environmental priorities - Complementarity with other interventions	Ref.: ProDoc. 2.1 Relevance to UNEP Programme of Work; 2.2 Relevance to Regional, National or Subnational Priorities; Table 7 Donor Action Plan Template, detailed by partner. - Relevance to UNEP's Medium-Term Strategy (MTS) 2018–2021 and Programme of Work (PoW) 2022–2023 is well outlined. - UNEP strategic priorities—such as South-South Cooperation, the Sustainable Development Goals (SDGs), and the Bali Strategic Plan for Technology Support and Capacity Building—are addressed. - Regional priorities and needs for the Asia-Pacific, Latin America and the Caribbean, Pan-European, Africa, and North America regions are comprehensively described and linked to findings and achievements from past and ongoing air pollution-related initiatives. - In project design, key donors (including Sweden, Norway, Japan, EANET participating countries, Canada, the EU, the Africa Group, and the United States) were identified based on their previous commitments, engagement in UNEA resolutions, and interest in supporting UNEP's air quality agenda.	Highly Satisfactory
		Implications for the evaluation design	

F	Logical Framework and Causality	Consultant's Comments:	Section Rating:
	Consider whether in the logical framework or the TOC: - The causal pathways are clearly and convincingly described (from project outputs, through outcomes, towards impacts) - Drivers and Assumptions are clearly described - The roles of stakeholder groups are described (incl. marginalised/vulnerable groups) - Outcomes are realistic with respect to project timeframe and scale - Output- and outcome-level results are 'SMART' - Output- and outcome-level results have indicators and targets (Note if targets are not provided) - Indicators have baseline data - Specific indicators are included for marginalized/disadvantaged groups, if applicable	Ref.: ProDoc. Results 3 Project Results; 3.2 Logical Framework - The 5 outputs (scientific assessments; monitoring networks; action planning and strategy development; conferences, networks, and international collaboration; communication and awareness) are supported by a total of 14 planned activities. - The nature and linkages between the subprojects/grants and the global project are not explicitly identified or described. - The ProDoc described a well-structured and comprehensive Theory of Change, although all its elements (such as drivers and assumptions) are not surmised in special block and hence lacks a complete representation in TOC diagram. The causal pathways are logical and well-supported by the outputs. Assumptions are realistic, and stakeholder roles are generally well-defined, though the inclusion of vulnerable groups could be further strengthened. - In the Logical Framework, the targets and indicators set at the outcome, output, and milestone levels should be realistic and aligned with the project activity plan. However, some baselines are not specified with information, and several targets are vague, particularly when activities related to city/national levels, institutional levels, and individual levels. - Specific indicators for women and marginalized/disadvantaged groups are not included. - No components/subprojects level indicator was set for monitoring and attributing to the outputs. Implications for the evaluation design	Moderately Satisfactory
G	Financial Planning	Consultant's Comments:	Section Rating:
	Consider whether the project document includes: - Complete financial information (i.e. budgets) - Co-financing expectations, disaggregated by cash and in-kind	Ref.: ProDoc. Table 3: Budget Summary; 6 Resource Mobilization and Cost Effectiveness - The project includes Extra Budgetary (XB) funding—covering posts, non-posts, and Programme Support Costs (PSC)—with both secured and unsecured contributions from donors, broken down annually. - However, there is no budget allocated at the subproject/output level. - In-kind contributions from CCAC and specific staff are anticipated. - No co-financing is indicated in the project design.	Moderately Satisfactory

		Implications for the evaluation design	
		- Financial records, especially on expenditure and procurement need to be asked for early in the evaluation process - Evaluation should check whether the actual level of secured co-finance affects the delivery of results	
H	Efficiency	Consultant's Comments:	Section Rating:
	Consider whether the project document includes: - Consideration of pre-existing agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects to increase project efficiency - Reference to any efficiency strategies (e.g. sequence of the project's activities, cost-effectiveness, etc.)	Ref.: ProDoc. Achievements and lessons learnt that the project is building up on; 6 Resource Mobilization and Cost Effectiveness - The project builds on the outcomes of earlier UNEP-led Project Preparation Phases (PPPs), regional initiatives, and global partnerships, including with WHO, CCAC, WMO, and regional platforms like APCAP and EANET. These partnerships provide established data sources, tested methodologies, and institutional frameworks that increase efficiency and reduce duplication. The project also draws from recent regional assessments, such as the Asia-Pacific "Science-based Solutions" report and the WHO Global Conference on Air Pollution, leveraging existing commitments and voluntary pledges (e.g., BreatheLife campaign) to ensure alignment and amplify impact. - Additionally, lessons learned from previous projects (e.g., city-level demonstration projects, training toolkits, and stakeholder mobilization efforts) are incorporated to improve design, relevance, and stakeholder engagement. - Project adopts several strategic approaches to enhance efficiency, e.g. co-funding, joint ownership, and in-kind contributions from partners, ensuring cost-effectiveness while expanding reach. - Activities are strategically sequenced for scalability, leveraging existing tools and platforms to reduce costs. South-South and cross-regional exchanges further support cost-effective peer learning. - Absence of costed subproject-level work plans limited financial transparency and clarity on activity scope.	Satisfactory
		Implications for the evaluation design	
		Evaluation to record if the project is extended beyond its original end date and explore the reasons for costed or no-cost extensions	

I	Monitoring	Consultant's Comments:	Section Rating:
	Consider whether the project document's monitoring plan: - Allocates a budget for monitoring activities, including funds for mid-term and terminal evaluations/reviews - Includes monitoring data collection methods, responsibilities and frequency - Prompts for the disaggregation of data (e.g. minority/disadvantaged groups)	Ref.: ProDoc. Table 2: Project Duration; 7, Monitoring Plan; 11 Evaluation Plans - The monitoring plan includes data sources, collection methods, frequency, and responsible offices/staff; however, it lacks a dedicated budget for monitoring activities. - Gender-disaggregated data collection is only planned under Output 5 (E). - A terminal evaluation is planned but no specific budget is allocated. - Prodoc monitoring plan and work duration is designed for a 3-year period, whereas the project work plan spans 4 years. - The outcome indicators also focus purely on quantitative aspects but fail to include qualitative aspects of the air quality policies and frameworks. - The milestones, deliverables, and output indicators in the logframe lack interlinkage and/or show gaps in coverage. Implications for the evaluation design <i>Evaluation to assess if the monitoring report sufficiently addresses the project activities and results</i>	Moderately Satisfactory
J	Sustainability / Replication and Catalytic Effects	Consultant's Comments:	Section Rating:
	Consider whether the project document includes: - Consideration of socio-political, financial, institutional and environmental sustainability issues - An exit strategy - Plans for dissemination of results and lesson sharing at the end of the project - Strategies to promote/support scaling up, replication and/or catalytic action	Ref.: ProDoc. 10 Sustainability, Uptake, Scaling Up and Replicability - The project incorporates sustainability by equipping national and local authorities with tools, data, and guidance for long-term air quality management. It fosters institutional coordination to embed results into national systems, ensures stakeholder engagement beyond the project timeline, and promotes regional and global knowledge exchange. Strategic partnerships (e.g., with WHO) further support the continuation of efforts, while data integration into policymaking ensures enduring socio-political and environmental impact. - The project plans to disseminate results and lessons through regional and international forums, UNEA reporting, and national/regional workshops. A key mechanism will be the development of communities of practice to share knowledge,	Satisfactory

		support replication across cities and regions, and respond to emerging demand. - Replication and upscaling will be promoted through synergies with complementary initiatives (e.g., in Ethiopia) and strategic communication under Output 5, including awareness-raising and practitioner engagement to expand adoption of tools and methodologies. - The project lacks a clearly defined exit strategy. While some activities aim to build local capacity and institutional ownership, and use of outcomes, tools, or sustain partnerships after project closure. A structured phase-out plan, including knowledge transfer, institutional anchoring, and long-term resource mobilisation, would enhance the project's sustainability.	
		Implications for the evaluation design	
		<i>Evaluation to capture this feature in the reconstructed TOC</i>	
K	Learning, Communication and Outreach	Consultant's Comments:	Section Rating:
	Consider whether the project document has a clear knowledge management approach, including appropriate methods for communication with all partners and stakeholders.	Ref.: ProDoc. 4 Communications and Learning - ProDoc 5.1 Communication strategy includes project's communication efforts on raising awareness about air pollution's impacts, promoting best practices, and encouraging action. This is addressed under Output 5 through regional knowledge exchange and alignment with global campaigns like <i>BreatheLife</i> and <i>BeatPollution</i>. Activities include coordination meetings, a dedicated air quality webpage, consistent messaging, and public data sharing via platforms like the <i>World Environment Situation Room</i>. Communication also targets UNEP stakeholders through presentations, regional meetings, and bilateral engagements. - ProDoc 5.2 Knowledge Management indicates: The project applies a structured knowledge management approach to capture and share lessons across regions. Information will be disseminated via internal platforms (e.g., shared drives, We-Collaborate), presentations, infographics, and public platforms like the World Environment Situation Room. UNEP's Communication Division will lead outreach campaigns (BeatPollution, BreatheLife) and support media content and social media. Regional initiatives like EANET and APCAP contribute valuable data and lessons, with dedicated	Highly Satisfactory

		websites facilitating access to best practices for policymaking, assessments, and capacity building.	
		Implications for the evaluation design	
		<i>Evaluation to check for knowledge sharing between partners as well as with external parties</i>	
N/A	Gender Marker Score	Comments/Implications for the evaluation design	No rating applicable.
	What is the Gender Marker Score applied by UNEP during project approval? <i>(This applies for projects approved from 2017 onwards)</i> UNEP Gender Scoring: 0 = gender blind: Gender relevance is evident but not at all reflected in the project document. 1 = gender partially mainstreamed: Gender is reflected in the context, implementation, logframe, or the budget. 2a = gender well mainstreamed throughout: Gender is reflected in the context, implementation, logframe, and the budget. 2b = targeted action on gender: (to advance gender equity): the principal purpose of the project is to advance gender equality. n/a = gender is not considered applicable: A gender analysis reveals that the project does not have direct interactions with, and/or impacts on, people. Therefore, gender is considered not applicable.	<i>Simply record the Gender Marker Score, which may be useful to know during the evaluation</i> Ref.: ProDoc. Annex G. Gender Marker Self-Assessment - The project is ranked as GEM 2a – Gender well mainstreamed, with gender considerations reflected in the project context, implementation plan, logical framework, and budget. - Specific factors supporting this ranking are detailed in the project’s implementation arrangements, logframe, and budget planning.	
N/A	Identified Project Design Weaknesses/Gaps	Comments/Implications for the evaluation design	No rating applicable.
	Note if there any substantive areas of weakness, oversight or false assumptions ap’umbrella’ in the design? <i>(Note if there were critical issues raised by PRC that were not addressed in a revision prior to project approval)</i>	Ref.: ProDoc. and PRC report dated on 16/05/2019 - As a global project, the synergies between subprojects and their cumulative contribution to global outcomes and impacts are not sufficiently analyzed or interlinked. - The PRC’s comments on the ProDoc were largely addressed; however, gaps remain in the level of detail in project drivers, and between the logical framework indicators and the monitoring plan. For example, Project component A’s Indicator M3 is not reflected in the monitoring plan.	

ANNEX XI. ENVIRONMENTAL AND SOCIAL SAFEGUARDS ASSESSMENT

ESS PLANNING AT PROJECT DESIGN	
List any ESS issues identified at project design (e.g. SS 1.7, SS 2.3, etc.) ⁵²	At the project design stage, several Environmental and Social Standards (ESS) issues were identified in alignment with the safeguard screening. All identified issues were assessed as Low significance, but they nevertheless require appropriate consideration and monitoring during implementation. The key ESS issues include: Biodiversity and Natural Habitats (ESS1): Potential minor disturbance to local ecosystems and natural habitats linked to project activities, though impacts are expected to be limited, site-specific, and reversible. Resource Efficiency and Pollution Prevention (ESS2): Risks related to waste generation, pollution control, and efficient use of materials and resources. This standard carries the highest impact score among the triggered ESS, primarily due to the need for proper waste and emission management. Cultural Heritage (ESS7): A low-probability risk of encountering cultural heritage elements during project activities, requiring adherence to chance-find procedures. Economic Sustainability (ESS9): Minor risks associated with potential short-term impacts on local economic activities, although long-term impacts are expected to be positive. Labor and Working Conditions (ESS6), Gender Equity (ESS8), Indigenous Peoples (ESS5), Involuntary Resettlement (ESS4), and Safety of Dams (ESS3): These were triggered as part of due diligence but present minimal risk, with no expected adverse impacts based on project design and location characteristics.
For any ESS issues identified at project design, were <u>mitigation strategies</u> developed (Y/N)? (If yes, briefly describe)	Overall, the project design identified only low-level ESS risks across both environmental and social dimensions, none of which require further study or additional impact management measures.
Were any <u>gaps</u> in ESS issues identified at the evaluation inception phase (Y/N)? (If yes, briefly describe)	N

ESS MONITORING AT PROJECT IMPLEMENTATION

⁵² Select from the list of Environmental and Social Safeguards Risks in Table 1 of the template (tool 14, Safeguards Assessment Template).

Is there evidence that the potential emergence of ESS issues was actively monitored during project implementation (Y/N)? ⁵³ (If yes, briefly describe)	N
Is there a justification for the absence of ESS monitoring (Y/N)? (If yes, briefly describe ⁵⁴)	Y. No ESS screening decision was made at the project design stage, and no screening/monitoring was required during the Project Review Committee (PRC) process as of information in the PRC Report.

MANAGEMENT RESPONSIVENESS DURING PROJECT IMPLEMENTATION	
Identify the ESS issues/events triggered ⁵⁵ by the project. ⁵⁶	N/A
Describe consequences of ESS issues/events during project implementation.	Given that the project aims to advance gender equality, unaddressed gender-specific exposure patterns may undermine both equity and effectiveness of outcomes. Management took steps to recognize the higher vulnerability of women and children in contexts reliant on solid fuels, and incorporated some responsive measures. While opportunities remained to strengthen gender-differentiated actions, the efforts undertaken contributed positively to enhancing the inclusiveness and equity of project outcomes.
Describe the management response and identify supporting documentation. ^{57, 58}	N/A
Were negative ESS effects offset by management response (Y/N)? (If yes, briefly describe)	N/A

⁵³ **Low risk:** Negative impacts minimal or negligible: no further study or impact management required.

Moderate risk: Potential negative impacts, but limited in scale, not unprecedented or irreversible and generally limited to programme/project area; impacts amenable to management using standard mitigation measures; limited environmental or social analysis may be required to develop an Environmental and Social Management Plan (ESMP). Straightforward application of good practice may be sufficient without additional study.

High risk: Potential for significant negative impacts (e.g. irreversible, unprecedented, cumulative, significant stakeholder concerns); Environmental and Social Impact Assessment (ESIA) (or Strategic Environmental and Social Assessment (SESA)) including a full impact assessment may be required, followed by an effective comprehensive safeguard management plan.

⁵⁴ For instance, during COVID, access to the field may have been restricted

⁵⁵ 'Triggered' refers to environmental or social issues/events that are caused or exacerbated—directly or indirectly—as a result of the project's activities, interventions, or presence.

⁵⁶ Select from the list of Environmental and Social Safeguards Risks in Table 1 of the template (tool 14, Safeguards Assessment Template).

