



3rd year

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Newsletter

HTAPC

Hub of Talents on Air Pollution and Climate

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Highlights

HTAPC Accomplished Activities

- Bangkok Clean Air Management Plan Development Committee Meeting (2 April 2026)
- Provincial Environmental Quality Management Action Plan Committee Meeting (28 April 2026)
- BMA Capacity-Building Training on Air Pollution Surveillance and Control (29 April 2026)

HTAPC Knowledge dissemination



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HTAPC Accomplished Activities

The 2nd Meeting of the Bangkok Clean Air Management Plan Development Committee for Fiscal Year 2026



The **Bangkok Clean Air Management Plan Development Committee** held its second meeting of 2026 on **2 April 2026** at the Nopparat Meeting Room, Bangkok City Hall, Sao Chingcha, with online participation also available. The meeting was attended by representatives from government agencies, the Bangkok Metropolitan Administration, academic institutions, and relevant network partners. Its purpose was to review the progress of the Action Plan for the Reduction and Elimination of Pollution in the Bangkok Pollution Control Area, B.E. 2570–2575.

The meeting acknowledged the revised draft plan, which incorporated comments and recommendations from the previous committee meeting, the Better Air Quality (BAQ) 2026 meeting, and the public consultation on the draft plan. The presentation covered the vision, indicators, targets, eight strategic areas, and key measures, allowing the committee to review the content and provide further recommendations.

This meeting marked another important step in the development of Bangkok's Clean Air Management Plan. The committee's comments will be used to further refine the draft into a complete plan before it is submitted to the policy-level committee. This process aims to support systematic and sustainable air pollution reduction in Bangkok.



HTAPC Accomplished Activities

The 1st Meeting of the Committee for the Preparation, Monitoring, and Evaluation of the Provincial Environmental Quality Management Action Plan for Fiscal Year 2026



On **28 April 2026**, the Department of Environment, Bangkok Metropolitan Administration, convened a meeting of the Committee for the Preparation, Monitoring, and Evaluation of the Provincial Environmental Quality Management Action Plan and the Action Plan for the Reduction and Elimination of Pollution in Pollution Control Areas. The meeting was held at the Suthat Meeting Room, Bangkok City Hall, and was chaired by **Mr. Chadchart Sittipunt, Governor of Bangkok**, with the participation of committee members from relevant agencies.

Dr. Supat Wangwongwatana, Director of the Hub of Talents on Air Pollution and Climate (HTAPC), presented the draft Action Plan for the Reduction and Elimination of Pollution in the Bangkok Pollution Control Area. The plan serves as an important mechanism for systematically guiding the city's air pollution management. During the meeting, committee members provided comments and recommendations on the draft plan to ensure its completeness, appropriateness, and effective implementation.



HTAPC Accomplished Activities

Capacity-Building Training for Bangkok Metropolitan Administration Personnel on Air Pollution Surveillance and Control



The Hub of Talents on Air Pollution and Climate (HTAPC), Faculty of Public Health, Thammasat University, with support from the National Research Council of Thailand (NRCT), organized a training program on **“Application of CEMs for Air Quality Surveillance”** and **“Techniques for Controlling Air Pollution from Industrial Boilers and Relevant Regulations”** on **29 April 2026** at Princeton Bangkok Hotel. The training targeted Bangkok Metropolitan Administration personnel from district offices, the Department of Environment, and the Health Department.

The training aimed to enhance participants’ knowledge and understanding of the requirements and criteria for Continuous Emission Monitoring Systems (CEMs), as well as the application of CEMs data for air quality surveillance related to industrial emissions. It also covered technical approaches and relevant regulations for controlling air pollution from industrial boilers, with the objective of supporting Bangkok personnel in performing their duties more accurately, effectively, and in accordance with technical principles.

The training received strong interest and positive feedback from participants. The sessions were conducted in a collaborative atmosphere, with active questions and constructive exchanges of views. This reflected the success of the activity in strengthening personnel capacity and supporting Bangkok’s air pollution management efforts in both the immediate and long term.



PM_{2.5} in Thailand: A Recurring Crisis Yet to Be Resolved

PM_{2.5} refers to fine particulate matter that can penetrate deep into the respiratory system and enter the bloodstream, thereby causing serious adverse health effects. A substantial body of research has confirmed that exposure to PM_{2.5} increases the risk of chronic diseases including respiratory diseases, cardiovascular diseases, and lung cancer. Globally, more than 90% of the population lives in areas where air quality exceeds recommended standards contributing to over 7 million premature deaths annually. In Thailand, PM_{2.5} has become a recurring public health and environmental crisis particularly during the dry season. Although the government has strengthened air quality standards and introduced additional control measures, PM_{2.5} concentrations in many areas continue to exceed permissible levels causing widespread impacts on public health.

