



REPORT

Measurable Action for Haze-Free Sustainable Land Management in Southeast Asia (MAHFSA) Programme

Launch of the Second ASEAN Haze-Free Roadmap (2023-2030) and Policy Dialogue on Strategies and Actions for Achieving a Haze-free Southeast Asia

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Prepared by
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Introduction

Transboundary haze is a widespread air pollution and smog that affects multiple countries and regions, including Southeast Asia (SEA). The issue of haze has transcended from being a regional concern to a global environmental crisis and is primarily caused by land clearing and peatland fires, causing severe environmental degradation, health hazards, and economic disruptions. The Association of Southeast Asian Nations (ASEAN) Member States (AMS) have taken several measures to tackle transboundary haze and promote regional cooperation to address the problem effectively. The key measures include the ratification of the ASEAN

Agreement on Transboundary Haze Pollution (AATHP), adoption of the Roadmap on ASEAN Cooperation towards Transboundary Haze Pollution Control with Means of Implementation (2016-2020) and the ASEAN Peatland Management Strategy 2006-2020 (APMS), which specifically provided a framework for actions to address peatland related haze issues.

A review of the First (2016-2020) Roadmap implementation was commissioned to evaluate progress and experiences towards achieving the vision of a haze-free ASEAN, this led to the development of a new roadmap. In August 2023, the Second Roadmap on ASEAN Cooperation

towards Transboundary Haze Pollution Control with Means of Implementation (Second Haze-Free Roadmap) (2023-2030) was adopted during the 18th Meeting of the Committee Under the Conference of the Parties to ASEAN Agreement on Transboundary Haze Pollution (COM-18) and 18th Meeting of the Conference of the Parties to ASEAN Agreement on Transboundary Haze Pollution (COP-18).

On 21 February 2024, the Second Haze-Free Roadmap was launched followed by a policy dialogue to: (a) highlight key elements of the Second Haze-Free Roadmap, (b) discuss perspectives on strategies and actions, and resources, including the role of public and private sectors and other institutions to tackle fires and haze in the region; and (c) identify opportunities for collaboration and alignment. The complete event agenda can be found in Annex A and on the event web page at <https://tinyurl.com/HazeFreeRoadmap>.

This report summarizes the key points relevant to the Second Haze-Free Roadmap as discussed during the event. It synthesizes diverse viewpoints of contribution and alignment of national programs and policies and role of stakeholders, both the public and private sectors for the implementation of the Second Haze-Free Roadmap. It also explores opportunities for collaboration towards achieving a haze-free Southeast Asia.

Opening and Welcome Remarks

Lonkham Atsanavong, Chairperson of the Committee under the Conference of the Parties to the AATHP (COM), Lao People's Democratic Republic (Lao PDR) provided opening remarks for the event. He highlighted the AMS's commitment towards achieving the goals of regional transboundary haze pollution through collective actions at various regional, sub-regional, national, and local levels. Atsanavong viewed the Second ASEAN Haze-Free Roadmap as more than just a document, stating it is a proclamation of the ambitious implementation of goal-oriented and concrete actions by the AMS. Along with the endorsed ASEAN Investment Framework for Haze-Free Sustainable Management, the Second Haze-Free Roadmap provides stakeholders with a comprehensive strategy for implementing more targeted actions, managing resources and investments for a haze-free SEA.

Roadmap Launch

Ky-Anh Nguyen, Director, Sustainable Development Directorate, ASEAN Secretariat, and **Yumi Sakata**, Deputy Country Director, International Fund for Agricultural Development (IFAD) Southeast Asia and the Pacific Sub-regional Hub provided remarks for the launch.

Both speakers congratulated AMS for its collective effort in successfully delivering the Second Haze-Free Roadmap and also the recently endorsed ASEAN Investment Framework.

Nguyen emphasized the need to intensify efforts in preventing and mitigating fire and haze. He highlighted that addressing haze pollution not only improves air quality and health of ASEAN residents but also helps combat climate change. The positive outcomes of collaborative actions involving stakeholders, such as the private sector and local communities, in managing land and forest fires underscore the significance of ongoing stakeholder engagement to raise awareness and preparedness across various sectors. By strengthening connections, ASEAN reaffirms its commitment to enhancing environmental cooperation and building resilience to climate change. Nguyen underscored the essential role of stakeholder involvement in successfully implementing the Second Roadmap.