⁵⁷ For most low-moderate risk projects, good practice approach may be sufficient. Project should demonstrate safeguard management approach in the project activities, budget, risks management, stakeholder engagement or/and monitoring segments of the project document to avoid or minimize the identified potential risks without preparing a separate safeguard management plan.

⁵⁸ E.g., GEF Project Implementation Report (PIR), Progress Report, Minutes, etc.

ANNEX XII. JUSTIFICATION FOR REFORMULATION / EXPANSION OF DRIVERS AND ASSUMPTIONS

Formulation in original project document(s)	Formulation for reconstructed TOC at evaluation (RTOC) inception	Justification for reformulation and/or consultant's explanatory notes on the interpretation ⁵⁹ of the driver or assumption
DRIVERS (From Outputs to Outcome)		
Stakeholders, including citizens, increasingly aware of risks of air pollution and influence actions towards cleaning the air	a) Increased public concern and advocacy around the disproportionate health impacts of air pollution particularly on women and vulnerable groups ⁶⁰ are driving demand for action.	Civil society, researchers, and international agencies have raised awareness of gender- and equity-based disparities in air pollution exposure and health outcomes. This momentum helps create political and social pressure for inclusive policy responses and can improve project relevance and effectiveness if leveraged properly.
	b) The selection of countries is demand-driven, reflecting strong government and city-level interest and commitment.	The selection of countries and cities was demand-driven, ensuring that participating stakeholders had a pre-existing interest in air quality improvement. This interest served as a strong foundation for engagement and ownership. This driver implies that political will and local commitment are preconditions for effective implementation, which must be sustained throughout the project to influence change.
	c) UNEA resolutions mandate UNEP's global leadership in air quality and call for periodic assessments.	Formal mandates provide UNEP with legitimacy, clear expectations, and institutional support from Member States. These resolutions act as policy anchors, reinforcing continuity across political cycles and providing leverage for implementation.
	d) Existing networks such as the Climate and Clean Air Coalition (CCAC), the Acid Deposition Monitoring Network in East Asia (EANET), and the Asia Pacific Clean Air Partnership (APCAP) support global and regional cooperation and facilitate implementation.	These networks offer tested platforms for regional cooperation, knowledge exchange, and implementation of air quality measures. These drivers are utilized to ensure that the project does not operate in isolation, but rather enhances synergies with ongoing initiatives, amplifying reach and efficiency.
	e) Advances in low-cost sensor technology enable rapid deployment of air quality monitoring in under-monitored areas.	Emerging air quality monitoring technologies enable cost-effective, scalable solutions—especially in low-resource settings. This driver allows the project to lower technical barriers and broadens access to air quality data, particularly in under-monitored urban areas.
DRIVERS (From Outcome to Impact)		

⁵⁹ In some instances, the drivers or assumptions may not need to be reformulated, but implied meanings need to be made explicit or understanding clarified. In other cases, it may be necessary to add driver and assumptions that were not previously identified in the original TOC or results framework.

⁶⁰ If the project design document contains commitments on human rights and gender equality that are not reflected in the results framework, the commitment must appear as Driver.

N/A	f) Current and new government(s)' continued interest and commitment to reduce air pollutants and health risks.	Achieving long-term improvements in air quality and public health requires enduring political will. National and subnational authorities must maintain commitment across political cycles to adopt, implement, and enforce clean air policies. It is expected that governments—both current and incoming—will remain motivated to act on air pollution due to increasing public health concerns, international obligations, and socioeconomic impacts, ensuring continued momentum toward impact.
	g) Continuation of awareness-raising and capacity building activities	Awareness and knowledge must be sustained and updated to keep stakeholders engaged and capable. Ongoing communication and training efforts are essential to maintain behavioral change and institutional readiness. Project partners and national institutions are expected to continue these activities post-project, leveraging tools, platforms, and networks established during the project to expand reach and reinforce capacities for air quality management.
	h) Continued active international and regional cooperation (incl. innovation) and support (i.e. allocation of human and financial resources) to implement strategies, policies, and action plans in air quality management	Air pollution is a transboundary issue requiring coordinated responses. Global and regional partnerships offer technical assistance, policy alignment, and funding opportunities that individual countries may not achieve alone. It is assumed that platforms like EANET, CCAC, and Asia Pacific Clean Air Partnership will remain active and that donors and development partners will continue to invest in knowledge exchange, innovations, and regional strategies that underpin long-term impact.
ASSUMPTIONS (From Outputs to Outcome)		
Political will to move forward on the pollution agenda	i) Countries and cities continue to show political will and engage in technical cooperation.	Sustained engagement is assumed based on initial demand; however, it depends on evolving national priorities and institutional stability. This assumption is crucial for the uptake of project outputs and must be monitored to adapt engagement strategies if political will weakens.
	ii) Stakeholders make use of assessment outputs and data to inform policy.	Project outputs are designed to be demand-driven and user-friendly; their usefulness depends on capacity, timing, and institutional receptivity. This assumes that stakeholders have the technical and institutional capacity to absorb and apply knowledge—highlighting the importance of follow-up support.
	iii) Capacity built through the project are retained and applied.	The assumption relies on institutional memory and low staff turnover, which can be unpredictable. Sustained application of capacity gains may require institutionalization (e.g. protocols, regulations) rather than relying solely on individuals.
	iv) Coordination across regions and sectors lead to harmonized and complementary actions.	Multi-stakeholder processes and regional platforms are in place to encourage this, but alignment is not guaranteed. The assumption reflects an ideal scenario, requiring active facilitation to avoid duplication and fragmentation.
	v) Awareness-raising leads to behaviour change and increased demand for clean air from citizens and decision-makers.	Awareness is a first step, but behaviour change requires sustained engagement, incentives, and enabling conditions. The causal link between awareness and action is non-linear; thus, communication strategies must be tailored to audience needs and supported by institutional measures.
	vi) UNEP's institutional mandate, experience, and extensive partner networks effectively supports the	UNEP is assumed to provide legitimacy, technical expertise, and convening power necessary to coordinate stakeholders and drive results.

	achievement of the project's objectives.	
	vii) The project is aligned with and supports the UN principles on human rights and gender equality. ⁶¹	Human rights and gender equality are cross-cutting priorities for UNEP and the UN system, and must be embedded in all programming. This assumption implies that project activities will actively promote inclusion, especially of women and marginalized groups, and that their participation is both an ethical and practical requirement for sustainability.
ASSUMPTIONS (From Outcome to Impact)		
N/A	viii) Legal frameworks and institutional frameworks have been enhanced to facilitate the clean air.	The translation of project outcomes into lasting impact requires supportive legal and institutional environments. Governments must adopt or strengthen air quality regulations and enforcement mechanisms, enabling the integration of air quality priorities into national and subnational planning. It is assumed that national and local institutions will formalize the gains of the project by updating legal frameworks, thereby sustaining air pollution mitigation efforts and supporting long-term improvements in air quality and health.
	ix) Funding is made available by the governments, private sector, donors for upscaling of implementation, awareness-raising and capacity building activities	Long-term impact depends on continued investment beyond the life of the project. Mobilizing domestic budgets, donor contributions, and private sector financing is essential to replicate and scale successful interventions, as well as to maintain monitoring infrastructure and public engagement. It is assumed that stakeholders will prioritize air quality in budget allocations and resource mobilization efforts, building on the foundation established by the project to generate lasting environmental and health benefits.

⁶¹ If the project design document and the framework are silent on human rights and gender equality, the following assumption must be included in the TOC: 'The project works toward the UN principles on human rights and gender equality'.

ANNEX XIII. JUSTIFICATION FOR REFORMULATION OF RESULTS STATEMENTS

Formulation in original project document(s) <i>Source: ProDoc/July 2019</i>	Formulation for reconstructed ToC at evaluation inception (RTOC)	Justification for reformulation and/or consultant's explanatory notes on the interpretation ⁶² of the result ⁶³	Contributed by P-C*
(LONG LASTING) IMPACT			
Reduced global air pollution levels and related risk to the environment and human health	Remain same with no change	<i>Impacts are long-lasting results arising, directly or indirectly from a project. Impacts are intended and positive changes and must relate to UNEP's mandate.</i>	1-7
INTERMEDIATE STATES			
A significant increase in actions on air pollution by countries, cities. Stakeholders, including citizens, increasingly aware of risks of air pollution and influence actions towards cleaning the air	Increased implementation of air quality measures by countries and cities, with stakeholders—including citizens—demonstrating greater awareness of air pollution risks and actively influencing and supporting actions to reduce air pollution.	<i>Intermediate states are changes (i.e., changes at the outcome level) beyond the Project Outcome(s) that are required to contribute towards the achievement of the intended impact of a project.</i>	1-7
PROJECT OUTCOMES			
Governments have measures, policies or frameworks in place to address air pollution for improved air quality and human health at national and subnational level through the support of UNEP	National and subnational governments adopt and implement measures, policies, or frameworks to address air pollution and improve air quality and human health, as a result of UNEP's support.	<i>An outcome is a change at institutional level, or changes in behaviors, attitudes or conditions achieved from the use (i.e., uptake, adoption, application) of outputs by intended beneficiaries.</i>	1-7
OUTCOME INDICATORS [comment if relevant]			
Indicators used for the evaluation are identified as per the Revision dated on Jan 5.2022			
OUTPUTS			
A) Assessments to inform the state of air quality developed and made available to decision-makers and relevant stakeholders	Remain same with no change	<i>An output is the availability (for intended beneficiaries/users) of new products and services and/or gains in knowledge, abilities, and awareness of individuals or within institutions. For example, access by the intended user to a report; new knowledge held by a workshop participant at the end of a training event; heightened awareness of a serious risk among targeted decision-makers (Outputs are viewed from the perspective of the</i>	1,5,7
B) Advisory and support services provided to establish functional urban air quality monitoring networks	B) Urban authorities access advisory and support services to establish and operate functional air quality monitoring networks.		1,4,7
C) Advisory and support services provided in action planning and air quality strategy development and implementation	C) National and local authorities access advisory and support services to develop and implement air quality action plans and strategies.		1,4,7

⁶² In some instances, the results statement may not need to be reformulated, but implied meanings need to be made explicit or understanding clarified. In other cases, it may be necessary to specify the stakeholder, etc.

⁶³ Source: UNEP GLOSSARY OF RESULTS DEFINITIONS (Version8), December 2023:

D) Governments' institutions demonstrated increased knowledge, and coordination/collaboration on air quality action enhanced at regional and global level	D) Government institutions gain access to enhanced knowledge, tools, and collaborative mechanisms to coordinate and advance air quality action at regional and global levels.	<i>intended beneficiary or user of the output rather than the provider).</i>	1,2,6
E) Enhanced communication and awareness-raising tools to encourage action and promote best practices on air quality	E) Policymakers and practitioners in communities of practice, UNEP in-house coordinators have access to and use improved communication materials and awareness-raising tools that encourage action on air quality and promote best practices.		3,4,6
OUTPUT INDICATORS			
Indicators used for the evaluation are identified as per the Revision dated on Jan 5.2022			
*Note: The contributions of multiple activities to each component. Each component contributes directly to a specific output and, due to the cross-cutting nature of the project's activities, also provides indirect contributions to other outputs.			

ANNEX XIV. PROJECT PARTNER PROFILES

- [**The Regional Resource Centre for Asia and the Pacific \(RRC.AP\)**](#) at the Asian Institute of Technology assists countries to advance their environment and sustainable development goals through the provision of capacity-building, knowledge sharing, policy advice, and research in three thematic areas: Climate Change, Air and Atmosphere, and Waste Management.
- [**The Asia Center for Air Pollution Research \(ACAP\)**](#), based in Niigata, Japan, serves as the Network Center for the Acid Deposition Monitoring Network in East Asia (EANET), a regional initiative launched in [2001](#) to address serious air pollution and acid deposition challenges in East Asia. Formerly known as the Acid Deposition and Oxidant Research Center (ADORC), ACAP plays a central role in monitoring, research, and capacity building on air quality issues across 13 participating countries, in collaboration with governments, research institutions, and international partners.
- [**Clean Air Asia \(CAA\)**](#), headquartered in Manila, Philippines, with regional offices in Beijing, China, and New Delhi, India, is a leading non-profit organization working across Asia to improve air quality and contribute to healthier, more livable cities. CAA works with governments, cities, and partners to develop science-based policies and implement sustainable air quality management strategies.
- [**The Clean Air Institute \(CAI\)**](#) is an independent, nonprofit organization founded in 2006, with headquarters in Washington, DC, and a regional office in Mexico City. It was established as a spin-off from the Clean Air Initiative for Latin America and the Caribbean (originally launched by the World Bank and major metropolitan partners). CAI is recognized as an international reference center dedicated to improving air quality and mitigating climate change, focusing on rigorous air quality management, public health protection, and sustainable mobility. It specializes in enabling strategic policymaking and catalytic investments through strong multi-stakeholder engagement.
- [**The Environmental Compliance Institute \(ECI\)**](#) is a Nairobi-based non-profit organization established in 2013 to promote environmental governance and compliance in East Africa. Accredited by UNECOSOC and UNEA, and a partner of the Climate and Clean Air Coalition (CCAC), ECI supports clean air and climate initiatives through policy development, capacity building, and regional collaboration.
- The **UN Economic and Social Commission for Asia and the Pacific (ESCAP)** is the UN's regional development arm for the Asia-Pacific region, headquartered in Bangkok.
- [**The Finnish Meteorological Institute \(FMI\)**](#) is Finland's national agency for weather, climate, and air quality services. Based in Helsinki, FMI conducts research on atmospheric science, climate change, and environmental monitoring, providing forecasts and data to support public safety and policy.
- [**Gyeonggi Research Institute \(GRI\)**](#) is a public policy think tank in Suwon, South Korea, focused on regional development, urban planning, and environmental policy. Established in 1995, GRI supports evidence-based policies development and sustainable development through research and collaboration with local and international partners.
- [**The Incheon Research Institute \(IRI\)**](#), also known as the Incheon Institute, is a public research organization based in Incheon, South Korea. It conducts systematic and applied research to support urban development, regional economy, transportation, climate, and environmental policy. The institute collaborates with local governments and public agencies to provide evidence-based solutions for sustainable urban planning and public investment management.
- The [**Institute for Global Environmental Strategies \(IGES\)**](#) is a Japan-based research institute established in 1998 under a Japanese government initiative, with support from

Kanagawa Prefecture. Headquartered in Hayama, Japan, IGES operates additional offices in Tokyo, Kobe, Kitakyushu, Bangkok, Beijing, and New Delhi. The institute conducts policy-oriented research to develop innovative strategies for sustainable development, focusing on the Asia-Pacific region and addressing global environmental challenges. IGES's research activities are organized into thematic centers covering areas such as climate and energy, sustainable consumption and production, natural resources and ecosystem services, and quantitative modeling and governance for sustainability.

