

UNITED NATIONS DEVELOPMENT PROGRAMME
Concept Note

Project Title: Clean Air for Blue Sky Asia
Project Number: TBC
Implementing Partner: UNDP
Start Date: April 2022
End Date: December 2024

Overview

As air pollution is a growing environmental threat that calls for sustained regional cooperation, decision-makers are looking to the scientific community and private sector for help when monitoring, mapping, and managing these harmful consequences to the overall SDGs agenda. Scientific identification and prediction of the air quality response to emission changes is a prerequisite for an integrated assessment system in developing effective control policies. Tackling the multi-tiered issue of Air Pollution requires scientific big data hub, technology information and knowledge sharing program for integrating energy use, emissions, meteorology, health and cost & benefit impacts.

The project will be implemented by UNDP using the Direct Implementation Modality (DIM) with the objective to prototype the first of its kind **Asian Air Quality Management Program (AAQMaP)** to support Thailand, Lao PDR, and Cambodia in their collaborative efforts to tackle for regional air pollution challenges. Ultimately, the AAQMaP and its process will inform government's decisions on policies and investments that promote a cleaner, greener environment. The project has three key outputs:

- 1) Air quality information gap is addressed in targeted countries (Thailand, Laos PDR, and Cambodia), through a prototype Asian Air Quality Management Program (AAQMaP)
- 2) National Counterparts in targeted countries have the capacity to address air pollution challenges by utilizing integrated science-based air quality models
- 3) Existing initiatives to address air pollution management and policy measures are scaled-up and catalyzed



The project main activities are to integrate regional air emission inventory, to enable regional air quality modelling and forecasting, and to promote regional air quality policy capabilities to enable coping regional air pollution study and management.

Linkage to the UNDP Strategic Plan (2022-2025)
Outcome:
 SP Outcome 1: Structural transformation accelerated, particularly green, inclusive, and digital transitions;

Links to Regional Programme Outputs (2022-2025):
 RPD Output 1.4:
 Sustainable, scalable and innovative solutions and strategies for Nature, Climate and Energy transformation strengthened through enhanced Climate Promise, nature-based solutions, and transitioning to clean energy and zero-carbon development.

Indicative Output(s) with gender marker: GEN1
 Output 1: Phase 1 of Asian Air Quality Monitoring Platform prototype
 Output 2: Science-based air quality modeling developed, and solutions identified to address regional pollution challenges
 Output 3: A portfolio of actions and initiatives to improve regional air pollution management and policy measures

Total resources required:	USD 419,181.75
Ministry of Environment, Government of Republic of Korea	USD 419,181.75

Submitted by:	Approved by
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CLEAN AIR FOR BLUE SKY ASIA

ENGAGEMENT FACILITY CONCEPT NOTE

I. DEVELOPMENT CHALLENGE

In recent years, in the face of urban growth, economic expansion and attendant growth in demands for energy, agricultural and industrial production, tourism, transportation and general consumption, air pollution has become a leading threat to the health of the environment and population, alike. These translate to onward social and economic costs that undermine the gains of economic and development advancements.

The impact of air pollution is getting more serious and leads to dangerous health impact in Asia. According to the World Health Organization (WHO), Southeast Asia recorded the highest urban ambient air pollution levels in the world in 2016. An estimated 2.4 million premature deaths were attributed to air pollution. Air Quality Report (2018) from Greenpeace and AirVisual found that 95 percent of Southeast Asian cities surveyed exceeded the WHO's annual exposure guideline.

Whilst much attention is given to urban industrial sources of air pollution, non-urban sources of air pollution in Southeast Asia, such as those caused by forest fires, vehicle and industrial emissions, and combustion of low-quality fuels and agricultural burning, are also of significant concern. Political, economic, judicial, and social issues linked with air pollution make air pollution extremely difficult to tackle as it is not just a technological issue, but one with roots embedded in social inequality, ineffectual governance, policy and incentivization, and misdirected investment. It has direct impact on health, productivity, employment and society.

Above all, the global demand for greenhouse gas reduction and carbon neutrality in the era of climate change poses a great challenge to Asian countries with high economic growth rates and rapid increases in greenhouse gas (GHGs) emissions. Given the complexity and scale of the challenges, from rapid urbanization to heightened inequality and climate change, and the recognition that such interconnected and structural problems cannot be solved by any single actor. Asian countries are facing a situation where they have to do simultaneously in a manner that does not harm the mutual benefits.

II. STRATEGY

Establishing comprehensive and systemic strategy/plan is a first step to tackle the multi-tiered issue of Air Pollution, the Ministry of Environment (MOE) and the National Institute of Environmental Research (NIER) can support Asian countries using their experiences to set the standard and implement various policy measures. For example, 'Special Measures for Improving Air Pollution in Seoul Metropolitan Area' and its framework Plans, which have been carried out since the early 2000s, clarified various regulations in the fields of industry, transportation, energy, household, and investment plans. As a result, sulfur dioxide and total dust were dramatically reduced. Recently, the MOE is dramatically reducing fine dust by establishing and strengthening various technical, institutional and financial capabilities. In addition, there are many achievements in efforts to be carbon neutral beyond fine dust reduction.

Based on Korea's successful cases of overcoming air pollution, the project will serve as a milestone for expanding measures to knowledge development and environmental technology in overcoming climate change and air pollution. With collaboration between UNDP and MOE, Korea and Asian academia and experts can participate in preparing from a roadmap or designing a comprehensive strategy and modeling to policy recommendation and its effects. Through in-depth analysis and cooperative projects, the MOE and UNDP will lead a new era for integrating energy, health, climate change and a carbon-neutral society in Asia for Sustainable Development Goals.

Over the past decade, the Lower Mekong region has faced major landscape challenges caused by deforestation, human-induced burning of agricultural areas, and forest fires, which is also an important aspect for climate change response in the region. Fires emit air pollutants and other GHGs emissions into the atmosphere further leading to decreased air quality and elevated public health concerns. Consistent with the 2030 Agenda and UNDP Strategic Plan for 2018 to 2021, the objective of the project is geared to accelerate structural transformations for sustainable development through multi-stakeholder partnerships within and across government and society

Air pollution control must be grounded in sound scientific research and data, given its variable regional impacts depending on the amount of pollutant emissions and intensity, weather phenomena such as rainfall and wind, and topography, etc. The more intractable problem is that it's difficult to deduce the relationship between regional air quality and emission reduction by simply following through with the latter, because the whole photochemical process of having various reactant gases emitted into the air, reacting in the atmosphere, and finally generating pollutants is complex and nonlinear. Diverse identification and efficient prediction of the air quality response to emission changes is a prerequisite for an integrated assessment system in developing effective control policies.

