IMPACT OF AIR POLLUTION IN HEALTH AND ECONOMY

By 2060, air pollution could cause up to

9 million early deaths each year

Air pollution shortens global average life expectancy by

2.2 years

Air pollution can reduce GDP by

1-2.5% in Asia by 2060

8 trillion US dollars in annual global health costs is attributed to air pollution

1.2 billion work days lost globally each year due to pollution.

Source: WHO, World Bank, EPIC and OECD

PROJECT IMPLEMENTATION

AFD funds, supports and accelerates the transition to a fairer and more sustainable world. Focusing on climate, biodiversity, peace, education, urban development, health and governance, AFD teams are involved in more than 4,200 projects in 150 countries. It contributes to the commitment of France to the realisation of the Sustainable Development Goals across the developing world.

Expertise France is the French public agency for the design and implementation of international technical cooperation projects. As part of the AFD Group, it works alongside partner countries to advise and support them in strengthening their public policies, often relying on the knowledge of French public experts.

The Association of Southeast Asian Nations (ASEAN) was established on 8 August 1967 and constitutes ten Member States: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam.

Contact

Catherine Frances Corpuz, Project Coordinator
E-mail: catherine.corpuz@expertisefrance.fr

www.afd.fr
www.www.expertisefrance.fr
www.asean.org

In partnership with

RÉPUBLIQUE FRANÇAISE
Liberté
Égalité
Fraternité

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

asean

Enhancing lives through better air quality management

AIR QUALITY IMPROVEMENT PROGRAM IN ASEAN (AQIP)

AQIP is a two-year project which will run from 2023-2025 funded by the Agence Française de Developpement (AFD) and implemented by Expertise France in partnership with the ASEAN Working Group on Environmentally Sustainable Cities (AWGESC).

Implemented by

EXPERTISE FRANCE GROUPE AFD

WHY AQIP?

Only eight cities out of 296 surveyed cities in South East Asia have met the World Health Organisation's $PM_{2.5}$ air quality guideline*. Inadequate air quality monitoring makes communities vulnerable. Proper monitoring and better air quality management are needed to reduce its impacts on human health, the environment and the economy.

Source: The World Air Quality Report 2022, IQAir

The leading sources of air pollution in the region are:

Industry and power generation

Vehicular emissions

Open burning

" **Every $1 spent on air pollution control yields an estimated $30 in economic benefits.**

Source: USEPA

AQIP OUTPUTS AND ACTIVITIES

AQIP is designed to support the ASEAN Member States (AMS) in their efforts to develop comprehensive public policies for improving air quality within their respective jurisdictions and the region. It will contribute towards:

- greater awareness of air quality issues
- better knowledge and monitoring of air quality
- strengthening of local capacities
- the preparation of guidelines and policy recommendations tailored to ASEAN

To realise these objectives, technical guidelines will be produced to aid policy making in air quality management. This will be complemented by training programs and study visits as part of capacity enrichment for AMS personnel. Aligned with the ASEAN Working Group on Environmentally Sustainable Cities' (AWGESC) Action Plan, it is envisioned that these interventions will enhance measures that will help cities and urban places in ASEAN to be environmentally sustainable, while meeting the social and economic needs of the people.

Study and Guidelines on Particulate Matter (PM) Composition Analysis

As a common proxy indicator for air pollution, a detailed analysis of the chemical composition of particulate matter in urban areas across AMS will improve the design of local policies. The study will distinguish between local and imported particles, focusing on traffic and biomass tracers.

Guidelines for the Elaboration of Emission Inventories in ASEAN

Emission inventories are fundamental for assessing mitigation measures' effectiveness and serve as crucial input for pollution mapping and reduction scenario testing. Developing common guidelines for emission inventories in ASEAN cities will improve modelling exercises and targeted actions.

Guidelines on Air Quality and Health Co-benefits of Climate Policies

The synergy between air quality and climate policies implies that mitigating climate change brings long term human health benefits by reducing global temperature changes and curbing ground-level air pollution. Actions like reducing fossil fuel use, notably coal, can improve local air quality by reducing particulate matter (PM) and ozone (O_3) pollution.

Improvement of air quality monitoring and establishment of a data management system (DMS)

Transboundary air pollution is a significant issue requiring improved coordination among AMS, beginning with shared, high-quality, and reliable data. This training will explore monitoring system options considering existing tools, capacities to manage systems, and available financial resources.

Emissions inventories (methodology, data collection, relevant emissions factors, use for policy making)

This training will cover how an emissions inventory is produced and its practical applications in air quality modeling and impact assessments. It will also discuss comparisons between local and national public policies using ASEAN emission inventories.

Engagement and policies toward the private sector to improve air quality

This training will address emissions from key sectors like industry, energy, transport, and construction. It will explore tools and policies to better engage the private sector in enhancing air quality management within their companies. This includes regulations, monitoring, incentives, awareness programs, and sharing good practices.

Long term strategic planning of air quality

This focuses on long-term strategic planning for air quality policies, involving stakeholders at different levels. It aims to prioritize and enhance existing air quality policies by discussing governance, regulations, awareness, and sharing good practices.