- **MOVEGREEN** is a youth-led environmental organization based in Bishkek, Kyrgyzstan, founded in 2011. It focuses on air pollution, climate change, disaster risk reduction, and environmental education. MOVEGREEN engages young people in activities like tree planting, cleanups, and citizen environmental monitoring. Its AQ.kg app provides real-time air quality data across Kyrgyzstan. MOVEGREEN collaborates with national and international partners, including UNEP and the U.S. Department of State, to promote sustainable development in Central Asia.
- The **RES Foundation** is a Serbian non-governmental organization established in 2015, focusing on energy, climate, and air quality policies to promote social benefits and improve the conditions of marginalized groups. It engages in participatory local energy and climate planning, policy design processes, and is active in numerous climate and air pollution-related initiatives in Serbia and the region. The foundation is recognized as a leading organization in climate and air quality policy, particularly in the Western Balkans.
- **Seoul Institute (SI)** improves municipal administration, enhances the quality of life of Seoul citizens, and reinforces the competitiveness of the city by setting a medium- and long-term vision of the Seoul Metropolitan Government (SMG); Suggest social policies on welfare, culture, education, and industries and urban management policies on city planning, transportation, safety and the environment through professional research.
- **Stockholm Environment Institute (SEI)** is an independent non-profit research organization founded in 1989 and headquartered in Stockholm, Sweden, with centers worldwide. SEI supports sustainable development by providing knowledge that links science, policy, and practice. It focuses on climate change, energy, water, air quality, land use, and food security, working closely with stakeholders to inform policy globally.
- **World Resources Institute (WRI)** is a global, non-profit research organization founded in 1982 that focuses on improving people's lives, protecting nature, and combating climate change. It works across more than 50 countries (and operates globally) to produce high-quality research, tools, and data—such as the Global Forest Watch—targeting key areas like food, forests, water, energy, cities, oceans, and climate. WRI's data-driven approach supports smart, scalable solutions and informs policies and practices at every level.
- **Zoï Environment Network** is a Geneva-based non-profit organization established in 2009. It specializes in analyzing and communicating environmental issues to support sustainable societies. Zoï combines expertise in environmental science, design, and communication to create accessible information products for decision-makers and the public. The organization focuses on themes such as climate change, security and conflict, chemicals and waste, water, biodiversity, and access to information. Zoï collaborates with various multilateral and bilateral development agencies, global environmental agreements, regional organizations, NGOs, and consulting companies. It holds consultative status with UN ECOSOC and is accredited with UNFCCC, UNEA, and IOM.

ANNEX XV.COMMUNICATION AND OUTREACH TOOLS

178. The TE findings will be shared with key stakeholders through the following channels:

179. The UNEP Evaluation Office will share the evaluation findings with the UNEP Industry and Economy Division, Chemicals and Health Branch, Pollution and Health Unit, and other UNEP divisions and UNEP Regional Offices involved in project implementation. This will facilitate their feedback on the findings and the development of work plans to integrate the recommendations into ongoing project activities and future project designs.

180. The UNEP Evaluation Office will also share the evaluation report with donors and project implementation partners for their review, fact check, comments, and responses.

181. The evaluation report will be published on the [UNEP Knowledge Repository](#) for public access and transparency.

ANNEX XVI. BRIEF CV OF THE EVALUATOR

Name	Chuanrong WANG
Profession	International Evaluation Consultant
Nationality	Chinese
Country experience	• Europe: Belgium, France, Germany, Moldova • Africa: Ghana, São Tomé and Príncipe, Tanzania, Uganda, • Asia: Cambodia, China, India, Japan, Lebanon, Sri Lanka, Thailand, the Republic of Korea, Malaysia, Viet Nam, • Americas: USA
Education	• Bachelor of Science in Chemistry, Sichuan Normal University, China • Master of Science on International Material Flow Management, University of Applied Sciences Trier, Germany • EMBA, KEDGE Business School, France

Short biography

Ms. Chuanrong WANG is 20 years experienced Senior Expert in donor-funded projects with a focus on Circular Economy, Waste and Pollutants management, Environment Governance, and Sustainable Consumption and Production. Her primary role includes facilitating policy dialogues and enhancing development and cooperation from Europe to international platforms. She has extensive experiences in the design, implementation, as well as monitoring and evaluation of projects, encompassing proposal evaluations and audits of project contracts.

Key specialties and capabilities cover:

- Knowledge of Chemical and Waste Management
- Experience in managing, implementing, reporting, and monitoring and evaluating projects
- Proven previous experience in evaluation of Chemicals and Waste projects at UN Agencies
- Familiarity of international donor mandates and funding management

Selected assignments and experiences

- Team leader for Assessment of 11 Closed Projects Under the Special Programme of Chemicals and Waste Management of UNEP (Argentina, Belarus, Benin, China, Dominican Republic, Iraq, Kyrgyzstan, Moldova, Serbia, Tanzania, Uganda)
- Team Leader for Evaluation of "Integrated Waste Management NAMA (now Mitigation Action Facility) National Support Project in China"
- Terminal Review of the UNEP Project "Promotion and Delivery of Environmentally Sound Waste Management Technologies and Methods and in-Country Technical and Advisory Support (PIMS ID 02010)" 2018-2023
- Terminal Evaluation of the UNEP Project "Generating and Sharing Knowledge for Influencing Decision-Making on Sound Management of Chemicals and Waste (PIMS: 2029)" 2018-2023
- Assessor for EU Grants Applications received in the framework of the Call for Proposals of SWIM (Sustainable Water Integrated Management) II programme 2016 – Demonstration Projects
- External evaluator for Applications submitted to the EU SWITCH Asia - Promoting Sustainable Consumption and Production Calls for Proposals in 2017 and 2023

ANNEX XVII. TERMINAL EVALUATION TOR

Terminal Evaluation of the UNEP project Providing support to countries and cities in improving air quality in order to improve environmental quality and the health and well-being of all (SMA ID 40440)

Section 1: PROJECT BACKGROUND AND OVERVIEW

1. Project General Information

Table 1. Project summary

UNEP SMA ⁶⁴ ID:	PIMS 02067, SMA: 40440	Grant ID ⁶⁵ (if applicable):	
UNEP Management (Division/Branch/Unit):	Industry and Economy Division/Chemicals and Health Branch/Air Quality and Mobility and Pollution and Health Unit		
Implementing Partners:	Asia Centre for Air Pollution Research (ACAP), Environmental Compliance Institute (ECI), Clean Air Institute, Zoi Environment Network, Finnish Meteorological Institute Asian Institute of Technology (AIT), MOVEGREEN, RES Foundation, Clean Air Asia, Stockholm Environment Institute (SEI), Institute for Global Environmental Strategies (IGES), Seoul Research Institute, Incheon Research Institute, Gyeonggi Research Institute, Cambodia Ministry of Environment, Sri Lanka Ministry of Environment ESCAP, UNICEF, and World Health Organization		
Sources of Funding:	Country ⁶⁶ (ies): Global Regional	Institution ⁶⁷ Name/Type:	
Relevant SDG(s):	SDG 3 - target 9 (Indicator 3.9.1) SDG 7 - target 1 (Indicator 7.1.2) SDG 11- target 6 (Indicator 11 .6.2) SDG 12 - target 4 (Indicator 12.4.1) SDG 17 target 9 (Indicator 17.9.1)		
MTS (all that apply):	2018–2021 and 2022-2025	UNEP approval date:	01/07/2019
POW Direct Outcome(s) number/reference ⁶⁸ (applicable for projects approved from 2022): OR POW Output(s) number/reference ⁶⁸	POW Direct Outcome: PoW 2022-2023 DO (3.4) DO (3.5) DO (3.13)	MTS 2025 Outcome(s) number/reference ⁶⁸ (applicable for projects approved from 2022): OR POW Expected Accomplishment(s) number/reference ⁶⁸ above (applicable for	MTS 2025 Outcome: 3(iii)

⁶⁴ SMA refers to the ID provided by the Integrated Planning, Management and Reporting Solution (IPMR) system, which was introduced by UNEP in July 2023. Previously, it was referred to as a PIMS ID number.

⁶⁵ For example, ID references from EC, IKI, UNDA, Adaptation Fund, GCF.

⁶⁶ Where applicable, list countries who have provided project funds and/or co-finance.

⁶⁷ Indicate where funding institutions are any/all of the following: Foundation/NGO; Private Sector; UN Body; Multilateral Fund; Environment Fund; Other.

⁶⁸ For these items do not include full text. Only enter the number or reference.

<i>(applicable for projects approved pre-2022):</i>	POW Output: 5-c-1 5-c-3: 5-c-4:		projects approved pre-2022):	POW Expected Accomplishment: EA (c) (i) EA (c) (ii) EA (c) (iii) PoW 2022-2023
Sub-programme:	Chemicals and Pollution Action		Programme Coordination Project (if relevant):	
Expected start date:	01/04/2019		Actual start date:	07/2019
Planned completion date:	30/06/2022		Actual operational completion date:	06/2023
Planned project budget ⁶⁹ at approval:	Planned Core Funding (regular budget, Environment Fund, etc.):			
	Planned Extra-budgetary Funds ⁷⁰ :			
	Cash: 4,835,789 In-kind: Total Planned Budget: USD 8,592,291			
Actual expenditures reported:	Actual Core Funding expenditures reported as of <i>insert date</i> :			
	Actual Extra-budgetary Funds expenditures reported as of <i>insert date</i> :			
	Cash: In-kind: Total actual expenditures reported as of <i>insert date</i> :			
First disbursement:			Planned date of financial closure:	
No. of formal project revisions:	1		Date of last approved project revision:	05/11/2021
No. of Steering Committee meetings:			Date of Last Steering Committee meeting:	
Mid-term Review/ Evaluation ⁷¹ (<i>required or not required</i>):	UNEP requirement:	No	Mid-term Review/ Evaluation actual date:	June 2022
	Donor requirement:	Y/N		
Terminal Evaluation (<i>planned date</i>):	2025		Terminal Evaluation actual date:	
Coverage - Country(ies):	Ethiopia, Uganda, Costa Rica, Peru, Cambodia, India, Palestine, Republic of Korea, Serbia, Kazakhstan,		Coverage - Region(s):	Africa, Asia Pacific, Europe, Latin America and the Caribbean, West Asia

⁶⁹ Total budget may include: Regular Budget, Environment Fund, Extra-Budgetary, including 'softly-earmarked' etc.

⁷⁰ Extra-budgetary funds may include co-finance (cash/in-kind)

⁷¹ UNEP projects of four or more years duration require an MTR unless there is an exceptional circumstance. See the Evaluation in the Project Cycle section in the [Evaluation Office's operational manual](#). Donor requirements may vary and should be considered in conjunction with UNEP's requirements.

	Kyrgyzstan, Uzbekistan, Indonesia, Sri Lanka, Vietnam, Mongolia [EANET participating countries]		
Dates of previous project phases:		Status of future project phases:	

2. Project Rationale

Air pollution is the world's leading environmental health risk, contributing to approximately 6.5 million deaths annually. Between 2008 and 2013, urban air pollution increased by 8%, with 80% of urban populations exposed to air quality exceeding WHO guidelines. Low- and middle-income countries, particularly in Asia Pacific and Africa, bear the greatest burden, accounting for 94% of air pollution-related deaths. Premature mortality due to air pollution rose from 4.8 million in 1990 to 7 million in 2016, with significant links to respiratory and cardiovascular diseases. The economic toll is also severe, with estimated welfare losses of \$5 trillion and annual lost income of \$255 million.⁷² In addition to harming human health, air pollution damages ecosystems, reducing crop yields, degrading soil and water quality, and accelerating climate change through pollutants such as black carbon.

Despite increasing awareness, many countries lack the institutional capacity, legal frameworks, and technical expertise to address air pollution effectively. Key challenges include weak policy implementation and enforcement, insufficient monitoring infrastructure, limited public awareness, and a lack of cross-sectoral collaboration and regional cooperation. These gaps hinder progress in mitigating air pollution and achieving better air quality.

Recognizing these challenges, the United Nations Environment Assembly (UNEA) adopted resolutions UNEP/EA.1/RES.7 and UNEP/EA.3/RES.8 at its first and third sessions, respectively. These resolutions urged governments to take action across sectors to reduce all forms of air pollution and requested UNEP to support countries through technical assistance in air quality monitoring and assessment, the development of action plans, and enhanced regional and international cooperation. In response, UNEP strengthened its institutional focus on air quality and initiated a global air quality program to integrate its expertise and services under a single framework.

The project, titled ***Providing Support to Countries and Cities in Improving Air Quality (PIMS 2067)***, was designed to support the implementation of these resolutions and address the critical gaps in air pollution management. It aimed to enhance air quality worldwide by assisting national and local governments through scientific assessments, policy guidance, capacity-building tools, and a cooperative framework for multi-stakeholder engagement. The initiative focused on five key areas:

1. Supporting the development of assessments on air quality status and trends made available to decision-makers and relevant stakeholders
2. Promoting the establishment of functional urban air quality monitoring networks
3. Developing tools and methodologies to guide clean air plans and strategies
4. Strengthening global and regional cooperation and partnerships to address air pollution

⁷² WHO (2018). Burden of disease from the joint effects of household and ambient Air pollution for 2016

WHO (2016). Ambient air pollution: a global assessment of exposure and burden of disease.

World Bank and Institute for Health Metrics and Evaluation (2016). The Cost of Air Pollution: Strengthening the Economic Case for Action

Bowe et al. (2018). The 2016 global and national burden of diabetes mellitus attributable to PM2.5 air pollution.

WHO (2018). 9 out of 10 people worldwide breathe polluted air, but more countries are taking action.

5. Enhancing communication and awareness-raising tools to encourage action and promote best practices

Spanning multiple regions, including Africa, Asia Pacific, Europe, and Latin America, the project implemented targeted interventions in Ethiopia, Uganda, Costa Rica, Peru, Cambodia, and India. It also reinforced collaboration with existing regional initiatives such as the Asia Pacific Clean Air Partnership (APCAP), the Climate and Clean Air Coalition (CCAC), and the African Ministerial Conference on the Environment (AMCEN).

The project directly contributed to the Sustainable Development Goals (SDGs), particularly SDG 3 (Good Health & Well-being), SDG 7 (Affordable and Clean Energy), SDG 11 (Sustainable Cities & Communities), SDG 12 (Responsible Consumption & Production), and SDG 17 (Partnerships for the Goals). Through a holistic approach, it sought to equip countries, cities, and stakeholders with the necessary knowledge, capacity, and tools to take effective action against air pollution, ultimately improving public health and environmental sustainability.

3. Project Results Framework

The table below reports the project outcome and outputs, as presented in the Logical Framework of the UNEP revised Project Document (ProDoc) in November 2021.