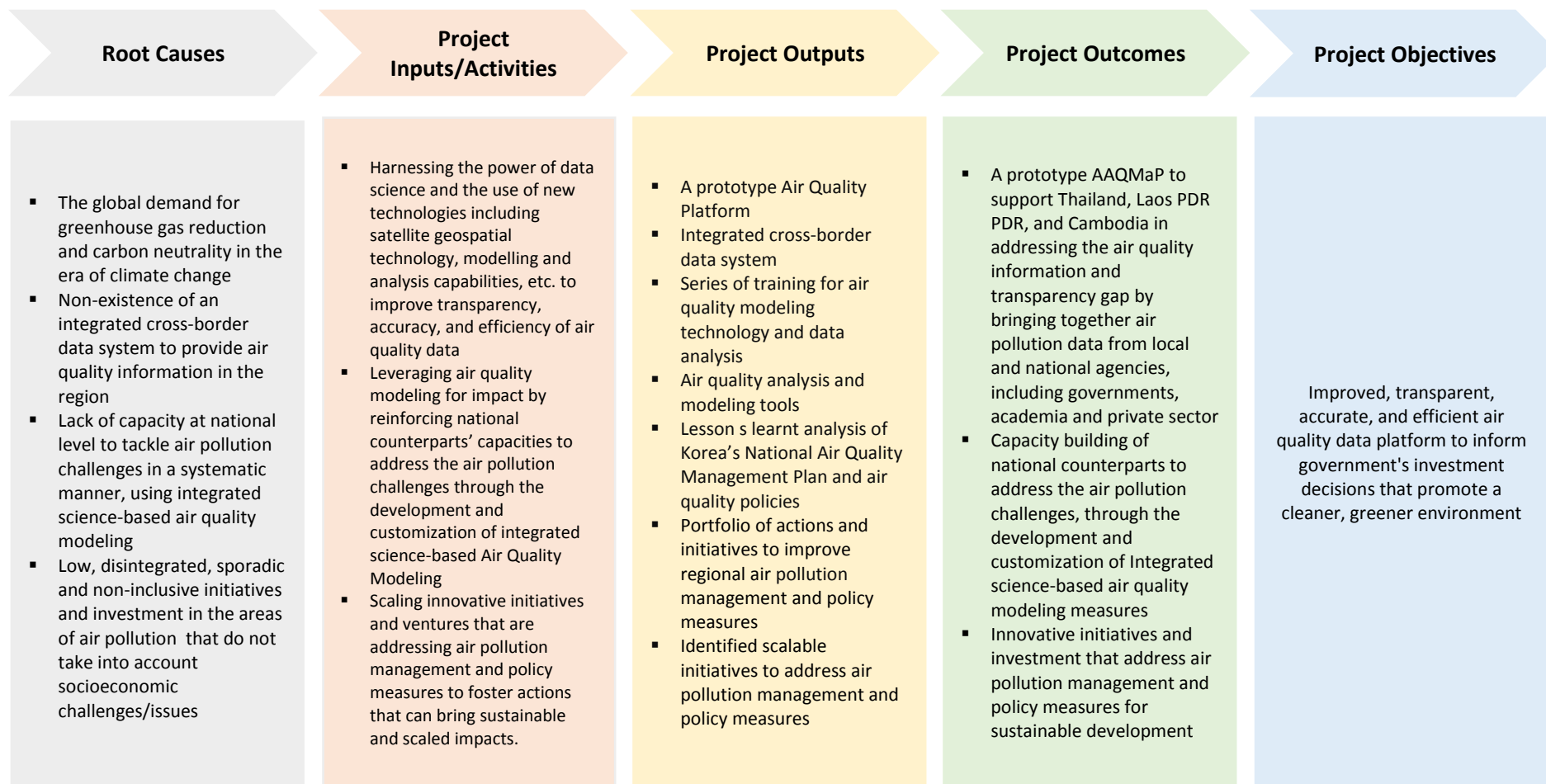
Theory of Change for the Clean Air for Blue Sky Asia Engagement Facility

Responding to the challenges and demand from the Lower Mekong Countries, to reinforce regional air pollution monitoring and forecasting capabilities, UNDP, through Regional Bureau Asia Pacific (RBAP), with support from Ministry of Environment (MOE), the Government of Korea, has put forward a value proposition to support Asia-Pacific region (with Thailand, Lao PDR and Cambodia as piloting countries) to tackle air pollution by introducing a prototype Asian Air Quality Management Program (AAQMaP) to support Thailand, Laos PDR, and Cambodia in their efforts to tackle regional air pollution challenges and inform government's investment decisions that promote a cleaner, greener environment.

The focus aims to drive transformation by leveraging on a consortium of expertise from a multitude of sectors that can inform on the application of the latest scientific data and knowledge. These are strong partnerships at the global, regional, and national level covering a wide array of stakeholders from private, public sectors, academia, research institutions, expert groups, civil societies, and local governments.

At the center of the strategy, available data science technology will leverage regional air quality data from existing air quality monitoring network and satellite technology, coupled with ground-sensor data, machine-learning, air quality modelling and analysis capabilities, to enable monitoring and forecasting regional air pollution. This information would help stakeholders, public and private to develop data-driven policies, strategies, and initiative to understand and collaborate onto the regional air pollution in Asian region.

Theory of Change for Clean Air for Blue Sky Asia



III. RESULTS AND PARTNERSHIPS

Expected Results

Output 1: Air quality information gap is addressed in targeted countries (Thailand, Laos PDR, and Cambodia), through a prototype Asian Air Quality Management Program (AAQMaP)

Output 1 will work to harness the power of data science and the introduction of new technologies including satellite geospatial technology, modelling and analysis capabilities, and ground observations to improve accuracy of air quality data. The data shared on the platform, will empower country's logical and scientific basis to improve policy, raise citizen's awareness to make more informed health choices, while giving businesses the ability to make investment decisions that promote a cleaner, greener environment.

To this end, the project will partner with existing initiatives and efforts to build an integrated cross-border data system that can deliver on the promise of producing high-quality data and then making data open in a way that they are accessible to be shared and reused by stakeholders. The project will also develop further cooperation potential to expand other neighboring countries in near future.

The project will undertake a range of result-based activities as follows:

- **Activity 1.1:** Review and assess air quality information gap including air quality related data and regional air quality monitoring system;
- **Activity 1.2:** Review and collect regional air quality, emission and satellite data, identify data and model types, indicators and variables including QA/QC of collected data;
- **Activity 1.3:** Build air emission inventories, and conduct data-integration and analysis in the project domain;
- **Activity 1.4:** Identify regional air pollution characteristics and air quality/satellite/emission data mapping;
- **Activity 1.5:** Data-linking and building a prototype Asian Air Quality Management Program (AAQMaP).

The approach consists of forging partnership and leveraging a consortium of stakeholders to combine and repurpose different types of data sources to enhance the impact of data on development. The project would particularly be bringing experience and resources from the MOE (NIER, Republic of Korea) and beneficiaries' countries, universities, research communities (etc.) to ensure the reliability of published data and to support national capacity to integrate and prototype policy intervention. UNDP can also find linkages to its ongoing related digital data and knowledge platforms, CoPs and other knowledge tools and systems. UNDP NCE team brings significant opportunities for both technical and financial leveraging, with its focus on low carbon development/Green Economy areas.

Output 2: National Counterparts in targeted countries have the capacity to address air pollution challenges by utilizing integrated science-based air quality models.

Output 2 will reinforce national counterparts' capacities to address the air pollution challenges, through the development and customization of Integrated science-based air quality modeling. The primary output will be the detailed information from local/regional scale air quality modeling based on integrated regional air emission inventory, which could be the solid basis of further analysis and discussion. The expected output will be also including the identification of a detailed portfolio of cost-effective measures for technological and policy interventions to address regional air pollution while delivering the greatest benefits for human health, climate and the environment. To this end, the project will facilitate the deployment and application of tools for conducting science-based air quality modeling on air pollution issues with the view to formulate public policies scenarios with the estimate public financial and investment requirements guided by national and regional priorities, policies and plans.

The project will focus on the following activities:

- **Activity 2.1:** Introduce and develop local and regional scale air quality modeling including cross-check with air quality monitoring data;
- **Activity 2.2:** Identify and assess relevant national public policies/programs/scenarios aiming to address regional air pollution;
- **Activity 2.3:** Implement local and regional scale air quality modeling and analysis using a variety of scenarios (e.g. Business-As-Usual (BAU) and policy intervention scenarios, etc.);
- **Activity 2.4:** Implement a series of training courses for air quality modeling technology and data analysis including technical workshops for experts;
- **Activity 2.5:** Conduct comprehensive, solution-oriented and interdisciplinary assessment of regional air pollution modeling and its results.