Sakata spoke about the crucial role of the endorsed roadmap and the ASEAN Investment Framework in guiding comprehensive peatland and haze-free management until 2030. These documents are designed to incorporate best practices in peatland management, fostering sustainable practices for the future. The strategies outlined in the Second Roadmap aim to empower stakeholders to enhance collaboration through dialogues, knowledge sharing, and resource mobilization to effectively implement prioritized actions. Sakata lastly confirmed IFAD's dedication to climate change mitigation, highlighting the leadership of the ASEAN Secretariat and AMS in driving forward these important initiatives.

Presentation: What is the ASEAN Haze-Free Roadmap?

Mardiah Hayati, Senior Officer, Environment Division of ASEAN Secretariat, presented on the Second Haze-Free Roadmap and highlighted some key points:

- The key documents & milestones of ASEAN cooperation on transboundary haze pollution and peatland management, ranging from the ASEAN Agreement on Transboundary Haze Pollution (AATHP), to 2023 adoption of the APMS (2023-2030), Haze-Free Roadmap (2023-2030) and ASEAN Investment Framework for Haze-Free Sustainable Land Management which aim to prevent, monitor, and mitigate land and forest fires to control transboundary haze pollution through concerted efforts and cooperation at the national, regional, and international levels.
- The vision of the Second ASEAN Haze-Free Roadmap (2023-2030) is a transboundary haze-free ASEAN by 2030 through the effective implementation of collective actions at the regional, subregional, national, and local levels to prevent and control open burning from agriculture, land and/or forest fires, including peatland fires.
- The Second Haze-Free Roadmap comprises the following nine strategies:
 - Strategy 1: Enhance the implementation of the AATHP, including capabilities of the ASEAN Coordinating Centre for Transboundary Haze Pollution Control (ACC THPC)
 - Strategy 2: Developing and implementing subregional strategies
 - Strategy 3: Sustainable management of agricultural land and forests to prevent large scale land and/or forest fires.
 - Strategy 4: Sustainable management of peatlands for peatlands fire prevention, in accordance with the new ASEAN Peatland Management Strategy (2023-2030)
 - Strategy 5: Securing adequate resources from multi-stakeholders for transboundary haze prevention.
 - Strategy 6: Strengthening relevant national policies, laws, regulations, and their implementation (including follow-up and review/enforcement)
 - Strategy 7: Enhancing cross-sectoral and multi-level cooperation to protect the global environment
 - Strategy 8: Enhancing public awareness and stakeholder participation
 - Strategy 9: Evaluate and mitigate the impacts of haze on health, economy, society, and the environment
- Establishment of ACC THPC, APMS 2023-2030, ASEAN Haze-Free Investment Framework, ASEAN Haze Portal, and the existing, past and upcoming initiatives that support the Roadmap strategies.
- Partners, business/institutions, organizations, and relevant stakeholders are welcome to support the implementation of the Roadmap through new and long-term programmes.
- The difference between the First and Second Roadmap is that the latter recognizes differences between northern and southern ASEAN with respect to seasonal patterns, sources of emissions, peatland and burned forest fires, and geographic and socioeconomic conditions. An additional difference is the inclusion of strategies on engagement and investments in the Second Roadmap, where actions with wider range of stakeholders, including private sector, is proposed to enhance the sharing of information, best practices, and social responsibilities. Further, the ASEAN Haze-Free Investment Framework will play help support the implementation of the Second Roadmap and the ASEAN Peatland Management Strategy through building multi-stakeholder partnerships and mobilizing resources to stop large scale burning of forests, peatlands, and other lands.

Session 1. Perspectives on the Second Haze-Free Roadmap and associated strategies

Through a facilitated talk show format, four panelists were invited to share their perspectives on the Second ASEAN Haze-Free Roadmap's strategies and actions and its potential implementation: **Israr Albar**, Deputy Director of Land and Forest Fire Management, Indonesian Ministry of Environment and Forestry, **Kessinee Unapumnuk**, Environmentalist, Senior Professional Level, Air Quality and Noise Management Division, Pollution Control Department of Thailand, **Supat Wangwongwatana**, Faculty of Public Health of Thammasat University and **Elim Sritaba**, Chief Sustainability Officer, Asia Pulp and Paper (APP).