Table 1: Project Logical Framework

Relevant Expected Accomplishment in the Programme of Work: SP5 – Chemicals, Waste and Air Quality: EA (c): National emissions sources identified, policies, legal, regulatory, fiscal and institutional frameworks and mechanisms for the reduction of air pollution developed, institutional capacity built for improved air quality, and air quality assessments done by countries with UNEP support			
Project Outcome	Indicator	Baseline	Target
Governments have measures, policies or frameworks in place to address air pollution for improved air quality and human health ⁶ at national and subnational level through the support of UNEP	- Number of governments that are adopting and/or applying measures, action plans, and policies contributing to improve environmental quality and human health and well-being (baseline: 5, target: 14) - Number of governments that have developed or are using publicly accessible monitoring data and information for inventories or assessments (baseline: 0, target: 6)	5	14
Project Outputs	Indicator	Baseline	Target
A) Assessments to inform the state of air quality developed and made available to decision-makers and relevant stakeholders	- Number of reports developed and made available (baseline: 0; target: 6) - Number of decision makers and relevant stakeholders that report having access to air	0 0	6 30

	quality reports (baseline: 0; target: 30)		
B) Advisory and support services provided to establish functional urban air quality monitoring networks	- Number of people trained in air quality monitoring, or related issues (Baseline: 0; Target: 80) - Number of guidance documents made available to city air quality managers (baseline: 0; Target: 8)	0 0	80 8
C) Advisory and support services provided in action planning and air quality strategy development and implementation	- Number of sectoral air quality action plans developed (Baseline: 4; Target 9) - Number of institutions with improved capacity to assess or address air quality issues supported (Baseline: 0; Target: 6)	4 0	9 6
D) Governments' institutions demonstrate increased knowledge, and coordination/collaboration on air quality action enhanced at regional and global level	- Number of meetings convened for coordination and knowledge sharing at the regional level (Baseline: 2; Target:4) - Number of annual meetings of Intergovernmental Network (Baseline: 3; Target 5) - Number of people and/or governments institutions that have gained knowledge on air quality action (Baseline: 0; target: 10) - Number of regional action plans developed by regional Economic Bodies/Intergovernmental Network (Baseline: 0; Target 1)	2 3 0 0	4 5 10 1
E) Enhanced communication and awareness-raising tools to encourage action and promote best practices	Number of knowledge sharing mechanisms developed (for instance communities of practice, conferences, online platforms, case study	0 0	12 1

Figure 1. Theory of Change as presented in the ProDoc at design, page 28

The PIMS 2067 project “Providing Support to Countries and Cities in Improving Air Quality” had the following components/grants:

EANET (Acid Deposition Monitoring Network in East Asia) was to contribute to the project by providing scientifically credible, high-quality monitoring data on acid deposition and air pollution across 13 participating countries in East Asia. As part of its role under UNEP's Asia Pacific Office, EANET was to support regional assessments, informed policy decisions, and strengthened institutional capacities through technical assistance, standardized methodologies, and training. It also was to serve as a platform for regional cooperation and knowledge exchange, helping countries enhance their air

quality monitoring systems and policy frameworks to address acid deposition and broader air pollution challenges.

2) Asia Pacific Clean Air Partnership

The Asia Pacific Clean Air Partnership (APCAP) was to contribute to the project by serving as a regional platform for coordination, knowledge sharing, and capacity building. It was to support countries in developing clean air action plans, conduct training for air quality officers, and facilitate regional dialogue through forums. APCAP also was to help align national efforts with science-based clean air measures and strengthened evidence-based policymaking in the region.

3) Air Quality Action forum in India

The Air Quality Action Forum in India was to contribute to the project by supporting the implementation of the National Clean Air Programme (NCAP) through stakeholder engagement, policy support, and technical assistance. It was expected to focus on reducing air pollution in industrial clusters by facilitating collaboration among government agencies, experts, and communities. Funded by Norway and SIDA, the forum also was to help develop clean air strategies, build institutional capacity, and promote evidence-based actions to improve air quality in India.

4) Clean Air Solutions for Children

The "Clean Air Solutions for Children" initiative was to contribute to the project by addressing the specific vulnerabilities of children to air pollution. It was to focus on raising awareness, promoting behavioral change, and developing targeted interventions to reduce children's exposure to harmful air pollutants. The initiative supported data collection, advocacy, and capacity building aimed at protecting children's health, particularly in urban areas, and was integrated into the project's broader goals of improving air quality and promoting public health through inclusive, stakeholder-driven actions.

5) Beating Air Pollution in Seoul; Metropolitan region through evidence-based solutions

The "Beating Air Pollution in Seoul" initiative was to contribute to the project by showcasing successful city-level strategies and best practices for tackling air pollution. It was to provide a model of effective urban air quality management through policy measures, technological innovation, and public engagement. Insights and lessons from Seoul's experience were to be shared through regional platforms and forums, helping inform and inspire other cities participating in the project to adopt similar approaches for improving air quality and protecting public health.

6) Supporting Countries to Monitor and Improve Urban Air Quality

The sub-project "Supporting Countries to Monitor and Improve Urban Air Quality" was to contribute to the broader initiative by helping countries establish and enhance urban air quality monitoring networks. It was to provide technical guidance, capacity building, and tools to deploy affordable monitoring technologies, enabling cities to gather reliable air quality data. This data was expected to support evidence-based policymaking, inform the development of clean air action plans, and increase public awareness. The sub-project was to play a key role in strengthening institutional capacity and fostering local ownership of air quality management efforts.

7) Improve air quality in the Asia-Pacific region by establishing and strengthening air quality communities of practice

The project "Improve air quality in the Asia-Pacific region by establishing and strengthening air quality communities of practice" was to contribute to the 'umbrella' project by fostering regional collaboration and peer learning among policymakers, practitioners, and experts. It was to create platforms for regular exchange of knowledge, experiences, and best practices on air quality management. These communities of practice were expected to support capacity building, enhance regional coordination, and encourage the adoption of effective, locally adapted solutions to air pollution, thereby strengthening the overall impact and sustainability of the project's goals in the Asia-Pacific region.

Some of the components/grants listed above include a results framework, as described in Annex 2.4.

Executing Arrangements

The Industry and Economy Division was responsible for the overall management of the project and the monitoring of its results. Reporting to the Head of the Air Quality and Mobility Unit until 2019 and to the Head of the Pollution and Health Unit since then, the Programme (Air Quality Coordinator)

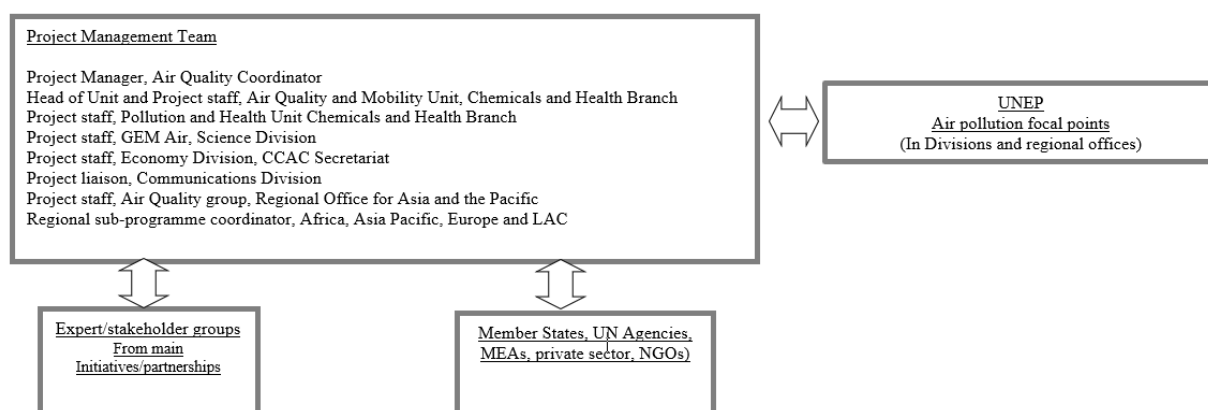
acted as the project manager, overseeing deliverables and supervising the project team. Given the cross-cutting nature of the project's activities, overall support was provided by a team composed of colleagues from the Science Division (now Early Warning and Assessment Division), Law Division, Communication Division, regional offices, and the CCAC Secretariat to help achieve the project's objectives.

Strong coordination with the Regional Offices was promoted throughout the project. These offices led regional activities, identified the needs of countries and cities, and were actively involved in implementation—particularly regarding capacity-building efforts, workshops, and regional communities of practice. They also supported the identification of best practices and facilitated South-South exchanges.

The CCAC Secretariat was closely involved in the project. It led the development of two assessments under Output 1—the Africa Regional Assessment and the Methane Assessment—and contributed to Output 4 by using its global outreach and constituency to enhance international and regional cooperation. Although the work of CCAC's initiatives was captured under its own project document within Sub-programme 1, relevant lessons learned and knowledge were shared with the Air Quality project management team.

A Steering Committee, composed of the main stakeholders and beneficiaries, was established to provide oversight. It influenced decision-making at global, national, and subnational levels, reviewed the annual workplan, and proposed corrective actions in case of implementation challenges or delays.

Figure 2. Project implementation arrangements as presented in the ProDoc at design, page 41



5. Project Cost and Financing

The project funding structure at the time of the design, as presented in the ProDoc, and following the project's closure, is as follows.

Table 2: Budget Summary as presented in the ProDoc at design, pages 7 and 8.

TYPE OF FUNDING	SOURCE OF FUNDING	Details	Year 1 2019	Year 2 2020	Year 3 2021	Year 4 2022	Total
CASH	Environment Fund (EF) activity budget			-			
	Regular Budget (RB) activity budget						
	Extra Budgetary Funding (XB) (posts + non-post + Programme Support Cost (PSC))	Donor funding Secured	353,982	353,982	176,991	176,991	1,061,946
		1. Government of Japan for APCAP					
		2. EANET Member countries		543,700			543,700
		3. Norway- Reducing Air Pollution in India's Industrial Clusters	45,370				45,370
		4. SIDA - Reducing Air Pollution in India's Industrial Clusters	92,593				92,593
		5. US State Department	511,905 412,500	206,906 437,500	155,180		873,991 850,000

		6. CCAC ⁷³					
		Unsecured XB funding			614,400	614,400	1,228,800
		1. EANET Member countries				150,000	150,000
		2. APCAP Joint Forum					
		3. Norway/SIDA – Upscaling UNEPs work on Air Quality	975,000	975,000	975,000	487,500	3,412,500
		Programme Support Cost on Secured funds:					
		1. EANET participating countries		70,681			70,681
		2. Government of Japan – APCAP	46,018	46,018	23,009	23,009	138,054
		3. Norway- Reducing Air Pollution in India's Industrial Clusters	3,630				3,630
		4. SIDA - Reducing Air Pollution in India's Industrial Clusters	7,407				7,407
		5. US State Department	66,548	26,898	20,173		113,618
		XB Sub-total	2,514,953	2,660,685	1,964,753	1,451,900	8,592,291
		SUB- TOTAL					
IN-KIND							
	CCAC	Awaiting confirmation	150,000				150,000
	XB in Kind	Staff Time Africa Project Manager	18,000	18,750	19,000	9,625	65,375
	SUB- TOTAL		168,000				215,375
TOTAL PROJECT PLANNED BUDGET (without EF & RB posts' costs)			2,731,500	2,679,776	2,017,512	1,451,900	8,855,924
In Kind EF & RB Posts	Environment Fund post costs		298,040	327,844	357,648	208,628	1,192,160
	Regular Budget post costs		78,070	85,877	93,684	50,746	308,377
TOTAL PROJECT PLANNED BUDGET							
	Funding secured		1,539,953	1,685,685	375,353	200,000	3,800,991
	Allocation to Regional Offices						

Table 3: Budget summary as of 23 April 2024, shared by the project's Fund Management Officer

⁷³ CCAC funding's contribution to this project has no PSC calculation below as this amount is deducted upfront by the Secretariat

The project included 13 grants for 7 project components.

Project title	Start Date	End Date	Approved Budget as per Prodoc (USD) (Secured & Not secured)	Total Secured Budget (USD) (As per the final Prodoc or Project Revision)	Allotment	Total Expenditure	Balance	Status	Funding Source
Providing support to countries & cities in improving air quality	7-Jan-19	30-Jun-23	10,114,588	6,872,155	6,517,924	6,236,788			SIDA, USDOS, Japan, ROK
Sub-projects/Grants									
Government of Japan – APCAP: S1-32CPL-000379	15 May 2019	30 June 2024	1,349,999.00	877,236.24	877,236.24	877,236.24	-	Open- balance moved to the new project	Japan
EANET Member countries: M1-32CPL-000284	1 March 2015	31 December 2025	1,843,181.00	1,644,464.35	1,644,464.35	1,644,464.35	-	Open- balance moved to the new project	EANET
Norway: M1-32NPL-000089/94/95	18 July 2019	31 July 2021		399,000.00	399,000.00	378,867.87	20,132.13	Closed	Norway
SIDA:M1-32SEL-000047/48/49	6 December 2018	30 June 2023	3,788,522.00	1,277,977.66	1,277,977.66	1,235,467.67	42,509.99	Closed	SIDA
GMNR				105,000.00	105,000.00	76,921.82	28,078.18		
CCAC			850,000.00				-		CCAC
UNICEF: S1-32CPL-000435	29 September 2020	31 December 2021	50,000.00	50,000.00	44,940.00	44,940.00	-	Closed	UNICEF
Korea City Governments: M1-32CPL-000535	28 December 2020	30 June 2023	800,850.00	800,850.00	714,318.95	714,318.95	-	Closed	Korea
PayTM Foundation: M1-32CPL-000564	21 September 2021	5 June 2023	183,948.00	183,948.00	173,112.89	173,112.89	-	Closed	PayTM
Korea: M1-32CPL-000552	13 May 2021	31 May 2025	160,478.00	238,075.25	140,148.37	123,628.68	16,519.69	Open- balance to be moved to the new project	Korea
US State Department-South Africa: S1-32CPL-000529	22 February 2022	30 September 2024	100,000.00	307,993.08	154,116.46	11,413.00	142,703.46	Open- balance to be moved to the new project	USDOS
US State Department (Global): S1-32CPL-000356	20 August 2018	30 September 2022	592,592.00	592,592.00	592,591.61	561,434.12	31,157.49	Closed	USDOS
US State Department (Asia Pacific): S1-32CPL-000357	20 September 2018	30 June 2022	395,018.00	395,018.00	395,017.66	394,982.70	34.96	Closed	USDOS
Sub-projects					4,441,681.70				
EANET	01-Mar-15	31-Dec-25	1,843,181	1,644,464	1,644,464.35	1,644,464.35	-	Open- balance moved to the new project	EANET member countries
Asia Pacific Clean Air Partnership	30-May-19	30-Jun-24	1,350,000	877,236	877,236.24	877,236.24	-	Open	Government of Japan
Air Quality Action forum in India	21-Sep-22	30-Apr-23	183,948	183,948	173,112.89	173,112.89	-	Closed	PayTM Foundation
Clean Air Solutions for Children	29-Sep-20	31-Dec-21	50,000	50,000	44,940.00	44,940.00	-	Closed	UNICEF
Beating Air Pollution in Seoul; Metropolitan region through evidence-based solutions	28-Dec-20	30-Jun-23	800,850	800,850	714,318.95	714,318.95	-	Closed	Seoul, Incheon, Gyeonggi
Improve air quality in the Asia-Pacific region by establishing and strengthening air quality communities of practice	20-Sep-18	31-Mar-22	987,610	987,610	987,609	956,417	31,192.45	Closed	US State Department
Supporting Countries to Monitor and Improve Urban Air Quality				2,328,046	2,076,242				

6. Implementation Issues

Operational complexity was a challenge in managing a global project that involved multiple regions and implementing partners, particularly due to varying levels of institutional readiness and differing local contexts. The COVID-19 pandemic caused delays in implementation, especially for activities that required in-person workshops, training, or the deployment of monitoring equipment. Initial difficulties arose in aligning partner activities and disbursing funds, partly because of the combination of secured and unsecured funding streams. Coordination and reporting requirements were burdensome due to the involvement of multiple donors and administrative systems.

The project was revised in November 2021 to reflect UNEP's evolving efforts in air pollution reduction, increased focus on the health impacts of air pollution, and the availability of new funding to support expanded activities. The revision aimed to inject additional resources, raise the ambition of project interventions at sub-regional and national levels, extend the project duration for select outputs, and align the project with UNEP's new Medium-Term Strategy (MTS) and Programme of Work (POW).

The project revision brought several significant changes and enhancements to the original Project Document (ProDoc) for the UNEP programme on air quality. One of the primary modifications was the extension of the project duration. Initially scheduled to run from July 2019 to June 2022 for a total of 36 months, the revised project extended the timeline by one year, concluding in June 2023. This extension allowed additional time to deliver expanded outputs and accommodate newly secured funding and sub-projects.