The approaches embedded in this component focus on leveraging science-based air quality modeling, integrated policy analysis and costing exercises as a means for achieving policy coherence, to transfer knowledge to Thailand, Lao PDR and Cambodia governments to identify national priorities and to act as a conduit to strengthen the mechanism for collaboration between the different tiers of government through integrated policy analysis and costing of initiatives, and laying a foundation for longer term enhanced alignment of national and subnational development plans and associated budgets. It could be further developed and expand to other neighboring countries for their near future collaboration potential.

Output 3: Existing initiatives to address air pollution management and policy measures are scaled-up and catalyzed

The third Output is to catalyze and scale innovative initiatives that are addressing air pollution management and policy measures. The project aims particularly at leveraging technological and financial investment to foster actions that can bring sustainable and scaled impacts. Concretely, the project will source initiatives to promote public-private and community partnerships and public actions to receive benefit from hands-on support to develop their scaling strategy. The project expects to seek support from NIER/MoE to share lessons learnt from its own national experience, assessing specific financial requirements to support enhanced monitoring, policy implementation and other

interventions required to address regional Air Pollution, and generally generate advocacy for policy dialogues in the Air Pollution space.

AAQMaP is dedicated to address air pollution management challenges and mitigation problems. In partnership with national stakeholders, the project will focus its efforts in generating a portfolio of actions and initiatives offering disruptive technologies, solutions, and services to improve regional air pollution management.

To this end, the project will focus its intervention on the following activities:

- **Activity 3.1:** Conduct lessons learnt analysis of Korea's National Air Quality Management Plan and air quality policies for policy advocacy and knowledge sharing;
- **Activity 3.2:** Assess financing requirements and cost-effective measures for implementing policy options and interventions needed to address regional air pollution;
- **Activity 3.3:** Facilitate the use of the results of the analysis as an advocacy tool for stakeholders' engagement, and to influence policy dialogue on air pollution;
- **Activity 3.4:** Engage with central and local governance institutions, communities, and financial partners (e.g. private sector, impact investors, development financial institutions) to develop portfolio of actions, including research projects, knowledge sharing, and community-based initiatives, etc.;
- **Activity 3.5:** Identify scalable initiatives to address air pollution management and policy measures.

The approach consists of connecting, enabling, and amplifying ongoing scattered solutions, reinforcing their consistency and visibility, through a collaborative methodology which ultimately links innovation research with R&BD collaboration, business incubation, acceleration, and investment, within an enabling policy framework set to support the innovation ecosystem. This area aligns strongly with the Nature Climate Energy (NCE) focus on low carbon development/Green Economy areas, and the additional financing that can be brought through access to vertical funds.

Partnerships

This project build a strategic partnership using ROK resources and expertise to expand Air Pollution monitoring across all three countries, thereby establishing Phase 1 goal of launching a Regional Air Pollution Monitoring Platform under the Clean Air for Blue Sky Asia initiative. Further, it also lays a foundation for connecting to and leveraging wider UNDP expertise and investment in the Air Pollution space for perspectives of Health, Digital Transformation, Climate & Environment, Green Economy, et. al.

The project will also build a results-based partnership with strategic regional and national counterparts to deliver effectively and efficiently the expected outputs. The project would particularly rely on the vast experience, knowledge and resources from regional institutions partners and the wider local partners to mobilize additional resources, expertise, and knowledge. South-South and triangular cooperation are in this regard integral to how UNDP works and thinks about the future of development.

Collective intelligence

The project is in a unique position to facilitate practical knowledge and resources from the UN Development System. The project will particularly draw on UNESCAP and UNEP complementary strengths and capabilities to deliver stronger results and to achieve the ambition of the project.

Building on the UNDP network of knowledge nodes, vast on-the-ground experience and partners, and recognized credibility as a neutral partner, the project will leverage the UNDP Global Policy Network (GPN) assets and capabilities to respond effectively to the countries' demand for advisory and support services.

Country-focused with the ability to pull resources from the entire UNDP network, the GPN is the cutting-edge provider of development advice and solutions, connecting countries to the world of knowledge, resources and networks of best practice that they need to achieve development breakthroughs. Leveraging on the areas where UNDP has unparalleled thematic leadership, i.e. inclusive growth, climate and environment, the project will engage and channel the GPN cross-disciplinary development solutions, existing expertise and assets to ensure an integrated approach to development with cost effectiveness and efficiency.

Working with Partners

As part of the project formulation and consultation process, the project has identified several potential partners, fora and coalitions with whom synergies and cooperation would be essential for the success of the project. It includes the national authorities such as respective Ministry of Environment, Research institutes such as NIER, Incheon National University, Korean Society for Atmospheric Environment and respective national research centers such as Chulalongkorn University, National Astronomical Research Institute of Thailand, the Natural Resources and Environment Research Institute, National University of Laos and Royal University of Phnom Penh, Institute of technology of Cambodia.

The project will collaborate with existing platforms such as the Global Environment Monitoring System for Asia (GEMS Asia), explore private sector engagement to ensure financial sustainability of the initiative in the long term.

Sustainability and Scaling Up

The project, introduced as Phase 1, will lay the foundation for "Clean AIR for Blue Sky Asia", which UNDP in partnership with Government of Korea, envisioned to expand beyond the initial countries i.e. Thailand, Laos and Cambodia to ultimately cover 20 countries by the end of phase 4. (See Figure 1)



Figure 1: Graphic concept of “Clean AIR for Blue Sky Asia”.

IV. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

The project will be implemented by UNDP within the Direct Implementation Modality (DIM), in line with UNDP Programme and Operations Policies and Procedures (POPP). UNDP Bangkok Regional Hub (BRH), will be responsible for the management and delivery of project activities to achieve the expected objectives and Outputs. UNDP will, in turn, enter into agreements with partner consortium/organizations, referred to as “responsible parties” to assist in delivering specific activities and outputs.

The project team (consisting of project manager, assistant and other technical experts as required) under the supervision of the NCE Team Lead/Advisor especially on substantive issues, will manage day-to-day activities of the project and coordinate closely with the participating Country Offices. To elaborate, at the regional level, The Project Manager will provide project implementation support and will serve as regional project manager who coordinates activities among countries. S/he will be responsible for quality assurance of the implementation of the project’s technical components. Substantive progress reports and financial reports will be consolidated at the regional level to ensure that a single window of communication is maintained throughout the duration of the project.

The project’s quality is regularly monitored and assured by UNDP staff. Financial transaction, the recruitment of staff and the procurement of goods and services will be performed by UNDP following UNDP rules and procedures. Similarly, UNDP will identify and assess potential responsible parties to undertake certain project activities.

The current UNDP Asia Pacific Regional Programme Document’s Advisory Board will serve as the highest level Board and provides strategic direction and executive management decisions and meets once a year. Clean Air for Blue Sky will be governed by an Advisory Group that will ensure country-led stakeholder advisory role, accountability and effective management. The Advisory Group will consist of:

- UNDP Bangkok Regional Hub Manager (Chair)
- Representation from Ministry of Environment, Government of Republic of Korea (Senior suppliers)
- UNDP Resident Representatives of participating countries (Senior beneficiaries)
- UNDP BRH NCE team (Regional project team)
- UNDP BRH Programme Management Unit (Project assurance)

The main functions of the Advisory Group will be to:

1. Provide overall guidance and direction to the project, in line with the theory of change, ensuring it remains within any specified constraints;
2. Address project issues as raised by the project manager;
3. Provide guidance on project risks, and agree on possible countermeasures and management actions to address specific risks;
4. Agree on project manager's tolerances as required;
5. Review the project progress, and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;
6. Appraise the annual project implementation report, including the quality assessment rating report; make recommendations for the work-plan;
7. Provide ad hoc direction and advice for exceptional situations when the project manager's tolerances are exceeded; and
8. Assess and decide how to proceed on project changes through appropriate revisions

The Advisory Group will meet once a year (virtually or face-to-face) and be updated and consulted through emails and/or teleconference on a regular basis, as required. The Advisory Group will be managed and supported by a Secretariat based at the UNDP Bangkok Regional Hub. The Secretariat will be responsible for preparing and disseminating minutes of each meeting.