The key issue is that PM_{2.5} is not merely a localized pollution problem, but rather it is a structural problem linked to transportation systems, industrial production, agricultural practices, and patterns of energy consumption. At the same time, current management approaches remain largely focused on end-of-pipe responses rather than systematic reductions at emission sources. Within this context, the promotion of new policy instruments such as the draft Clean Air Act, has been viewed as an opportunity to strengthen air pollution governance. However, the central question is not simply whether additional measures can be introduced, but whether these measures can effectively transform the underlying structures that generate particulate pollution.

This article aims to analyze the PM_{2.5} situation in Thailand, examine the limitations of existing policies, assess the role of the draft Clean Air Act, and propose policy recommendations for more effective management. The study employed documentary research based on reports from the World Health Organization (WHO), relevant academic studies, statistical data, and policy documents. These sources are used to comparatively analyze pollution sources, implemented measures, and policy outcomes.

The findings indicated that the major sources of PM_{2.5} in Thailand include road transportation, accounting for approximately 51%, followed by the industrial sector at around 21%, and the residential sector at approximately 10%. In addition, open burning in the agricultural sector, forest fires, and transboundary haze remain important contributors to PM_{2.5} emissions in many parts of the country. Recent trends show that annual average PM_{2.5} concentrations in several areas of Thailand continue to exceed national standards and are almost universally higher than the levels recommended by WHO. It has also been estimated that PM_{2.5} pollution is associated with approximately 37,500 premature deaths among Thai people each year and may reduce average life expectancy by around 1.8 years, despite Thailand's tightening of its air quality standards in 2023.

Nevertheless, the PM_{2.5} problem has not yet been sustainably resolved. Although the government has declared PM_{2.5} a national agenda item and has continuously introduced additional measures, the problem continues to recur annually, particularly during the dry season. This persistence can be attributed to at least three structural bottlenecks. First, management approaches still emphasize remedial actions such as water spraying, road cleaning, and public warnings, rather than reducing emissions at their sources. Second, existing economic incentives continue to make open burning a low-cost option. Third, law enforcement remains constrained, particularly in relation to transboundary haze management. Although the government has implemented several measures, including stricter vehicle emission standards, black-smoke inspections, Bangkok's dust response plans, and regional cooperation efforts, the overall outcomes have not yet led to a sustainable reduction in particulate pollution.



PM_{2.5} in Thailand: A Recurring Crisis Yet to Be Resolved

In this context, the draft Clean Air Management Act represents an important opportunity to shift air pollution management from administrative measures toward an integrated legal framework. Its key components include recognition of the right to clean air, the establishment of national-level governance mechanisms, application of the polluter-pays principle, promotion of public participation, and support for open data systems. However, the effectiveness of this legislation will depend on the strength of enforcement, its ability to reduce overlap with existing laws, its capacity to address transboundary pollution, and the continuity of policy implementation.

Recent developments show that the draft Clean Air Management Act has been proposed by multiple sectors, including civil society and political actors. It is currently under parliamentary consideration through a process of consolidating and comparing different versions of the draft. The law is likely to become a framework law requiring secondary legislation for implementation. A major strength of the draft law is its potential to shift air pollution management from a reactive approach toward a preventive one, while also introducing additional legal and economic instruments and expanding opportunities for public participation. However, key concerns remain regarding the strictness of actual enforcement, possible overlap with existing legislation such as the Environmental Quality Promotion and Conservation Act, the ability to address transboundary haze, and policy continuity under changing governments. In this sense, the law could become a significant turning point in Thailand's PM_{2.5} governance, but it may fail to generate practical outcomes if enforcement is not serious and continuous.

With regard to policy recommendations, a central conclusion is that addressing PM_{2.5} requires an integrated approach aimed at transforming the structural roots of the problem, rather than merely adding short-term interventions. Priority should be given to controlling emissions at their sources, including reducing dependence on agricultural burning and supporting alternative technologies such as appropriate biomass residue management. These actions should be accompanied by economic incentives, such as taxes or subsidies, to make non-burning practices more economically viable. In addition, transportation reform is necessary to reduce dependence on private vehicles while strongly promoting public transportation and electric vehicles. At the same time, transboundary haze should be addressed through stronger regional cooperation, particularly by developing ASEAN mechanisms with more binding commitments. The Clean Air Act should also be implemented alongside enforceable measures, measurable targets, and transparent monitoring and evaluation systems to ensure that PM_{2.5} management produces sustainable outcomes in practice.

In conclusion, PM_{2.5} is not merely a "dust problem." It reflects deeper issues within the country's economic structure, production systems, and environmental policy framework. The draft Clean Air Management Act may serve as an important institutional turning point. However, the real question is not simply whether Thailand will have a clean air law, but whether that law can be used effectively to transform the structures that continue to generate particulate pollution.

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