Alongside the extended timeline, the project budget was also increased. The original planned budget of USD 8.59 million was raised to USD 10.11 million. This increase was largely due to new contributions, including USD 800,850 from the Government of Korea, USD 50,000 from UNICEF, and USD 183,948 from PayTM in India. Furthermore, additional funds totalling USD 843,676 were secured from SIDA in 2020 and 2021 for the 'umbrella' project.

The revision also incorporated three new components/grants under the 'umbrella' Air Quality Project:

1. The Seoul Metropolitan Region (SMR) sub-project, with a budget of USD 800,850, aimed to assess air pollution reduction measures in the region, raise awareness, evaluate policy effectiveness, and identify best practices for replication elsewhere. It contributed to Outputs A and E.
2. The “Clean Air Solutions for Children” sub-project, in partnership with UNICEF, focused on identifying and promoting child-centered clean air interventions in the Asia Pacific region. This initiative, budgeted at USD 50,000, was captured under Output D and aimed to reduce the health impacts of air pollution on children.
3. Launch of a new initiative in India, the “Air Quality Action Forum” led by UNEP’s India Office with support from the Asia Pacific Office and the CCAC. This initiative supported the implementation of UNEA resolutions 1/7 and 3/8 and aimed to create a coordinated platform for air quality efforts in India through an Air Quality Action Forum under the leadership of the Ministry of Environment, Forests and Climate Change. Funded by PayTM with a budget of USD 183,948, it contributed to Output E.

In addition to expanding in scope and financing, the project also extended its geographical reach. While the original ProDoc focused on countries such as Ethiopia, Uganda, Costa Rica, Peru, Cambodia, and India, the revised project added several more, including Palestine, the Republic of Korea, Serbia, Kazakhstan, Kyrgyzstan, Uzbekistan, Indonesia, Sri Lanka, Vietnam, and Mongolia.

The project’s logical framework and milestones were updated accordingly to reflect the expanded scope and revised outputs. New targets were introduced, including an increased number of air quality assessments, additional training sessions, and more guidance documents for local authorities. Each of the new sub-projects was assigned specific milestones to track progress and ensure alignment with the overall goals.

The revised project was brought into alignment with UNEP’s updated strategic priorities. It reflected the organization’s Medium-Term Strategy for 2022–2025 and the Programme of Work for 2022–2023. These frameworks emphasized the health impacts of air pollution and the importance of institutional capacity building, further reinforcing the relevance and ambition of the revised project.

The Mid-Term Review of the project in June 2022 highlighted that the project was relevant, technically sound, and showed tangible results, but faced coordination, funding, and pandemic-related challenges. It also stressed that revisions to the logframe and funding allocations helped adapt the project to changing conditions, and the team demonstrated flexibility in maintaining momentum. However, it underscored that institutional capacity, gender mainstreaming, and long-term sustainability required closer attention in the final phase of implementation.

Section 2. OBJECTIVE AND SCOPE OF THE EVALUATION

7. Objective of the Evaluation

In line with the UNEP Evaluation Policy⁷⁴ and the UNEP Programme and Project Management Manual,⁷⁵ the Terminal Evaluation is undertaken at operational completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency) and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The Evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UNEP and its partners of implementing partners such as Asia Centre for Air Pollution Research (ACAP), Environmental Compliance Institute (ECI), Clean Air Institute, Zoi Environment Network, Finnish Meteorological Institute Asian Institute of Technology (AIT), MOVEGREEN, RES Foundation, Clean Air Asia, Stockholm Environment Institute (SEI), Institute for Global Environmental Strategies (IGES), Seoul Research Institute, Incheon Research Institute, Gyeonggi Research Institute, Cambodia Ministry of Environment, Sri Lanka Ministry of Environment, ESCAP, UNICEF, and World Health Organization. Therefore, the Evaluation will identify lessons of operational relevance for the formulation and implementation of future air pollution/quality projects. Recommendations relevant to the whole house may also be identified during the evaluation process.

⁷⁴ <https://wedocs.unep.org/handle/20.500.11822/41114>

⁷⁵ <https://wedocs.unep.org/20.500.11822/42752>

The PIMS ID 2067 had 13 grants and concluded in June 2023. However, some grants allocated to two sub-projects—namely the Asia Pacific Clean Air Partnership and EANET—were scheduled to continue until 2024 and 2025, respectively. As a result, the remaining funds from EANET member countries, the Government of Japan, the Republic of Korea, and the U.S. Department of State were transferred to a new follow-up project titled UNEP-wide project on Improving Air Quality, as indicated in Table 3 above.

In light of this development, the terminal evaluation will assess the performance of the ‘umbrella’ project up to its closure in June 2023. It will not evaluate the results or deliverables funded by the grant balances transferred to the follow-up project.

8. Key Evaluation Principles

Evaluation findings and judgements will be based on **sound evidence and analysis**, clearly documented in the Evaluation Report. Information will be triangulated (i.e. verified from different sources) as far as possible, and when verification is not possible, the single source will be mentioned (whilst anonymity is still protected). Analysis leading to evaluative judgements should always be clearly spelled out.

The “Why?” Question. As this is a Terminal Evaluation and the UNEP-wide project on improving air quality SMA 156083 is being implemented particular attention will be given to learning from the experience. Therefore, the “why?” question should be at the front of the consultants’ minds all through the evaluation exercise and is supported by the use of a theory of change approach. This means that the consultant(s) needs to go beyond the assessment of “what” the project performance was and make a serious effort to provide a deeper understanding of “why” the performance was as it was (i.e. what contributed to the achievement of the project’s results). This should provide the basis for the lessons that can be drawn from the project.

Attribution, Contribution and Credible Association: In order to *attribute* any outcomes and impacts to a project intervention, one needs to consider the difference between what has happened with, and what would have happened without, the project (i.e. take account of changes over time and between contexts in order to isolate the effects of an intervention). This requires appropriate baseline data and the identification of a relevant counterfactual, both of which are frequently not available for evaluations. Establishing the *contribution* made by a project in a complex change process relies heavily on prior intentionality (e.g. approved project design documentation, logical framework) and the articulation of causality (e.g. narrative and/or illustration of the Theory of Change). Robust evidence that a project was delivered as designed and that the expected causal pathways developed supports claims of contribution and this is strengthened where an alternative theory of change can be excluded. A *credible association* between the implementation of a project and observed positive effects can be made where a strong causal narrative, although not explicitly articulated, can be inferred by the chronological sequence of events, active involvement of key actors and engagement in critical processes.

Communicating evaluation results. A key aim of the Evaluation is to encourage reflection and learning by UNEP staff and key project stakeholders. The consultant(s) should consider how reflection and learning can be promoted, both through the evaluation process and in the communication of evaluation findings and key lessons. Clear and concise writing is required on all evaluation deliverables. Draft and final versions of the Main Evaluation Report will be shared with key stakeholders by the Evaluation Manager. There may, however, be several intended audiences, each with different interests and needs regarding the report. The consultant(s) will plan with the Evaluation Manager which audiences to target and the easiest and clearest way to communicate the key evaluation findings and lessons to them. This may include some, or all, of the following: a webinar, conference calls with relevant stakeholders, the preparation of an Evaluation Brief or interactive presentation.

9. Key Strategic Questions

In addition to the evaluation criteria outlined in Section 10 below, the Evaluation will address the **strategic questions** listed below (no more than 5 questions are recommended). These are questions of interest to UNEP and to which the project is believed to be able to make a substantive contribution:

- (a) In what ways, and to what extent, have the needs and interests of differentiated groups been considered in the implementation and monitoring of the project?
- (b) In what ways, and to what extent, were the recommendations from the Mid Term Review actioned upon?

- (c) What innovative financing mechanisms can be explored to sustain air quality initiatives beyond the project's lifecycle?
- (d) How can the project's data and findings be leveraged to influence policy changes at the national regional and global levels?
- (e) How can the project's successes and innovative approaches be scaled up and replicated in other regions facing similar air quality challenges?

10. Evaluation Criteria

All evaluation criteria will be rated on a six-point scale. Sections A-I below, outline the scope of the criteria. A weightings table in excel format will be provided by the Evaluation Manager to support the determination of an overall project rating. The set of evaluation criteria are grouped in nine categories: (A) Strategic Relevance; (B) Quality of Project Design; (C) Nature of External Context; (D) Effectiveness, which comprises assessments of the availability of outputs, achievement of outcomes and likelihood of impact; (E) Financial Management; (F) Efficiency; (G) Monitoring and Reporting; (H) Sustainability; and (I) Factors Affecting Project Performance.

A. Strategic Relevance

The Evaluation will assess the extent to which the activity is suited to the priorities and policies of the donors, implementing regions/countries and the target beneficiaries. The Evaluation will include an assessment of the project's relevance in relation to UNEP's mandate and its alignment with UNEP's policies and strategies at the time of project approval. Under strategic relevance an assessment of the complementarity of the project with other interventions addressing the needs of the same target groups will be made. This criterion comprises four elements:

i. Alignment to the UNEP Medium Term Strategy⁷⁶ (MTS), Programme of Work (POW) and Strategic Priorities

The Evaluation should assess the project's alignment with the MTS and POW under which the project was approved and include, in its narrative, reflections on the scale and scope of any contributions made to the planned results reflected in the relevant MTS and POW. UNEP strategic priorities include the Bali Strategic Plan for Technology Support and Capacity Building⁷⁷ (BSP) and South-South Cooperation (S-SC). The BSP relates to the capacity of governments to: comply with international agreements and obligations at the national level; promote, facilitate and finance environmentally sound technologies and to strengthen frameworks for developing coherent international environmental policies. S-SC is regarded as the exchange of resources, technology and knowledge between developing countries.

ii. Alignment to Donor/Partner Strategic Priorities

Donor strategic priorities will vary across interventions. The Evaluation will assess the extent to which the project is suited to, or responding to, donor priorities. In some cases, alignment with donor priorities may be a fundamental part of project design and grant approval processes while in others, for example, instances of 'softly-earmarked' funding, such alignment may be more of an assumption that should be assessed.

iii. Relevance to Global, Regional, Sub-regional and National Environmental Priorities

The Evaluation will assess the alignment of the project with global priorities such as the SDGs and Agenda 2030. The extent to which the intervention is suited, or responding to, the stated environmental concerns and needs of the countries, sub-regions or regions where it is being implemented will be considered. Examples may include: UN Sustainable Development Cooperation Frameworks (UNSCDF) or national/sub-national development plans, poverty reduction strategies or Nationally Appropriate Mitigation Action (NAMA) plans or regional agreements etc. Within this section consideration will be given to whether the needs of all beneficiary groups are being met and reflects the current policy priority to leave no one behind.

⁷⁶ UNEP's Medium Term Strategy (MTS) is a document that guides UNEP's programme planning over a four-year period. It identifies UNEP's thematic priorities, known as Sub-programmes (SP), and sets out the desired outcomes, known as Expected Accomplishments (EAs), of the Sub-programmes. <https://www.unenvironment.org/about-un-environment/evaluation-office/our-evaluation-approach/un-environment-documents>

⁷⁷ <http://www.unep.fr/ozonaction/about/bsp.htm>

iv. Complementarity with Relevant Existing Interventions/Coherence⁷⁸

An assessment will be made of how well the project, either at design stage or during the project inception or mobilization⁷⁹, took account of ongoing and planned initiatives (under the same sub-programme, other UNEP sub-programmes, or being implemented by other agencies within the same country, sector or institution) that address similar needs of the same target groups. The Evaluation will consider if the project team, in collaboration with Regional Offices and Sub-Programme Coordinators, made efforts to ensure their own intervention was complementary to other interventions, optimized any synergies and avoided duplication of effort. Examples may include UNSDCF's or One UN programming. Linkages with other interventions should be described and instances where UNEP's comparative advantage has been particularly well applied should be highlighted.

B. Quality of Project Design

The quality of project design is assessed using an agreed template during the evaluation inception phase, ratings are attributed to identified criteria, and an overall Project Design Quality rating is established. The complete Project Design Quality template should be annexed in the Evaluation Inception Report. Later, the overall Project Design Quality rating⁸⁰ should be entered in the final evaluation ratings table (as item B) in the Main Evaluation Report and a brief summary of the project's strengths and weaknesses at design stage should be included within the body of the report.

C. Nature of External Context

At evaluation inception stage a rating is established for the project's external operating context (considering the prevalence of conflict, natural disasters and political upheaval⁸¹). This rating is entered in the final evaluation ratings table as item C. Where a project has been rated as facing either an Unfavourable or Highly Unfavourable external operating context, and/or a negative external event has occurred during project implementation, the ratings for Effectiveness, Efficiency and/or Sustainability may be increased at the discretion of the Evaluation Consultant and Evaluation Manager together. A justification for such an increase must be given.

D. Effectiveness

i. Availability of Outputs⁸²

The Evaluation will assess the project's success in producing the programmed outputs and making them available to the intended beneficiaries as well as its success in achieving milestones as per the project design document (ProDoc). Any formal modifications/revisions made during project implementation will be considered part of the project design. Where the project outputs are inappropriately or inaccurately stated in the ProDoc, reformulations may be necessary in the reconstruction of the Theory of Change (TOC). In such cases a table should be provided showing the original and the reformulation of the outputs for transparency. The availability of outputs will be assessed in terms of both quantity and quality, and the assessment will consider their ownership by, and usefulness to, intended beneficiaries and the timeliness of their provision. It is noted that emphasis is placed on the performance of those outputs that are most important to achieve outcomes. The Evaluation will briefly explain the reasons behind the success or shortcomings of the project in delivering its programmed outputs and meeting expected quality standards.

⁷⁸ This sub-category is consistent with the new criterion of 'Coherence' introduced by the OECD-DAC in 2019.

⁷⁹ A project's inception or mobilization period is understood as the time between project approval and first disbursement. Complementarity during project implementation is considered under Efficiency, see below.

⁸⁰ In some instances, based on data collected during the evaluation process, the assessment of the project's design quality may change from Inception Report to Main Evaluation Report.

⁸¹ Note that 'political upheaval' does not include regular national election cycles, but unanticipated unrest or prolonged disruption. The potential delays or changes in political support that are often associated with the regular national election cycle should be part of the project's design and addressed through adaptive management by the project team. From March 2020 this should include the effects of COVID-19.

⁸² Outputs are the availability (for intended beneficiaries/users) of new products and services and/or gains in knowledge, abilities and awareness of individuals or within institutions (UNEP, 2023)

ii. Achievement of Project Outcomes⁸³

The achievement of project outcomes is assessed as performance against the project outcomes as defined in the reconstructed⁸⁴ Theory of Change. These are outcomes that are intended to be achieved by the end of the project timeframe and within the project's resource envelope. Emphasis is placed on the achievement of project outcomes that are most important for attaining intermediate states. As with outputs, a table can be used where substantive amendments to the formulation of project outcomes is necessary to allow for an assessment of performance. The Evaluation should report evidence of attribution between UNEP's intervention and the project outcomes. In cases of normative work or where several actors are collaborating to achieve common outcomes, evidence of the nature and magnitude of UNEP's 'substantive contribution' should be included and/or 'credible association' established between project efforts and the project outcomes realised.

iii. Likelihood of Impact

Based on the articulation of long-lasting effects in the reconstructed TOC (*i.e. from project outcomes, via intermediate states, to impact*), the Evaluation will assess the likelihood of the intended, positive impacts becoming a reality. Project objectives or goals should be incorporated in the TOC, possibly as intermediate states or long-lasting impacts. An excel-based flow chart, 'Likelihood of Impact Assessment Decision Tree' is available to support the analysis. Essentially the approach follows a 'likelihood tree' from project outcomes to impacts, taking account of whether the assumptions and drivers identified in the reconstructed TOC held. Any unintended positive effects should also be identified and their causal linkages to the intended impact described.