V. RESULTS AND RESOURCES FRAMEWORK

Intended Outcome as stated in the Global/Regional Programme Results and Resource Framework:								
Outcome 1: Inclusive and sustainable structural transformations accelerated to reduce poverty, inequality, and vulnerabilities towards the achievement of SDGs and inclusive, sustainable, resilient and digital transitions								
Outcome indicators as stated in the Regional Programme Results and Resources Framework:								
1.3. Number of Asia-Pacific cities in most polluted 100 cities in the world								
Applicable Outcome(s) from the UNDP Strategic Plan:								
SP Outcome 1: Structural transformation accelerated, particularly green, inclusive, and digital transitions								
Project title and Atlas Project Number: Clean Air for Blue Sky Asia								
Expected Outputs	Output Indicators	Data Source	Baseline		Targets			Data Collection Methods and Risks
			Value	Year	2022	2023	2024	
Output 1: Air quality information gap is addressed in targeted countries (Thailand, Laos PDR, and Cambodia), through a prototype Asian Air Quality Management Program (AAQMaP)	1.1 % of data sets collected from various observations and sources needed to AAQMaPs	<ul style="list-style-type: none"> Data generation to harmonize modeling input 	0	2021	60	80	90	<ul style="list-style-type: none"> Surveys Monitoring
	1.2 A comprehensive assessment completed to identify air quality information gap in targeted countries	<ul style="list-style-type: none"> Project Monitoring Reports 	NO	2021	YES	YES	YES	<ul style="list-style-type: none"> Project Monitoring Reports
	1.3 % increase in monthly users/visitors of a prototype Air Quality Platform (Baseline is the no. of users at the launch of the AAQMaP, assuming Q3 of 2023)	<ul style="list-style-type: none"> System generated data 	0%	Q3-2022	20%	40%	60%	<ul style="list-style-type: none"> System generated data
Output 2: National Counterparts in targeted countries have the capacity to address air pollution challenges by utilizing integrated science-based air quality models	2.1 Number of generating scenarios and analysis for air quality modeling by country technology and data analysis	<ul style="list-style-type: none"> System generated scenario and reports 	0	2022	0	15	30	<ul style="list-style-type: none"> System generated scenario and reports
	2.2 Number of people participated in training courses on air quality modeling technology and data analysis disaggregated by gender	<ul style="list-style-type: none"> Project Monitoring Reports 	0	2022	0	M20 F10	M40 F20	<ul style="list-style-type: none"> Monitoring Reporting
Output 3: Existing initiatives to address air pollution management and policy measures are scaled-up and catalized	3.1 Number of identified scalable initiatives to address air pollution management and policy measures	<ul style="list-style-type: none"> Project Monitoring Reports Independent Evaluation 	0	2022	0	1	3	<ul style="list-style-type: none"> Assessment Feedback from partners and beneficiaries

VI. MONITORING AND EVALUATION

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans:

Monitoring Plan

Monitoring Activity	Purpose	Frequency	Expected Action
Track results progress	Progress data against the results indicators in the RRF will be collected and analyzed to assess the progress of the project in achieving the agreed outputs.	Quarterly	Slower than expected progress will be addressed by project management.
Monitor and Manage Risk	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk.	Quarterly	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.
Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	Annually	Relevant lessons are captured by the project team and used to inform management decisions.
Annual Project Quality Assurance	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project.	Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.
Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	Annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections.
Project Report	A progress report will be presented to the Project Board and key stakeholders, consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk long with mitigation measures, and any evaluation or review reports prepared over the period.	Annually, and at the end of the project (final report)	
Project Review	The project's governance mechanism (i.e. project advisory group) will hold regular project reviews to assess the performance of the project and review the Multi-Year Work Plan to ensure realistic budgeting over the life of the project. In the project's final year, the Advisory Group shall hold an end-of project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences.	Annually or as deemed necessary	Any quality concerns or slower than expected progress should be discussed by the project board and management actions agreed to address the issues identified.

Evaluation plan

	Primary Responsibility	Budget	Time frame
Independent Terminal Evaluation (TE) included in UNDP evaluation plan	UNDP	USD 12,000	At least three months before operational closure.

VII. MULTI-YEAR WORK PLAN

Output	Planned activities	Donor	Fund code	Responsible Party	Required budget			Timeframe			Budget note
					Account code	Budget Description	Amount \$US	Year 1	Year 2	Year 3	
								2022	2023	2024	
Output 1: Air quality information gap is addressed in targeted countries (Thailand, Laos PDR, and Cambodia), through a prototype Asian Air Quality Management Program (AAQMaP)	Activity 1.1 Identify and assess air quality information gap including air quality related data and regional air quality monitoring system	ROK - 00204	30000	UNDP	72100	Contractual Services - Companies	119,700.00	98,700.00	18,000.00	3,000.00	1
	Activity 1.2: Review and collect regional air quality, emission and satellite data, identify data and model types, indicators and variables including QA/QC of collected data										
	Activity 1.3: Build air emission inventories, and conduct data-integration and analysis in the project domain										
	Activity 1.4: Identify regional air pollution characteristics and air quality/satellite/emission data mapping										
	Activity 1.5: Data-linking and building a prototype Asian Air Quality Management Program (AAQMaP)										
TOTAL OUTPUT 1							119,700.00	98,700.00	18,000.00	3,000.00	
Output 2: National Counterparts in targeted countries have the capacity to address air pollution	Activity 2.1: Introduce and develop local and regional scale air quality modeling and analysis, including cross-check with air quality monitoring data	ROK - 00204	30000	UNDP	72100	Contractual Services - Companies	104,300.00	17,900.00	53,400.00	33,000.00	2
	Activity 2.2: Identify and assess relevant national public policies/programs/scenarios aiming to address regional air pollution										

Output	Planned activities	Donor	Fund code	Responsible Party	Required budget			Timeframe			Budget note
					Account code	Budget Description	Amount \$US	Year 1	Year 2	Year 3	
								2022	2023	2024	
challenges by utilizing integrated science-based air quality models	Activity 2.3: Implement local and regional scale air quality modeling and analysis using a variety of scenarios										
	Activity 2.4: Implement a series of training courses for air quality modeling technology and data analysis including technical workshops for experts										
	Activity 2.5: Conduct comprehensive, solution-oriented and interdisciplinary assessment of regional air pollution modeling and its results										
TOTAL OUTPUT 2							114,300.00	21,900.00	57,400.00	35,000.00	
Output 3: Existing initiatives to address air pollution management and policy measures are scaled-up and catalized	Activity 3.1: Conduct lessons learnt analysis of Korea's National Air Quality Management Plan and air quality policies for policy advocacy and knowledge sharing										
	Activity 3.2: Assess financing requirements and cost-effective measures for implementing policy options and interventions needed to address regional air pollution;										
	Activity 3.3: Facilitate the use of the results of the analysis as an advocacy tool for stakeholders' engagement, and to influence policy dialogue on air pollution	ROK - 00204	30000	UNDP	72100	Contractual Services - Companies	66,000.00	6,000.00	16,000.00	44,000.00	3
	Activity 3.4: Engage with central and local governance institutions, communities, and financial partners (e.,g. private sector, impact investors, development financial institutions) to develop portfolio of actions, including research projects, knowledge sharing, and community-based initiatives, etc.										