The Evaluation will also consider the likelihood that the intervention may lead, or contribute to, unintended negative effects (e.g. will vulnerable groups such as those living with disabilities and/or women and children, be disproportionately affected by the project?). Some of these potential negative effects may have been identified in the project design as risks or as part of the analysis of Environmental and Social Safeguards.

The Evaluation will consider the extent to which the project has played a catalytic role⁸⁵ or has promoted scaling up and/or replication as part of its Theory of Change (either explicitly as in a project with a demonstration component or implicitly as expressed in the drivers required to move to outcome levels) and as factors that are likely to contribute to greater or long-lasting impact.

Ultimately, UNEP and all its partners aim to bring about benefits to the environment and human well-being. Few projects are likely to have impact statements that reflect such long-lasting or broad-based changes. However, the Evaluation will assess the likelihood of the project to make a substantive contribution to the long-lasting changes represented by the Sustainable Development Goals, and/or the intermediate-level results reflected in UNEP's Programme of Work Direct Outcomes and the strategic priorities of funding partner(s).

E. Financial Management

Financial management will be assessed under two themes: adherence to UNEP's financial policies and procedures and completeness of financial information. The Evaluation will establish the actual spend across the life of the project of funds secured from all donors. This expenditure will be reported, where possible, at output/component level and will be compared with the approved budget. The Evaluation will verify the application of proper financial management standards and adherence to UNEP's financial

⁸³ An outcome is a change at institutional level, or changes in behaviors, attitudes or conditions achieved from the use (*i.e.*, uptake, adoption, application) of outputs by intended beneficiaries. (UNEP, 2023)

⁸⁴ All submitted UNEP project documents are required to present a Theory of Change. The level of 'reconstruction' needed during an evaluation will depend on the quality of this initial TOC, the time that has lapsed between project design and implementation (which may be related to securing and disbursing funds) and the level of any formal changes made to the project design.

⁸⁵ The terms catalytic effect, scaling up and replication are inter-related and generally refer to extending the coverage or magnitude of the effects of a project. Catalytic effect is associated with triggering additional actions that are not directly funded by the project – these effects can be both concrete or less tangible, can be intentionally caused by the project or implied in the design and reflected in the TOC drivers, or can be unintentional and can rely on funding from another source or have no financial requirements. Scaling up and Replication require more intentionality for projects, or individual components and approaches, to be reproduced in other similar contexts. Scaling up suggests a substantive increase in the number of new beneficiaries reached/involved and may require adapted delivery mechanisms while Replication suggests the repetition of an approach or component at a similar scale but among different beneficiaries. Even with highly technical work, where scaling up or replication involves working with a new community, some consideration of the new context should take place and adjustments made as necessary.

management policies. Any financial management issues that have affected the timely delivery of the project or the quality of its performance will be highlighted. The Evaluation will record where standard financial documentation is missing, inaccurate, incomplete or unavailable in a timely manner.

F. Efficiency

Under the efficiency criterion, the Evaluation will assess the extent to which the project delivered maximum results from the given resources. This will include an assessment of the cost-effectiveness and timeliness of project execution.

Focussing on the translation of inputs into outputs, *cost-effectiveness* is the extent to which an intervention has achieved, or is expected to achieve, its results at the lowest possible cost. *Timeliness* refers to whether planned activities were delivered according to expected timeframes as well as whether events were sequenced efficiently. The Evaluation will also assess to what extent any project extension could have been avoided through stronger project management and identify any negative impacts caused by project delays or extensions. The Evaluation will describe any cost or time-saving measures put in place to maximise results within the secured budget and agreed project timeframe and consider whether the project was implemented in the most efficient way compared to alternative interventions or approaches.

The Evaluation will give special attention to efforts made by the project teams during project implementation to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities⁸⁶ with other initiatives, programmes and projects etc. to increase project efficiency.

The factors underpinning the need for any project extensions will also be explored and discussed. As management or project support costs cannot be increased in cases of 'no cost extensions', such extensions represent an increase in unstated costs to implementing parties.

G. Monitoring and Reporting

The Evaluation will assess monitoring and reporting across two sub-categories: monitoring implementation and project reporting.

i. Monitoring of Project Implementation

The Evaluation will assess whether the monitoring system was operational and facilitated the timely tracking of results and progress towards projects objectives throughout the project implementation period. This assessment will include consideration of whether the project gathered relevant and good quality baseline data that is accurately and appropriately documented. This should include monitoring the representation and participation of disaggregated groups, including gendered, marginalised or vulnerable groups, such as those living with disabilities, in project activities. It will also consider the quality of the information generated by the monitoring system during project implementation and how it was used to adapt and improve project execution, achievement of outcomes and ensure sustainability. The Evaluation should confirm that funds allocated for monitoring were used to support this activity.

ii. Project Reporting

UNEP has a centralised Integrated Planning, Monitoring and Reporting system (IPMR) in which project managers upload six-monthly progress reports against agreed project milestones. This information will be provided to the Evaluation Consultant(s) by the Evaluation Manager. Some projects have additional requirements to report regularly to funding partners, which will be supplied by the project team. The Evaluation will assess the extent to which both UNEP and donor reporting commitments have been fulfilled. Consideration will be given as to whether reporting has been carried out with respect to the effects of the initiative on disaggregated groups.

H. Sustainability

⁸⁶ Complementarity with other interventions during project design, inception or mobilization is considered under Strategic Relevance above.

Sustainability⁸⁷ is understood as the probability of the benefits derived from the achievement of project outcomes being maintained and developed after the close of the intervention. The Evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the endurance of achieved project outcomes (i.e. 'assumptions' and 'drivers'). Some factors of sustainability may be embedded in the project design and implementation approaches while others may be contextual circumstances or conditions that evolve over the life of the intervention. Where applicable an assessment of bio-physical factors that may affect the sustainability of project outcomes may also be included.

i. Socio-political Sustainability

The Evaluation will assess the extent to which social or political factors support the continuation and further development of the benefits derived from project outcomes. It will consider the level of ownership, interest and commitment among government and other stakeholders to take the project achievements forwards.

ii. Financial Sustainability

Some project outcomes, once achieved, do not require further financial inputs, e.g. the adoption of a revised policy. However, in order to derive a benefit from this outcome further management action may still be needed e.g. to undertake actions to enforce the policy. Other project outcomes may be dependent on a continuous flow of action that needs to be resourced for them to be maintained, e.g. continuation of a new natural resource management approach. The Evaluation will assess the extent to which project outcomes are dependent on future funding for the benefits they bring to be sustained. Secured future funding is only relevant to financial sustainability where a project's outcomes have been extended into a future project phase. Even where future funding has been secured, the question remains as to whether the project outcomes are financially sustainable.

iii. Institutional Sustainability

The Evaluation will assess the extent to which the sustainability of project outcomes (especially those relating to policies and laws) is dependent on issues relating to institutional frameworks and governance. It will consider whether institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. are robust enough to continue delivering the benefits associated with the project outcomes after project closure. In particular, the Evaluation will consider whether institutional capacity development efforts are likely to be sustained.

I. Factors Affecting Project Performance and Cross-Cutting Issues

(These factors are rated in the ratings table but are discussed within the Main Evaluation Report as cross-cutting themes as appropriate under the other evaluation criteria, above. If these issues have not been addressed under the evaluation criteria above, then independent summaries of their status within the evaluated project should be given.)

i. Quality of Project Management and Supervision

In some cases, 'project management and supervision' may refer to the supervision and guidance provided by UNEP to implementing partners and national governments while in others, it may refer to the project management performance of an implementing partner, and the technical backstopping and supervision provided by UNEP. The performance of parties playing different roles should be discussed and a rating provided for both types of supervision (UNEP/Implementing Agency; Partner/Executing Agency) and the overall rating for this sub-category established as a simple average of the two.

The Evaluation will assess the effectiveness of project management with regard to: providing leadership towards achieving the planned outcomes; managing team structures; maintaining productive partner relationships (including Steering Groups etc.); maintaining project relevance within changing external and strategic contexts; communication and collaboration with UNEP colleagues; risk

⁸⁷ As used here, 'sustainability' means the long-term maintenance of outcomes and consequent impacts, whether environmental or not. This is distinct from the concept of sustainability in the terms 'environmental sustainability' or 'sustainable development', which imply 'not living beyond our means' or 'not diminishing global environmental benefits' (GEF STAP Paper, 2019, Achieving More Enduring Outcomes from GEF Investment)

management; use of problem-solving; project adaptation and overall project execution. Evidence of adaptive management should be highlighted.

ii. Stakeholder Participation and Cooperation

Here the term 'stakeholder' should be considered in a broad sense, encompassing all project partners, duty bearers with a role in delivering project outputs and target users/beneficiaries of project outputs and any other collaborating agents external to UNEP and the implementing partner(s). The assessment will consider the quality and effectiveness of all forms of communication and consultation with stakeholders throughout the project life and the support given to maximise collaboration and coherence between various stakeholders, including sharing plans, pooling resources and exchanging learning and expertise. The inclusion and participation of all differentiated groups, including gender groups and those living with disabilities should be considered.

iii. Responsiveness to Human Rights and Gender Equality

The Evaluation will ascertain to what extent the project has applied the UN Common Understanding on the human rights-based approach (HRBA) and the UN Declaration on the Rights of Indigenous People. Within this human rights context the Evaluation will assess to what extent the intervention adheres to UNEP's Policy and Strategy for Gender Equality and the Environment⁸⁸.

In particular the Evaluation will consider to what extent project implementation and monitoring have taken into consideration: (i) possible inequalities (especially those related to gender) in access to, and the control over, natural resources; (ii) specific vulnerabilities of disadvantaged groups (especially women, youth and children and those living with disabilities) to environmental degradation or disasters; and (iii) the role of disadvantaged groups in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation.

iv. Environmental and Social Safeguards

UNEP projects address environmental and social safeguards primarily through the process of environmental and social screening at the project approval stage, risk assessment, and management (avoidance, minimization, mitigation or, in exceptional cases, offsetting) of potential environmental and social risks and impacts associated with project and programme activities. The Evaluation will confirm whether UNEP requirements⁸⁹ were met to: *review* risk ratings on a regular basis; *monitor* project implementation for possible safeguard issues; *respond* (where relevant) to safeguard issues through risk avoidance, minimization, mitigation or offsetting and *report* on the implementation of safeguard management measures taken. UNEP requirements for proposed projects to be screened for any safeguarding issues, for sound environmental and social risk assessments to be conducted and initial risk ratings to be assigned, are evaluated above under Quality of Project Design.

The Evaluation will also consider the extent to which the management of the project minimised UNEP's environmental footprint.

v. Country Ownership and Driven-ness

The Evaluation will assess the quality and degree of engagement of government / public sector agencies in the project. While there is some overlap between Country Ownership and Institutional Sustainability, this criterion focuses primarily on the forward momentum of the intended projects results, i.e. either a) moving forwards from outputs to project outcomes or b) moving forward from project outcomes towards intermediate states. The Evaluation will consider the engagement not only of those directly involved in project execution and those participating in technical or leadership groups, but also those official representatives whose cooperation is needed for change to be embedded in their respective institutions and offices (e.g. representatives from multiple sectors or relevant ministries beyond Ministry of Environment). This factor is concerned with the level of ownership generated by the

⁸⁸ The Evaluation Office notes that Gender Equality was first introduced in the Project Review Committee Checklist in 2010 and, therefore, provides a criterion rating on gender for projects approved from 2010 onwards. Equally, it is noted that policy documents, operational guidelines and other capacity building efforts have only been developed since then and have evolved over time. https://wedocs.unep.org/bitstream/handle/20.500.11822/7655/-Gender_equality_and_the_environment_Policy_and_strategy-2015Gender_equality_and_the_environment_policy_and_strategy.pdf.pdf?sequence=3&isAllowed=y

⁸⁹ For the review of project concepts and proposals, the Safeguard Risk Identification Form (SRIF) was introduced in 2019 and replaced the Environmental, Social and Economic Review note (ESERN), which had been in place since 2016. In GEF projects safeguards have been considered in project design since 2011.

project over outputs and outcomes and that is necessary for long term impact to be realised. Ownership should extend to all gender and marginalised groups.

vi. Communication and Public Awareness

The Evaluation will assess the effectiveness of: a) communication of learning and experience sharing between project partners and interested groups arising from the project during its life and b) public awareness activities that were undertaken during the implementation of the project to influence attitudes or shape behaviour among wider communities and civil society at large. The Evaluation should consider whether existing communication channels and networks were used effectively, including meeting the differentiated needs of gendered or marginalised groups, and whether any feedback channels were established. Where knowledge sharing platforms have been established under a project the Evaluation will comment on the sustainability of the communication channel under either socio-political, institutional or financial sustainability, as appropriate.

Section 3. EVALUATION APPROACH, METHODS AND DELIVERABLES

The Terminal Evaluation will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used as appropriate to determine project achievements against the expected outputs, outcomes and impacts. It is highly recommended that the consultant(s) maintains close communication with the project team and promotes information exchange throughout the Evaluation implementation phase in order to increase their (and other stakeholder) ownership of the evaluation findings. Where applicable, the consultant(s) will provide a geo-referenced map that demarcates the area covered by the project and, where possible, provide geo-reference photographs of key intervention sites (e.g. sites of habitat rehabilitation and protection, pollution treatment infrastructure, etc.)

The findings of the Evaluation will be based on the following:

(a) A desk review of:

Relevant background documentation, inter alia inter alia UNEP Medium-Term Strategy and corresponding Programme of Work;

Project design documents (including minutes of the project design review meeting at approval); Annual Work Plans and Budgets or equivalent, revisions to the project (Project Document Supplement), the logical framework and its budget;

Project reports such as six-monthly progress and financial reports, progress reports from collaborating partners, meeting minutes, relevant correspondence etc.;

Project deliverables: [list];

Mid-Term Review or Mid-Term Evaluation of the project;

Evaluations/reviews of similar projects.

(b) Interviews (individual or in group) with:

UNEP Project Manager (PM);

Project management team, where appropriate;

UNEP Fund Management Officer (FMO);

Project partners, including the Asia Centre for Air Pollution Research (ACAP), Environmental Compliance Institute (ECI), Clean Air Institute, Zoi Environment Network, Finnish Meteorological Institute Asian Institute of Technology (AIT), MOVEGREEN, RES Foundation, Clean Air Asia, Stockholm Environment Institute (SEI), Institute for Global Environmental Strategies (IGES), Seoul Research Institute, Incheon Research Institute, Gyeonggi Research Institute and Cambodia Ministry of Environment, Sri Lanka Ministry of Environment;

Sub-Programme Coordinator for Chemicals and Pollution Action;

Project beneficiaries;

Representatives from civil society and specialist groups (such as women's, farmers and trade associations etc).

- (a) **Surveys** The evaluation might use surveys to collect evidence beyond the evaluation interviews. The Inception Report will describe details of the potential surveys
- (b) **Field visits** The consultant may visit one country in Africa (e.g. Uganda) and another in Asia Pacific (e.g. Cambodia). The site selection criteria will be clarified and confirmed in the evaluation Inception Report.
- (c) **Other data collection tools** The Inception Report will clarify the use of any other data collection tools.

11. Evaluation Deliverables and Review Procedures

The Evaluation Team will prepare:

Inception Report: (see Annex 1 for a list of all templates, tables and guidance notes) containing an assessment of project design quality, a draft reconstructed Theory of Change of the project, project stakeholder analysis, evaluation framework and a tentative evaluation schedule.

Preliminary Findings: typically in the form of a PowerPoint presentation, the sharing of preliminary findings is intended to support the participation of the project team, act as a means to ensure all information sources have been accessed and provide an opportunity to verify emerging findings. In the case of highly strategic project/portfolio evaluations or evaluations with an Evaluation Reference Group, the preliminary findings may be presented as a word document for review and comment.

Draft and Final Evaluation Report: containing an executive summary that can act as a stand-alone document; detailed analysis of the evaluation findings organised by evaluation criteria and supported with evidence; lessons learned and recommendations and an annotated ratings table.

An **Evaluation Brief** (a 2-page overview of the evaluation and evaluation findings) for wider dissemination through the UNEP website may be required. This will be discussed with the Evaluation Manager no later than during the finalization of the Inception Report.

Review of the Draft Evaluation Report. The Evaluation Consultant(s) will submit a draft report to the Evaluation Manager and revise the draft in response to their comments and suggestions. Once a draft of adequate quality has been peer-reviewed and accepted, the Evaluation Manager will share the cleared draft report with the Project Manager/Implementing Partner, who will alert the Evaluation Manager in case the report contains any blatant factual errors. The Evaluation Manager will then forward the revised draft report (corrected by the Evaluation Consultant(s) where necessary) to other project stakeholders, for their review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions as well as providing feedback on the proposed recommendations and lessons. Any comments or responses to draft reports will be sent to the Evaluation Manager for consolidation. The Evaluation Manager will provide all comments to the Evaluation Consultant(s) for consideration in preparing the final report, along with guidance on areas of contradiction or issues requiring an institutional response.

Based on a careful review of the evidence collated by the Evaluation Consultant(s) and the internal consistency of the report, the Evaluation Manager will provide an assessment of the ratings in the final Main Evaluation Report. Where there are differences of opinion between the evaluator and the Evaluation Manager on project ratings, both viewpoints will be clearly presented in the final report. The Evaluation Office ratings will be considered the final ratings for the project.

The Evaluation Manager will prepare a **quality assessment** of the first draft of the Main Evaluation Report, which acts as a tool for providing structured feedback to the Evaluation Consultant(s). The quality of the final report will be assessed and rated against the criteria specified in template listed in Annex 1 and this assessment will be appended to the Final Evaluation Report.

At the end of the evaluation process, the Evaluation Office will prepare a **Recommendations Implementation Plan** in the format of a table, to be completed and updated at regular intervals by the Project Manager. The Evaluation Office will track compliance against this plan on a six-monthly basis for a maximum of 12 months.

12. The Evaluation Team/Evaluation Consultant

For this Evaluation, the Evaluation Consultant will work under the overall responsibility of the Evaluation Office represented by an Evaluation Manager. Cecilia Morales, in consultation with the UNEP Project Manager, Soraya Smaoun, Fund Management Officer, Gricha Zurita and the Sub-programme Coordinator of the Chemicals and Air Pollution Action Sub-Programme, Cristina Zucca. The consultant will liaise with the Evaluation Manager on any procedural and methodological matters related to the Evaluation, including travel. It is, however, each consultants' individual responsibility (where applicable) to arrange for their visas and immunizations as well as to plan meetings with stakeholders, organize online surveys, obtain documentary evidence and any other logistical matters related to the assignment. The UNEP Project Manager and project team will, where possible, provide logistical support (introductions, meetings etc.) allowing the consultants to conduct the Evaluation as efficiently and independently as possible.

The Evaluation Consultant will be hired over a period of 8 months and should have the following: a university degree in environmental sciences, international development or other relevant political or social sciences area is required and an advanced degree in the same areas is desirable; a minimum of 7 years of technical / evaluation experience is required, preferably including evaluating large, regional or global programmes and using a Theory of Change approach; and a good/broad understanding of air pollution is desired. English and French are the working languages of the United Nations Secretariat. For this consultancy, fluency in oral and written English is a requirement and proficiency in Spanish is desirable. Working knowledge of the UN system and specifically the work of UNEP is an added advantage. The work will be home-based with possible field visits.

In close consultation with the Evaluation Manager, the Evaluation Consultant will be responsible for the overall management of the Evaluation and timely provision of its outputs, data collection and analysis and report-writing. More specifically:

Inception phase of the Evaluation, including:

- preliminary desk review and introductory interviews with project staff;
- draft the reconstructed Theory of Change of the project;
- prepare the evaluation framework;
- develop the desk review and interview protocols;
- draft the survey protocols (if relevant);
- develop and present criteria for country and/or site selection for the evaluation mission;
- plan the evaluation schedule;
- prepare the Inception Report, incorporating comments until approved by the Evaluation Manager

Data collection and analysis phase of the Evaluation, including:

- conduct further desk review and in-depth interviews with project implementing and executing agencies, project partners and project stakeholders;
- (where appropriate and agreed) conduct an evaluation mission(s) to selected countries, visit the project locations, interview project partners and stakeholders, including a good representation of local communities. Ensure independence of the Evaluation and confidentiality of evaluation interviews.
- regularly report back to the Evaluation Manager on progress and inform of any possible problems or issues encountered and;
- keep the Project Manager informed of the evaluation progress.

Reporting phase, including:

- draft the Main Evaluation Report, ensuring that the evaluation report is complete, coherent and consistent with the Evaluation Manager guidelines both in substance and style;

- liaise with the Evaluation Manager on comments received and finalize the Main Evaluation Report, ensuring that comments are taken into account until approved by the Evaluation Manager
- prepare a Response to Comments annex for the main report, listing those comments not accepted by the Evaluation Consultant and indicating the reason for the rejection; and
- (where agreed with the Evaluation Manager) prepare an Evaluation Brief (2-page summary of the evaluation and the key evaluation findings and lessons)

Managing relations, including:

- maintain a positive relationship with evaluation stakeholders, ensuring that the evaluation process is as participatory as possible but at the same time maintains its independence;
- communicate in a timely manner with the Evaluation Manager on any issues requiring its attention and intervention.

13. Schedule of the Evaluation

The table below presents the tentative schedule for the Evaluation.

Table 3. Tentative schedule for the Evaluation

Milestone	Tentative Dates
Evaluation Initiation Meeting	July 2025
Inception Report	August 2025
Evaluation Mission	August-September 2025
E-based interviews, surveys etc.	August-September 2025
PowerPoint/presentation on preliminary findings and recommendations	October-November 2025
Draft report to Evaluation Manager (and Peer Reviewer)	November 2025
Draft Report shared with UNEP Project Manager and team	December 2025
Draft Report shared with wider group of stakeholders	January 2025
Final Report	February 2025
Final Report shared with all respondents	February 2025

14. Contractual Arrangements

Evaluation Consultants will be selected and recruited by the Evaluation Office of UNEP under an individual Special Service Agreement (SSA) on a “fees only” basis (see below). By signing the service contract with UNEP/UNON, the consultant(s) certify that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of the contract) with the project’s executing or implementing units. All consultants are required to sign the Code of Conduct Agreement Form.

Fees will be paid on an instalment basis, paid on acceptance by the Evaluation Manager of expected key deliverables. The schedule of payment is as follows:

Schedule of Payment for the Evaluation Consultant:

Deliverable	Percentage Payment
Approved Inception Report (<i>as per Guidance Note</i>)	30%
Approved Draft Main Evaluation Report c	30%
Approved Final Main Evaluation Report (<i>as per Guidance Note</i>)	40%

Fees only contracts: Where applicable, air tickets will be purchased by UNEP and 75% of the Daily Subsistence Allowance for each authorised travel mission will be paid up front. Local in-country travel will only be reimbursed where agreed in advance with the Evaluation Manager and on the production of

acceptable receipts. Terminal expenses and residual DSA entitlements (25%) will be paid after mission completion.

The consultants may be provided with access to UNEP's information management systems (e.g. PIMS, Anubis, SharePoint etc.) and if such access is granted, the consultants agree not to disclose information from that system to third parties beyond information required for, and included in, the evaluation report.

In case the consultants are not able to provide the deliverables in accordance with these guidelines, and in line with the expected quality standards by the UNEP Evaluation Office, payment may be withheld at the discretion of the Director of the Evaluation Office until the consultants have improved the deliverables to meet UNEP's quality standards.

If the consultant(s) fail to submit a satisfactory final product to UNEP in a timely manner, i.e. before the end date of their contract, the Evaluation Office reserves the right to employ additional human resources to finalize the report, and to reduce the consultants' fees by an amount equal to the additional costs borne by the Evaluation Office to bring the report up to standard⁹⁰.

⁹⁰ This may include contract cancellation in-line with prevailing UN Secretariat rules.

ANNEX XVIII. QUALITY ASSESSMENT OF THE EVALUATION REPORT

Terminal Evaluation: UNEP Project "Providing Support to Countries and Cities in Improving Air Quality in Order to Improve Environmental Quality and the Health and Well-Being of All (SMA ID 40440)" (2019-2023)

All UNEP evaluations are subject to a quality assessment by the Evaluation Office. This is an assessment of the quality of the evaluation product (i.e. evaluation report) and is dependent on more than just the consultant's efforts and skills.

Report Quality Criteria	UNEP Evaluation Office Comments	Final Report Rating
Section A: Executive Summary	Assessment	
1. Does the <i>Executive Summary</i> act as a concise, accurate standalone section, especially to inform decision-making? Consider how clearly and concisely the report presents: - a clear summary of the evaluation object - evaluation objectives, scope and methodology - the overall project evaluation rating - a summary of main evaluation findings, including key features of performance (strengths and weaknesses) - summary responses to key strategic evaluation questions - summary of main conclusions, lessons learned and recommendations	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The Executive Summary is a comprehensive and useful standalone section. It effectively presents the evaluation object, methodology, ratings, findings, strategic questions, conclusions, lessons, and recommendations in a manner that strongly supports decision-making and institutional learning.	5.5
Section B: The Project	Assessment	
2. Does the report clearly describe the <i>key parameters, scale and complexity of the evaluand</i>? Consider how well the report presents: - an overview of the main issue that the project is trying to address - timeline, including dates of project approval, duration and number of phases (where appropriate) - geographic coverage (regions/countries) - total secured budget and project financing, including a table with funding sources - implementing and funding partners - institutional context (i.e. UNEP sub-programme, Division, Branch etc) - implementation structure with diagram - UNEP results frameworks to which it contributes (e.g. PoW Direct Outcome) - summary of results framework as stated in the ProDoc (or as officially revised) - stakeholder groups organised according to relevant common characteristics - whether the project has been evaluated in the past (e.g. mid-term, by an external agency, etc.) - substantive or significant changes in design during implementation	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report provides a comprehensive description of the evaluand, clearly presenting its strategic rationale, institutional setting, timeline, financing, implementation structure, stakeholder landscape, and evolving design. It successfully captures the scale and complexity of the parent-umbrella programme while maintaining strong transparency and strategic clarity.	6
Section C: Evaluation Methods and Theory of Change	Assessment	

3. Does the report present a clear, comprehensive and adequate description of the <i>evaluation methodology</i>? Consider how well it presents the following elements, and their adequacy based on the scope of the evaluation: • statement of the purpose of the evaluation and the key intended audience for the evaluation findings • data collection methods and information sources • justification for methods used (e.g. electronic/face-to-face interviews, qualitative/quantitative analysis) • criteria and sampling strategies used to select stakeholders for consultations, and for sites/countries visited • number and types of respondents (<i>including in a table broken down by gender</i>) • strategies used to increase stakeholder engagement and response rate • methods used to include the voices/experiences of different and potentially excluded groups (e.g. women, marginalised) • data verification methods (e.g. triangulation) • data analysis methods (e.g. scoring, thematic analysis) • evaluation limitations and mitigation measures (e.g. how these were addressed by the evaluator) • consideration for ethics and human rights issues, including how anonymity and confidentiality were protected	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report presents a strong and largely comprehensive evaluation methodology appropriate to the scale and complexity of the intervention. It demonstrates robust mixed-methods design, triangulation, and transparent discussion of limitations. Minor weaknesses remain in the explicitness of sampling strategies and stakeholder inclusion methods, but overall the methodology meets UNEP quality standards at a satisfactory level.	5.5
4. Does the report describe an assessment and reformulation of the <i>Theory of Change</i>, and present an adequate articulation of the TOC causal pathways that were used to assess project performance (<i>narratively and diagrammatically</i>)? Consider how well the report presents: • whether the project design included a TOC • how the <i>TOC at Evaluation</i>⁹¹ was designed (e.g. who was involved, etc) • confirmation/reconstruction of results in accordance with UNEP definitions (<i>including reformulation table, which may have initially been presented in the Inception Report and should appear in the Main Evaluation report.</i>) • articulation of causal pathways • identification of drivers and assumptions • identification of key actors in the change process	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report provides a comprehensive Theory of Change assessment and reformulation, successfully reconstructing and articulating the project's causal pathways in accordance with UNEP evaluation standards. It presents clear narrative and diagrammatic pathways, identifies assumptions, drivers, and actors, and meaningfully integrates the TOC into performance analysis. Stakeholder participation in TOC reconstruction is mentioned in the Evaluation Methods section.	5.5
Section D: Evidence and Analysis	Assessment	

⁹¹ During the Inception Phase of the evaluation process a *TOC at Evaluation Inception* is created based on the information contained in the approved project documents (these may include either logical framework or a TOC or narrative descriptions), formal revisions and annual reports etc. During the evaluation process this TOC is revised based on changes made during project intervention and becomes the *TOC at Evaluation*.