Output	Planned activities	Donor	Fund code	Responsible Party	Required budget			Timeframe			Budget note
					Account code	Budget Description	Amount \$US	Year 1	Year 2	Year 3	
								2022	2023	2024	
	Activity 3.5: Identify scalable initiatives to address air pollution management and policy measures										
TOTAL OUTPUT 3							66,000.00	6,000.00	16,000.00	44,000.00	
Project Management		ROK - 00204	30000	UNDP	61100	Salary Cost- NP Staff	43,000.00	15,000.00	15,000.00	13,000.00	4
		ROK - 00204	30000	UNDP	75700	Training, Workshops and Conference	12,000.00	4,000.00	4,000.00	4,000.00	5
		ROK - 00204	30000	UNDP	71600	Travel	8,500.00	2,500.00	3,000.00	3,000.00	6
		ROK - 00204	30000	UNDP	74500	Services to project (GOE)	8,480.95	3,002.19	3,039.38	2,439.38	7
	Independent Review and Evaluation	ROK - 00204	30000	UNDP	71200	International Consultants	12,000.00	0.00	0.00	12,000.00	8
TOTAL Project Management							85,980.95	24,502.19	25,039.38	34,439.38	
Total project without GMS							383,980.95	151,102.19	116,439.38	116,439.38	
GMS fee (8%)							31,050.50	12,420.20	9,315.15	9,315.15	
Total project with GMS fee							415,031.45	163,522.39	125,754.53	125,754.53	
Coordination Levy 1%							4,150.31	4,150.31			
Total Project							419,181.76	167,672.70	125,754.53	125,754.53	

Budget Note Description

#	Budget Note Description	Amount (USD)
1	Consultancy services to undertake activities under Output 1: A prototype Asian Air Quality Management Program (AAQMaP) to support Thailand, Laos PDR, and Cambodia	119,700.00
2	Consultancy services to undertake activities under Output 2: National counterparts' capacity developed to address the air pollution challenge	114,300.00
3	Consultancy services to undertake activities under Output 3: Catalyzed and scaled-up innovative initiatives and investment	66,000.00
4	Regional project coordinator (cost sharing)	43,000.00
5	Workshop and consultation costs associated with project activities. Assume several consultations.	12,000.00
6	Travel costs for regional project staff for oversight and project implementation support visits	8,500.00
7	Support to project administrative services including procurement, HR, IT, finance services	8,480.95
8	International Consultant - Independent Terminal Evaluation (TE) included in UNDP evaluation plan	12,000.00

VIII. LEGAL CONTEXT

This project forms part of an overall programmatic framework under which several separate associated country level activities will be implemented. When assistance and support services are provided from this Project to the associated country level activities, this document shall be the "Project Document" instrument referred to in: (i) the respective signed SBAA's for the specific countries; or (ii) in the [Supplemental Provisions to the Project Document](#) attached to the Project Document in cases where the recipient country has not signed an SBAA with UNDP, attached hereto and forming an integral part hereof. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

This project will be implemented by UNDP ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

IX. RISK MANAGEMENT

1. UNDP as the Implementing Partner will comply with the policies, procedures and practices of the United Nations Security Management System (UNSMS.)
2. UNDP as the Implementing Partner will undertake all reasonable efforts to ensure that none of the [project funds]¹ [UNDP funds received pursuant to the Project Document]² are used to provide support to individuals or entities associated with terrorism, that the recipients of any amounts provided by UNDP hereunder do not appear on the United Nations Security Council Consolidated Sanctions List, and that no UNDP funds received pursuant to the Project Document are used for money laundering activities. The United Nations Security Council Consolidated Sanctions List can be accessed via <https://www.un.org/securitycouncil/content/un-sc-consolidated-list>. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.
3. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).
4. UNDP as the Implementing Partner will: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
5. In the implementation of the activities under this Project Document, UNDP as the Implementing Partner will handle any sexual exploitation and abuse (“SEA”) and sexual harassment (“SH”) allegations in accordance with its regulations, rules, policies and procedures.
6. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.
7. UNDP as the Implementing Partner will ensure that the following obligations are binding on each responsible party, subcontractor, and sub-recipient:
 - a. Consistent with the Article III of the SBAA [*or the Supplemental Provisions to the Project Document*], the responsibility for the safety and security of each responsible party, subcontractor and sub-recipient and its personnel and property, and of UNDP’s property in such responsible party’s, subcontractor’s and sub-recipient’s custody, rests with such responsible party, subcontractor and sub-recipient. To this end, each responsible party, subcontractor and sub-recipient shall:
 - i. put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
 - ii. assume all risks and liabilities related to such responsible party’s, subcontractor’s and sub-recipient’s security, and the full implementation of the security plan.

¹ To be used where UNDP is the Implementing Partner

² To be used where the UN, a UN fund/programme or a specialized agency is the Implementing Partner

- b. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the responsible party's, subcontractor's and sub-recipient's obligations under this Project Document.
- c. Each responsible party, subcontractor and sub-recipient (each a "sub-party" and together "sub-parties") acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the sub-parties, and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.
 - (a) In the implementation of the activities under this Project Document, each sub-party shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").
 - (b) Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, each sub-party, shall not engage in any form of sexual harassment ("SH"). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment. SH may occur in the workplace or in connection with work. While typically involving a pattern of conduct, SH may take the form of a single incident. In assessing the reasonableness of expectations or perceptions, the perspective of the person who is the target of the conduct shall be considered.
- d. In the performance of the activities under this Project Document, each sub-party shall (with respect to its own activities), and shall require from its sub-parties (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, sub-parties will and will require that their respective sub-parties will take all appropriate measures to:
 - (i) Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;
 - (ii) Offer employees and associated personnel training on prevention and response to SH and SEA, where sub-parties have not put in place its own training regarding the prevention of SH and SEA, sub-parties may use the training material available at UNDP;
 - (iii) Report and monitor allegations of SH and SEA of which any of the sub-parties have been informed or have otherwise become aware, and status thereof;
 - (iv) Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and
 - (v) Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. Each sub-party shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the

investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the relevant sub-party shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.

- e. Each sub-party shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the relevant sub-party to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.
- f. Each responsible party, subcontractor and sub-recipient will ensure that any project activities undertaken by them will be implemented in a manner consistent with the UNDP Social and Environmental Standards and shall ensure that any incidents or issues of non-compliance shall be reported to UNDP in accordance with UNDP Social and Environmental Standards.
- g. Each responsible party, subcontractor and sub-recipient will take appropriate steps to prevent misuse of funds, fraud, corruption or other financial irregularities, by its officials, consultants, subcontractors and sub-recipients in implementing the project or programme or using the UNDP funds. It will ensure that its financial management, anti-corruption, anti-fraud and anti money laundering and countering the financing of terrorism policies are in place and enforced for all funding received from or through UNDP.
- h. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to each responsible party, subcontractor and sub-recipient: (a) UNDP Policy on Fraud and other Corrupt Practices (b) UNDP Anti-Money Laundering and Countering the Financing of Terrorism Policy; and (c) UNDP Office of Audit and Investigations Investigation Guidelines. Each responsible party, subcontractor and sub-recipient agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.
- i. In the event that an investigation is required, UNDP will conduct investigations relating to any aspect of UNDP programmes and projects. Each responsible party, subcontractor and sub-recipient will provide its full cooperation, including making available personnel, relevant documentation, and granting access to its (and its consultants', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with it to find a solution.
- j. Each responsible party, subcontractor and sub-recipient will promptly inform UNDP as the Implementing Partner in case of any incidence of inappropriate use of funds, or credible allegation of fraud, corruption other financial irregularities with due confidentiality.

Where it becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, each responsible party, subcontractor and sub-recipient will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). It will provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

- k. *Option 1:* UNDP will be entitled to a refund from the responsible party, subcontractor or sub-recipient of any funds provided that have been used inappropriately, including through fraud corruption, other financial irregularities or otherwise paid other than in accordance with the terms and conditions of this Project Document. Such amount may be deducted by UNDP from any payment due to the responsible party, subcontractor or sub-recipient under this or any

other agreement. Recovery of such amount by UNDP shall not diminish or curtail any responsible party's, subcontractor's or sub-recipient's obligations under this Project Document.

Where such funds have not been refunded to UNDP, the responsible party, subcontractor or sub-recipient agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to such responsible party, subcontractor or sub-recipient for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud, corruption or other financial irregularities, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

- l. Each contract issued by the responsible party, subcontractor or sub-recipient in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from it shall cooperate with any and all investigations and post-payment audits.
- m. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project or programme, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.
- n. Each responsible party, subcontractor and sub-recipient shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to its subcontractors and sub-recipients and that all the clauses under this section entitled "Risk Management Standard Clauses" are adequately reflected, *mutatis mutandis*, in all its sub-contracts or sub-agreements entered into further to this Project Document.

ANNEX 1: SOCIAL AND ENVIRONMENT SCREENING TEMPLATE

Project Information

Project Information	
1. Project Title	Clean Air for Blue Sky in Asia
2. Project Number (i.e. Atlas project ID, PIMS+)	n/a
3. Location (Global/Region/Country)	Thailand, Lao PDR and Cambodia
4. Project stage (Design or Implementation)	Design Stage
5. Date	April 2022

Part A. Integrating Programming Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Programming Principles in Order to Strengthen Social and Environmental Sustainability?

Briefly describe in the space below how the project mainstreams the human rights-based approach

This project includes fundamental activities that will expand public awareness of risks posed by air pollution and take steps to reduce these risks in the future. In so doing, the project utilizes an inclusive and human rights-based approach. The needs of the most vulnerable sectors and populations in the project areas will be analyzed with the end goal of improving availability of air pollution modeling, reducing impacts of toxic air pollutants, and enhancing overall adaptive policy measures. Project activities such as risk and vulnerability assessments, capacity building and training, and enhancing air pollution forecasting systems are planned to be carried out in a way that supports and enables the contribution of all in the affected area – including communities which has no air quality monitoring station and data. From the project inception, the human rights to protect human health in a pleasant environment will be internalized in a way that analyzes the current situation and prepares countermeasures.

Briefly describe in the space below how the project is likely to improve gender equality and women's empowerment

This project is likely to improve gender equality and women's empowerment via enabling municipal and provincial governments in Thailand, Lao PDR and Cambodia to have access to improved air quality data that is, where possible, sex disaggregated to inform future decision-making and investment. In addition, the long-term capacities of the government institutions to implement plans, policies, and investments that are risk-informed and account for the needs of all - air pollution greatly affects the health of not only children but also women, especially pregnant women – will be assessed, with a project proposal developed based on the outcomes of this capacity assessment to enable future resilience-building and risk reduction measures.

The project will engage with local governance institutions, communities, women rights organizations, national gender machineries for gender equality and youth groups, financial partners, (e.g., private sector, impact investors, development financial institutions) to develop portfolio of actions, including technical and policy solutions, research projects, community-based initiatives, etc. Efforts will be made explicitly to seek voices and engagement of community members, including women, men, young women and young men, other genders, persons with disabilities, ethnic minorities, and migrants, leveraging UNDP's existing initiatives on the ground.

Briefly describe in the space below how the project mainstreams sustainability and resilience

This project will strengthen the environmental management capacities of local municipal and provincial governments in Thailand, Lao PDR and Cambodia by performing assessments that will enable a holistic, integrated approach to air quality management that protects the public health and natural ecosystems. This project also directly addresses

<p>the nexus among energy, environment and climate change in the region: by taking steps to reduce the impacts of air pollution on urban and rural landscapes, the project will enable the target regions to maintain progress towards carbon neutrality and advancing the Sustainable Development Goals.</p> <p>The project aims particularly at leveraging technological, financial and investment to foster actions that can bring sustainable and scaled impacts. Concretely, the project will source initiatives (e.g., SMEs, Start-ups, public-private partnerships, etc.), communities' initiatives and public actions to benefit from hands-on mentoring and support to develop their scaling strategy while incorporating solid positive social and environmental impact objectives, with targeted support to women-led enterprises and deliberate inclusion of women in communities lead entities.</p> <p>The project will also deepen its cooperation with existing platforms such as the Global Environment Monitoring System for Asia (GEMS Asia), the Asia Pacific Clean Air Partnership to mobilize resources. Further exploration to engage private sector, would be carried out to ensure financial sustainability of the initiative in the long term.</p>
<p>Briefly describe in the space below how the project strengthens accountability to stakeholders</p>
<p>The project is to accelerate structural transformations for sustainable development through multi-stakeholder partnerships and engagement within and across government and society. Throughout the project implementation a wide variety of stakeholders – including local, international experts, researchers, and national government entities - will be engaged in capacity building on air pollution risk reduction and climate change mitigation and resilience efforts that assess and address the risks to the most vulnerable local populations in the project area. The project will conduct a stakeholder mapping and analysis and develop an engagement plan that details how to include stakeholder institutions and involve women, indigenous and vulnerable populations in the project activities and consultations.</p>

Part B. Identifying and Managing Social and Environmental Risks



QUESTION 2: What are the Potential Social and Environmental Risks?	QUESTION 3: What is the level of significance of the potential social and environmental risks?			QUESTION 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High
<i>Risk Description (broken down by event, cause, impact)</i>	<i>Impact and Likelihood</i>	<i>Significance</i>	<i>Comments</i>	<i>Description of assessment and management measures for risks rated as Moderate, Substantial or High</i>
<p>Risk 1: Project activities could be carried out in a way that does not include or represent the needs and voices of marginalized and vulnerable populations, including women. (Overarching Principle: Leave No One Behind P.10, P.13)</p>	<p>I = 2 P = 2</p>	<p>Low</p>	<p>Women and children are underrepresented in air quality decision-making processes in Thailand, Lao PDR and Cambodia.</p>	<p>Activities have been designed to collect data including rural area. During the inception phase of the project, the analysis of health impacts and their voices will be reflected because air pollution has a great impact on the health of not only children but also women, especially pregnant women.</p>
<p>Risk 2: Climate change is expected to make the air pollution phenomenon more complicated, and the increase in energy consumption in Asia will hinder not only the analysis of the current</p>	<p>I = 3 P = 3</p>	<p>Moderate</p>	<p>The ongoing effects of global climate change and rapid increase of carbon-based energy use be</p>	<p>During project inception, the workplan and sequencing of activities will be designed to mobilize a few Climate-Air Pollution Joint Modelling tools and adopt NDC scenarios of the target countries to analyses expected and unexpected situation. Scientific and comparative</p>