5. Is the report based on <i>sufficient and adequate data</i> and <i>clear and credible evidence</i>? Consider how well the report presents: • sufficient evidence that is consistent throughout the report • evidence that is supported by data sources (e.g. quotes, reports, etc) • evidence that is explicitly triangulated, unless noted as having a single source • gaps in data are explained and justified • data sources that are reliable, adequate, sufficient for the scope of the evaluation	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report is based on a strong and credible body of evidence that is generally sufficient, well-triangulated, and consistent across sections. Documentary and technical evidence are particularly robust, and data limitations are transparently acknowledged. Minor weaknesses arise from the relatively limited visibility of interview-derived evidence and somewhat heavier reliance on documentary sources, but overall the report meets UNEP standards for evidence adequacy and credibility.	5.5
6. Does the report include <i>rigorous analysis</i> and <i>logical findings</i>? Consider the extent to which the findings are: • supported by clear analysis that is consistent with the evidence presented • logical, clear and coherent • aligned with UNEP's Criteria Ratings Matrix • aligned with the evaluation framework • more than descriptions and provide insights into 'how' and/or 'why' the project performed a certain way • balanced, presenting both successes and weaknesses	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report presents analytical rigour and logical findings. Findings are clearly supported by evidence, internally coherent, strongly aligned with UNEP's criteria ratings matrix and evaluation framework, and generally move beyond description to explain how and why performance occurred. The report maintains a balanced presentation of achievements and weaknesses, with only minor limitations related to narrative density and somewhat limited visibility of interview-derived analytical insights.	5.5
Section E: Evaluation Findings	Assessment	
7. Does the report present evidence and analysis of project <i>Strategic Relevance</i> with respect to UNEP, partner and geographic policies and strategies at the time of project approval? Consider how well the report addresses: • Alignment to the UNEP Medium Term Strategy (MTS), Programme of Work (POW) and Strategic Priorities • Alignment to Donor/GEF/Partners Strategic Priorities • Relevance to Regional, Sub-regional and National Environmental Priorities	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report provides comprehensive evidence and analysis of Strategic Relevance, thoroughly addressing alignment with UNEP strategic frameworks,	6

Complementarity with Existing Interventions: complementarity of the project at design (or during inception/mobilisation⁹²), with other interventions addressing the needs of the same target groups.	donor and partner priorities, regional and national environmental agendas, and complementarity with existing interventions. It demonstrates strong strategic analysis, robust evidence, and clear articulation of why the project was highly relevant at design and throughout implementation.	
Does the report present a summary of the strengths and weaknesses of the Quality of Project Design , based on the detailed assessment presented in the Inception Report?	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report provides a satisfactory and well-balanced summary of the Quality of Project Design, clearly presenting major strengths and weaknesses identified through the detailed inception-stage assessment. It successfully captures the project's strategic ambition and flexibility while also acknowledging significant design limitations related to complexity, monitoring, evaluability, coordination, and gender operationalisation.	*NOT RATED
Does the report recognise and describe, when appropriate, key features of the Nature of the External Context under which the project was implemented that limited the project's performance (e.g. conflict, natural disaster, political upheaval ⁹³), and how they affected performance?	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report provides a clear, credible, and appropriately contextualized assessment of the external environment, explicitly identifying major contextual disruptions and explaining how these affected implementation, efficiency, and delivery.	**NOT RATED
8. Does the report present a well-reasoned, complete and evidence-based assessment of the Availability of Outputs to the intended beneficiaries? Consider how well the report presents: a convincing, evidence-supported and clear presentation of the outputs made available by	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u>	5.5

⁹² A project's inception or mobilization period is understood as the time between project approval and first disbursement. Complementarity during project implementation is considered under Efficiency, see below.

⁹³ Note that 'political upheaval' does not include regular national election cycles, but unanticipated unrest or prolonged disruption. The potential delays or changes in political support that are often associated with the regular national election cycle should be part of the project's design and addressed through adaptive management of the project team.

the project compared to its approved plans and budget • assessment of the nature and scale of outputs versus the project indicators and targets • assessment of the timeliness, quality and utility of outputs to intended beneficiaries • identification of positive or negative effects of the project on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability).	The report provides a comprehensive assessment of output availability, clearly demonstrating substantial delivery against approved plans, indicators, and targets, while effectively analysing utility, uptake, and strategic relevance for intended beneficiaries. Minor weaknesses relate primarily to limitations in gender and vulnerable-group evidence, which stem largely from project design and monitoring constraints rather than weaknesses in the evaluation itself.	
9. Does the report present a well-reasoned, complete and evidence-based assessment of the Achievement of Outcomes, as a result of the uptake, adoption and/or implementation of outputs by the intended beneficiaries? This may include behaviour changes at an individual or collective level. Consider how well the report presents: • a convincing and evidence-supported analysis of the uptake of outputs by intended beneficiaries • assessment of the nature, depth and scale of outcomes versus the project indicators and targets • discussion of the contribution, credible association and/or attribution of outcome level changes to the work of the project itself • any constraints to attributing effects to the projects' work • identification of positive or negative effects of the project on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability).	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report provides a comprehensive assessment of outcome achievement, offering strong evidence of beneficiary uptake, policy and institutional change, and credible contribution pathways. It appropriately addresses attribution limitations, demonstrates clear analytical rigour, and effectively links outputs to outcomes through a well-structured evaluative framework. Minor weaknesses remain in the depth of evidence for gender and disadvantaged groups, but overall this section strongly meets UNEP quality standards.	5.5
10. Does the report present an integrated analysis, guided by the causal pathways represented by the TOC, of all evidence relating to Likelihood of Impact? Consider how well the report presents: • an explanation of how causal pathways emerged and the resulting change processes • an explicit discussion of how drivers and assumptions played out • an explanation of roles played by key actors and change agents • identification of any unintended negative effects of the project, especially on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability).	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report provides an integrated assessment of Likelihood of Impact, effectively guided by the Theory of Change and supported by strong analysis of causal pathways, assumptions, drivers, and actor roles. It appropriately balances evidence with caution regarding long-term uncertainties and	5.5

	demonstrates strong evaluative rigour. This section would have benefited from an explicit discussion of unintended differentiated effects, but overall the section strongly meets UNEP standards.	
11. Does the report present an integrated analysis of all dimensions evaluated under Financial Management and include a completed 'financial management' table? Consider how well the report addresses the following: • <i>adherence</i> to UNEP's financial policies and procedures • <i>completeness</i> of financial information, including the actual project costs and actual co-financing used and explanation of any variances between planned and actual expenditures	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report presents a credible and sufficiently integrated assessment of Financial Management, covering compliance, expenditure management, financial systems, and data limitations. It includes the required financial management table and provides appropriate discussion of variances and system constraints.	5.5
12. Does the report present an integrated analysis of all dimensions evaluated under Efficiency? Consider how well the report presents: • cost-effective or time-saving measures put in place to maximise results within the secured budget and agreed project timeframe • implications of any delays and no cost extensions • discussion of making use, during project implementation, of/building on pre-existing institutions, partnerships and complementarities with other initiatives, programmes and projects etc. • the extent to which the management of the project minimised UNEP's environmental footprint.	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report provides a strong and integrated assessment of Efficiency, demonstrating clear analysis of cost-effectiveness, adaptive implementation, use of partnerships, and delivery under complex external conditions. Minor weaknesses relate primarily to the depth of explicit environmental footprint analysis. However the Environmental and Social Safeguards indicated that there is no evidence of adverse environmental or social impacts arising from the Project's interventions.	5.5
13. Does the report present a well-reasoned, complete and evidence-based assessment of the project's Monitoring and Reporting? Consider how well the report addresses the following: • the quality of <i>monitoring of project implementation</i> (including use of monitoring data for adaptive management) • the quality of <i>project reporting</i> (e.g. PIMS and donor reports)	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report provides a strong evidence-based analysis of monitoring system weaknesses, reporting quality, adaptive management use,	6

	and accountability mechanisms. It clearly identifies major structural monitoring limitations while appropriately recognising the role of reporting systems and adaptive management in sustaining implementation.	
14. Does the report present an integrated analysis of all dimensions evaluated under Sustainability (i.e. the endurance of benefits achieved at outcome level)? Consider how well the report addresses the following: • socio-political sustainability • financial sustainability • institutional sustainability	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report provides a sustainability assessment comprehensively evaluating socio-political, financial, and institutional sustainability dimensions with strong analytical integration and evidence. It effectively identifies both sustainability drivers and risks, offering a realistic and forward-looking assessment of the likelihood that project outcomes will endure beyond project closure.	6
15. Does the report present a well-evidence analysis of the Factors Affecting Performance, <u>either in this section or in cross-referenced sections?</u> <i>These factors are not always discussed in stand-alone sections and may be integrated in the other performance criteria as appropriate. However, if not addressed substantively in this section, a cross reference must be given to where the topic is addressed, and that entry must be sufficient to justify the performance rating for these factors.</i> Consider how well the report addresses the following cross-cutting issues: • quality of project management and supervision⁹⁴ • stakeholder participation and co-operation • responsiveness to human rights and gender equality • environmental and social safeguards • country ownership and driven-ness • communication and public awareness	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report provides a comprehensive and well-evidenced assessment of Factors Affecting Performance, covering all required subcriteria and effectively integrating cross-cutting issues throughout both dedicated sections and broader findings.	6
Section F: Conclusions, Lessons Learned and Recommendations	Assessment	
16. Do the Conclusions present a summative assessment of the evaluand as a whole, reflecting on prominent aspects of the project's performance? Consider how well the conclusions:	<u>Coverage/omissions:</u> All required elements are addressed.	6

⁹⁴ In some cases 'project management and supervision' will refer to the supervision and guidance provided by UNEP to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping provided by UNEP. This includes providing the answers to the questions on Core Indicator Targets, stakeholder engagement, gender responsiveness, safeguards and knowledge management, required for the GEF portal.

• provide a compelling narrative and integrated assessment of project project's performance (i.e. achievements and limitations) • add deeper insights and analysis beyond the findings under each individual criterion • are derived from the synthesized analysis of evidence gathered during the evaluation process • provide clear and succinct response to the key strategic questions • address the human rights and gender dimensions of the intervention explicitly (e.g. how these dimensions were considered, addressed or impacted on) • provide lessons that are rooted in real project experiences, describe the context from which they are derived, and do not duplicate recommendations	<u>Strengths/weaknesses:</u> The report provides conclusions that offer a compelling, evidence-based, and integrated assessment of overall project performance. The conclusions effectively synthesise achievements, limitations, strategic implications, and systemic lessons while explicitly addressing strategic questions, gender, and human rights dimensions. Lessons are well grounded in project experience and provide strong institutional value.	
17. Does the report present Recommendations for specific action to be taken by identified people/position-holders to resolve concrete problems affecting the project or the sustainability of its results? Consider how well the recommendations: • are clearly formulated and logically derived from the findings and/or conclusions • are feasible to implement within the timeframe and resources available (including local capacities) and specific in terms of who would do what and when • include at least one recommendation relating to strengthening the human rights and gender dimensions of UNEP interventions • represent a measurable performance target in order that the Evaluation Office can monitor and assess compliance with the recommendations. <u>NOTES:</u> (i) In cases where the recommendation is addressed to a third party, compliance can only be monitored and assessed where a contractual/legal agreement remains in place. Without such an agreement, the recommendation should be formulated to say that UNEP project staff should pass on the recommendation to the relevant third party in an effective or substantive manner. The effective transmission by UNEP of the recommendation will then be monitored for compliance. (ii) Where a new project phase is already under discussion or in preparation with the same third party, a recommendation can be made to address the issue in the next phase.	<u>Coverage/omissions:</u> All required elements are addressed. <u>Strengths/weaknesses:</u> The report provides recommendations that are strategically relevant, evidence-based, and clearly linked to evaluation findings. They are actionable, appropriately assigned, time-bound, and generally feasible, while also including strong gender and human rights dimensions.	5.5
Section G: Report Structure and Presentation	Assessment	
18. Is the report well-structured and complete? Does it: • follow the Evaluation Office structure and formatting guidelines • include all required sections and annexes, as applicable • not exceed 50 pages in length from the Executive Summary to the end of the Conclusion Does the report present information clearly and appropriately? Is it written:	<u>Coverage/omissions:</u> Most required elements are addressed. <u>Strengths/weaknesses:</u> The report is well structured, and it closely follows UNEP Evaluation Office guidelines, includes all major required sections and annexes, and	4.5

• in clear and accessible language • largely free from grammar, spelling and punctuation errors • in an adequate and professional tone • with the use of visual aids, such as maps, graphs tables and photos	demonstrates strong professional tone, organisation, and use of visual aids. Minor weaknesses relate primarily to narrative density, and page-length compliance, but overall the report is of high professional quality and fit for UNEP evaluation standards.	
OVERALL REPORT QUALITY RATING		5.6

A number rating 1-6 is used for each criterion, with half-point increments allowed (e.g., 3.5 or 4.5). Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1. The overall rating is based on a simple average of the ratings for each criterion.

* The Quality of Project Design criterion is not rated in this table because the majority of the analysis is presented in the Inception Report and the Final Terminal Evaluation report only contains a summary.

** The Nature of External Context is not rated in this table because it is not consistently applicable across all projects. Some evaluation reports will simply record that there was no unexpected unfavourable external factors, while others may have to describe critical external events.

Rating the Report Quality Criteria

Rating (1–6)	Description
6 (90 – 100%)	Provides all content with high quality. (<i>i.e. exemplary</i>)
5 (70 - 89%)	Provides all content with minor weaknesses.
4 (50 – 69%)	Provides most content with minor weaknesses.
3 (30 - 49%)	Provides most content with significant weaknesses.
2 (11 – 29 %)	Omits substantive content with significant weaknesses.
1 (0 -10%)	Omits almost all content with major weaknesses.

At the end of the evaluation, compliance of the evaluation process against the agreed standard procedures is assessed, based on the table below. *All questions with negative compliance must be explained further in the table below.*

Evaluation Process Quality Criteria	Compliance	
	Yes	No
Consultant's independence:		
1. Were possible conflicts of interest of proposed Evaluation Consultant(s) appraised and addressed in the final selection?	X	
2. Was the Evaluation Consultant given direct access to identified external stakeholders?	X	
3. Did the Evaluation Consultant raise any concerns about being unable to work freely and without interference or undue pressure from project staff or the Evaluation Office?		X
4. If Yes to Q3: Were these concerns resolved to the mutual satisfaction of both the Evaluation Consultant and the Evaluation Manager?		
Project's engagement and support:		
5. Did the project make available all required/requested documents?	X	
6. Did the project make all financial information (and audit reports if applicable) available in a timely manner and to an acceptable level of completeness?	X	
7. Was adequate support provided by the project to the evaluator(s) in planning and conducting evaluation missions?	X	

8. Were the project team, relevant UNEP senior staff, partners and interviewed stakeholders given an opportunity to provide comments on key deliverables, as appropriate (e.g. Terms of Reference, Inception Report and Draft Evaluation Report)?	X	
Quality assurance of key deliverables:		
9. Were the Terms of Reference peer-reviewed?	X	
10. Was the inception report peer-reviewed, including the Theory of Change?	X	
11. Were evaluation preliminary findings presented to the project team in a format allowing discussion, before drafting the report?	X	
12. Was the draft report peer-reviewed?	X	
Transparency and commenting:		
13. Was the inception report, including the (reconstructed) TOC, sent to the project team, relevant UNEP senior staff and partners, with a minimum of eight working days to comment?		X
14. Was the draft evaluation report sent directly by the Evaluation Consultant to the Evaluation Office?	X	
15. Were all stakeholder comments to the draft evaluation report sent directly to the Evaluation Office?	X	
16. Did the Evaluation Consultant(s) respond adequately to all factual corrections and comments?	X	
17. Did the Evaluation Office share substantive comments and Evaluation Consultant responses with those who commented, as appropriate?	X	
Financial Resources:		
18. Was the evaluation budget approved at project design available for the evaluation? If not, comment in the table below on the sufficiency of the funds made available.	X	
19. Were the agreed evaluation funds readily available to support the payment of the evaluation contract throughout the payment process? If not, comment in the table below.	X	
Timeliness:		
20. If a Terminal Evaluation: Was the evaluation initiated within six months after project operational completion and not more than three months prior? (Or, if a Mid Term Evaluation: Was the evaluation initiated within a six-month period prior to the project's mid-point?)		X
21. Was the inception report delivered and reviewed/approved prior to commencing any travel?	X	
22. Were all submission and commenting deadlines met as set by the Evaluation Manager and as far as unforeseen circumstances allowed? If not, comment in the table below on exceptional delays.	X	

Provide comments / explanations / mitigating circumstances below for any non-compliant process issues.

Evaluation Process Criterion Number	Evaluation Office Comments
13	Given the tight evaluation deadlines, consultation on the Inception Report was limited to the Project Team and UNEP senior staff. Despite these constraints, the Evaluation Office remained fully committed to upholding the quality and integrity of the evaluation process.
20	The evaluation was initiated six months after project completion due to workload constraints. Nevertheless, the Evaluation Office is actively working to adhere to established evaluation timelines.