situation but also the future forecast. <i>(SES Standard 2 – Climate Change and Disaster Risks; 2.2)</i>			accelerated in the project area.	verification process will be assessed and accounted for in the risk mitigation plan.																				
Risk 3: Duty bearers (national government stakeholders and partners) may not have the capacity to meet their obligations to the project – potentially resulting in delays and/or missed project targets. <i>(Overarching Principle: Leave No One Behind; P.2)</i>	I=2 P=2	Low		Project has been designed in consultation with the networks of international academic researchers and government partners. During project inception processes, representatives from the national governments and experts will also be engaged to ensure ownership over project activities and Outputs.																				
QUESTION 4: What is the overall project risk categorization?																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%; text-align: center;">Low Risk</td> <td style="width: 5%; text-align: center;">X</td> <td style="width: 55%;"><i>Overall, this project has low risk of adverse environmental and social impact. Main considerations are the involvement of vulnerable populations, marginalized groups and women.</i></td> </tr> <tr> <td style="text-align: center;">Moderate Risk</td> <td style="text-align: center;"><input type="checkbox"/></td> <td></td> </tr> <tr> <td style="text-align: center;">Substantial Risk</td> <td style="text-align: center;"><input type="checkbox"/></td> <td></td> </tr> <tr> <td style="text-align: center;">High Risk</td> <td style="text-align: center;"><input type="checkbox"/></td> <td></td> </tr> </table>					Low Risk	X	<i>Overall, this project has low risk of adverse environmental and social impact. Main considerations are the involvement of vulnerable populations, marginalized groups and women.</i>	Moderate Risk	<input type="checkbox"/>		Substantial Risk	<input type="checkbox"/>		High Risk	<input type="checkbox"/>									
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Substantial Risk	<input type="checkbox"/>																							
High Risk	<input type="checkbox"/>																							
QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are triggered? (check all that apply)																								
Question only required for Moderate, Substantial and High Risk projects																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 55%;"><i>Is assessment required? (check if “yes”)</i></td> <td style="width: 5%; text-align: center;"><input type="checkbox"/></td> <td style="width: 15%;"></td> <td style="width: 25%;"></td> <td style="width: 10%; text-align: center;"><i>Status? (completed, planned)</i></td> </tr> <tr> <td style="text-align: center;"><i>if yes, indicate overall type and status</i></td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Targeted assessment(s)</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>ESIA (Environmental and Social Impact Assessment)</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>SESA (Strategic Environmental and Social Assessment)</td> <td></td> </tr> </table>					<i>Is assessment required? (check if “yes”)</i>	<input type="checkbox"/>			<i>Status? (completed, planned)</i>	<i>if yes, indicate overall type and status</i>		<input type="checkbox"/>	Targeted assessment(s)				<input type="checkbox"/>	ESIA (Environmental and Social Impact Assessment)				<input type="checkbox"/>	SESA (Strategic Environmental and Social Assessment)	
<i>Is assessment required? (check if “yes”)</i>	<input type="checkbox"/>			<i>Status? (completed, planned)</i>																				
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		<input type="checkbox"/>	ESIA (Environmental and Social Impact Assessment)																					
		<input type="checkbox"/>	SESA (Strategic Environmental and Social Assessment)																					

	Are management plans required? (check if “yes)	<input type="checkbox"/>	
	<i>If yes, indicate overall type</i>	<input type="checkbox"/>	Targeted management plans (e.g. Gender Action Plan, Emergency Response Plan, Waste Management Plan, others)
		<input type="checkbox"/>	ESMP (Environmental and Social Management Plan which may include range of targeted plans)
		<input type="checkbox"/>	ESMF (Environmental and Social Management Framework)
	Based on identified risks, which Principles/Project-level Standards triggered?		Comments (not required)
	Overarching Principle: Leave No One Behind		
	Human Rights	X	
	Gender Equality and Women’s Empowerment	X	
	Accountability	X	
	1. Biodiversity Conservation and Sustainable Natural Resource Management	<input type="checkbox"/>	
	2. Climate Change and Disaster Risks	X	
	3. Community Health, Safety and Security	<input type="checkbox"/>	
	4. Cultural Heritage	<input type="checkbox"/>	
	5. Displacement and Resettlement	<input type="checkbox"/>	
	6. Indigenous Peoples	<input type="checkbox"/>	
	7. Labour and Working Conditions	<input type="checkbox"/>	
	8. Pollution Prevention and Resource Efficiency	<input type="checkbox"/>	

Final Sign Off

Final Screening at the design-stage is not complete until the following signatures are included

Signature	Date	Description
<p>QA Assessor</p> <p>DocuSigned by:  <small>0DC129E02F5645F...</small> Janejira Chuthong Project Coordinator</p>	April 2022	UNDP staff member responsible for the project, typically a UNDP Programme Officer. Final signature confirms they have “checked” to ensure that the SESP is adequately conducted.
<p>QA Approver</p> <p>DocuSigned by:  <small>E8C5A38F2B5C41B...</small> Katri Kivioja, PMU coordinator</p>	April 2022	UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor.
PAC Chair*	n/a	UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

* Reference is made to [Country Office Support - RBAP guidance on programming instruments for COVID-19 response 14.05.20.pdf - All Documents \(sharepoint.com\)](#) where engagement facility does not require LPAC.

SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental Risks		
<p>INSTRUCTIONS: The risk screening checklist will assist in answering Questions 2-6 of the Screening Template. Answers to the checklist questions help to (1) identify potential risks, (2) determine the overall risk categorization of the project, and (3) determine required level of assessment and management measures. Refer to the SES tool kit for further guidance on addressing screening questions.</p>		
<p>Overarching Principle: Leave No One Behind</p> <p>Human Rights</p>		Answer (Yes/No)
P.1	Have local communities or individuals raised human rights concerns regarding the project (e.g. during the stakeholder engagement process, grievance processes, public statements)?	No
P.2	Is there a risk that duty-bearers (e.g. government agencies) do not have the capacity to meet their obligations in the project?	YES
P.3	Is there a risk that rights-holders (e.g. project-affected persons) do not have the capacity to claim their rights?	No
<i>Would the project potentially involve or lead to:</i>		
P.4	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
P.5	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups, including persons with disabilities? ³	No
P.6	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalized individuals or groups, including persons with disabilities?	No
P.7	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	No
<p>Gender Equality and Women’s Empowerment</p>		
P.8	Have women’s groups/leaders raised gender equality concerns regarding the project, (e.g. during the stakeholder engagement process, grievance processes, public statements)?	No
<i>Would the project potentially involve or lead to:</i>		
P.9	adverse impacts on gender equality and/or the situation of women and girls?	No
P.10	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	YES
P.11	limitations on women’s ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?	No

³ Prohibited grounds of discrimination include race, ethnicity, sex, age, language, disability, sexual orientation, gender identity, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to “women and men” or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender and transsexual people.

	<i>For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being</i>	
P.12	exacerbation of risks of gender-based violence? <i>For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.</i>	No
Sustainability and Resilience: Screening questions regarding risks associated with sustainability and resilience are encompassed by the Standard-specific questions below		
Accountability		
<i>Would the project potentially involve or lead to:</i>		
P.13	exclusion of any potentially affected stakeholders, in particular marginalized groups and excluded individuals (including persons with disabilities), from fully participating in decisions that may affect them?	YES
P.14	grievances or objections from potentially affected stakeholders?	No
P.15	risks of retaliation or reprisals against stakeholders who express concerns or grievances, or who seek to participate in or to obtain information on the project?	No
Project-Level Standards		
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management		
<i>Would the project potentially involve or lead to:</i>		
1.1	adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? <i>For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes</i>	No
1.2	activities within or adjacent to critical habitats and/or environmentally sensitive areas, including (but not limited to) legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	No
1.3	changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4	risks to endangered species (e.g. reduction, encroachment on habitat)?	No
1.5	exacerbation of illegal wildlife trade?	No
1.6	introduction of invasive alien species?	No
1.7	adverse impacts on soils?	No
1.8	harvesting of natural forests, plantation development, or reforestation?	No
1.9	significant agricultural production?	No
1.10	animal husbandry or harvesting of fish populations or other aquatic species?	No
1.11	significant extraction, diversion or containment of surface or ground water?	No

	<i>For example, construction of dams, reservoirs, river basin developments, groundwater extraction</i>	
1.12	handling or utilization of genetically modified organisms/living modified organisms? ⁴	No
1.13	utilization of genetic resources? (e.g. collection and/or harvesting, commercial development) ⁵	No
1.14	adverse transboundary or global environmental concerns?	No
Standard 2: Climate Change and Disaster Risks		
<i>Would the project potentially involve or lead to:</i>		
2.1	areas subject to hazards such as earthquakes, floods, landslides, severe winds, storm surges, tsunami or volcanic eruptions?	No
2.2	outputs and outcomes sensitive or vulnerable to potential impacts of climate change or disasters? <i>For example, through increased precipitation, drought, temperature, salinity, extreme events, earthquakes</i>	Yes
2.3	increases in vulnerability to climate change impacts or disaster risks now or in the future (also known as maladaptive or negative coping practices)? <i>For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding</i>	No
2.4	increases of greenhouse gas emissions, black carbon emissions or other drivers of climate change?	No
Standard 3: Community Health, Safety and Security		
<i>Would the project potentially involve or lead to:</i>		
3.1	construction and/or infrastructure development (e.g. roads, buildings, dams)? (Note: the GEF does not finance projects that would involve the construction or rehabilitation of large or complex dams)	No
3.2	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	No
3.3	harm or losses due to failure of structural elements of the project (e.g. collapse of buildings or infrastructure)?	No
3.4	risks of water-borne or other vector-borne diseases (e.g. temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	No
3.5	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	No
3.6	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g. food, surface water purification, natural buffers from flooding)?	No
3.7	influx of project workers to project areas?	No

⁴ See the [Convention on Biological Diversity](#) and its [Cartagena Protocol on Biosafety](#).

⁵ See the [Convention on Biological Diversity](#) and its [Nagoya Protocol](#) on access and benefit sharing from use of genetic resources.

3.8	engagement of security personnel to protect facilities and property or to support project activities?	No
Standard 4: Cultural Heritage		
<i>Would the project potentially involve or lead to:</i>		
4.1	activities adjacent to or within a Cultural Heritage site?	No
4.2	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	No
4.3	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.4	alterations to landscapes and natural features with cultural significance?	No
4.5	utilization of tangible and/or intangible forms (e.g. practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	No
Standard 5: Displacement and Resettlement		
<i>Would the project potentially involve or lead to:</i>		
5.1	temporary or permanent and full or partial physical displacement (including people without legally recognizable claims to land)?	No
5.2	economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3	risk of forced evictions? ⁶	No
5.4	impacts on or changes to land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	No
Standard 6: Indigenous Peoples		
<i>Would the project potentially involve or lead to:</i>		
6.1	areas where indigenous peoples are present (including project area of influence)?	No
6.2	activities located on lands and territories claimed by indigenous peoples?	No
6.3	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?	No

⁶ Forced eviction is defined here as the permanent or temporary removal against their will of individuals, families or communities from the homes and/or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection. Forced evictions constitute gross violations of a range of internationally recognized human rights.

	<i>If the answer to screening question 6.3 is “yes”, then the potential risk impacts are considered significant and the project would be categorized as either Substantial Risk or High Risk</i>	
6.4	the absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources? <i>Consider, and where appropriate ensure, consistency with the answers under Standard 5 above</i>	No
6.7	adverse impacts on the development priorities of indigenous peoples as defined by them?	No
6.8	risks to the physical and cultural survival of indigenous peoples?	No
6.9	impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices? <i>Consider, and where appropriate ensure, consistency with the answers under Standard 4 above.</i>	No
Standard 7: Labour and Working Conditions		
<i>Would the project potentially involve or lead to: (note: applies to project and contractor workers)</i>		
7.1	working conditions that do not meet national labour laws and international commitments?	No
7.2	working conditions that may deny freedom of association and collective bargaining?	No
7.3	use of child labour?	No
7.4	use of forced labour?	No
7.5	discriminatory working conditions and/or lack of equal opportunity?	No
7.6	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	No
Standard 8: Pollution Prevention and Resource Efficiency		
<i>Would the project potentially involve or lead to:</i>		
8.1	the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts ?	No
8.2	the generation of waste (both hazardous and non-hazardous)?	No
8.3	the manufacture, trade, release, and/or use of hazardous materials and/or chemicals?	No

8.4	the use of chemicals or materials subject to international bans or phase-outs? <i>For example, DDT, PCBs and other chemicals listed in international conventions such as the Montreal Protocol, Minamata Convention, Basel Convention, Rotterdam Convention, Stockholm Convention</i>	No
8.5	the application of pesticides that may have a negative effect on the environment or human health?	No
8.6	significant consumption of raw materials, energy, and/or water?	No

ANNEX 2: RISK ANALYSIS

#	Description	Date Identified	Risk Category	Impact & Probability	Risk Treatment/Management Measures	Risk Owner	Status
1	Project activities could be carried out in a way that does not include or represent the needs and voices of marginalized and vulnerable populations, including women.	November 2021	Social and Environmental	I = 2 P = 2	Activities have been designed to collect data including rural area. During the inception phase of the project, the analysis of health impacts and their voices will be reflected because air pollution has a great impact on the health of not only children but also women, especially pregnant women.	Janejira Chuthong/Yongwoo Kim	
2	Climate change is expected to make the air pollution phenomenon more complicated, and the increase in energy consumption in Asia will hinder not only the analysis of the current situation but also the future forecast.	November 2021	Social and Environmental	I = 3 P = 3	During project inception, the workplan and sequencing of activities will be designed to mobilize a few Climate-Air Pollution Joint Modelling tools and adopt NDC scenarios of the target countries to analyses expected and unexpected situation. Scientific and comparative verification process will be assessed and accounted for in the risk mitigation plan.	Janejira Chuthong/Yongwoo Kim	
3	Data collected during the project that details at risk areas and populations may be misused in the future to target or exclude vulnerable populations.	November 2021	Social and Environmental	I = 2 P = 1	During project delineation of workplans in each country, there will be further consideration for the collection and storage of the risk and vulnerability data collected. During the procurement processes for consultants/firms involved in data collection and dissemination, this will be a consideration.	Janejira Chuthong/Yongwoo Kim	

#	Description	Date Identified	Risk Category	Impact & Probability	Risk Treatment/Management Measures	Risk Owner	Status
4	Duty bearers (national government stakeholders and partners) may not have the capacity to meet their obligations to the project – potentially resulting in delays and/or missed project targets.	November 2021	Social and Environmental	I = 2 P = 2	Project has been designed in consultation with the networks of international academic researchers and government partners. During project inception processes in each country, representatives from the national governments and experts will also be engaged to ensure ownership over project activities and Outputs.	Janejira Chuthong/Yongwoo Kim	
5	When discussing the causes and effects of air pollution, external influences that is from neighbouring countries, are likely to be addressed	November 2021	Social and Environmental	I = 3 P = 2	The project will be based on scientific data analysis and approach thoroughly from the start, and will solidify research cooperation with related experts and research entities.	Janejira Chuthong/Yongwoo Kim	
6	With a limited project budget, the risk of insufficient results are expected and it may be unclear who will lead the project due to the nature of the cooperative project.	November 2021	Operational	I = 3 P = 3	Utilizing each country's expert and government entities to the fullest, the project will be promoted to mainly leading by the NIER and NCE team.	Janejira Chuthong/Yongwoo Kim	