Panelists were asked to share their perspectives on how to achieve the Roadmap's goals, the alignment of existing national programs and policies, and challenges facing stakeholders in implementing the Roadmap. The roles of academics, researchers, and the private sector and how they can collaborate with government agencies and other stakeholders to implement this Roadmap were discussed. Below are some synthesized key points from the speakers:

While all nine strategies and 65 actions of the Second Haze-Free Roadmap are considered important and mutually reinforcing, the panelists consider Strategy 1, Strategy 2, Strategy 3, Strategy 4, Strategy 8 and Strategy 9 as the most important strategies that require immediate attention for various reasons (highlights for each of these strategies summarized below). Actions associated with these strategies shall be given priority as they are instrumental in achieving the expected targets of the Second Haze-Free Roadmap.

Strategy 1	At the core of Second Roadmap is enabling ACC THPC to be the center for coordinating and facilitating cooperation and collaboration, mobilizing resources, and ensuring ASEAN Haze Agreement run in full operation.
Strategy 2	In northern region, implementation of this strategy is underway where Thailand worked together with Laos PDR and Myanmar to implement subregional national policies over Mekong Region, and it has also invited Cambodia to take part in this regional effort. There is a strong linkage between the roadmap strategies and actions and the CLEAR Sky Strategy, which the three countries have committed to promote air quality forecast, manage, and monitor cross-border smoke and haze pollution, and exchange information and experiences in sustainable agriculture management. Strategy 2 specifies important actions to strengthen cooperation between northern and southern part of the ASEAN and to ensure effective implementation of national actions to prevent forest and land fire, reduce emissions and haze. One immediate action would be to reduce emissions and identify their various sources. It should be noted there are subregional differences in terms of haze period, forest and agriculture land fire types, and type of forests (mixed deciduous forest, and peatland).
Strategy 3	Dealing with the prevention of forest and land fires and is deemed as an important one for fire-prone countries like Indonesia. It is strongly aligned with the countries' current policies and coordinated measures to prevent (priority focus), suppress and handle post-fire episodes, while building the capacity of local communities, fire brigades and others to monitor daily hotspots and develop early detection systems and to do burned area mapping.
Strategy 4	Indonesia demonstrates how this strategy is fully aligned with six of 11 focal areas specified in the country's national peatland management such as inventory, restoration, rehabilitation, community livelihood, and fire prevention.
Strategy 8	Enhancing public awareness and stakeholder participation, which also relates to Strategy 2, is essential for Roadmap implementation. Citing examples from Indonesia and Thailand, though not unique to these countries, panelists pointed to a pressing need for raising public awareness, particularly among local communities, of the importance of adverse impacts generated from using fire or burning when opening lands for agriculture production. This strategy enables us to further advance the participation of key actors and empower local communities.
Strategy 9	One concern that was repeated was the need to look at the root causes of fire and search for alternatives to burning, which farmers can find easily and affordably.

Some additional synthesized points on implementation, actions, and other considerations:

- The private sector plays an important role in the effective implementation of the Roadmap. APP, for example, finds the Roadmap aligned with what the company has implemented through integrated fire management, sustainable forest, and peatland management (e.g., water level regulation). The new framework will further strengthen actions on the ground.
- Facilitated by the private sector, *Desa Makmur Peduli Api* (DMPA) or fire-free village programme is cited as one of the effective programs in reducing pressure on forest and fire risk through economic empowerment of local communities. It provides local communities with alternatives to slash and burning practices, developing business plans using available resources for productive economy, and providing revolving funds to support local programs. The reduction of fires by 80% since 2015 is claimed to have resulted from the effective implementation of this program. The program has also enhanced the local capacity, improved livelihood and changed farmer behavior.
- Key lessons from the implementation of the First Roadmap (as specified in the review) are that not only human activities that caused forest and land fires and haze, but seasonal and climate changes acted as contributing factors as well. Adverse impacts from multiple sources and activities require that we need to engage multiple approaches in a comprehensive manner. The Second Haze-Free Roadmap will not only support policy implementation but will also guide a framework for partnership, engagement collaboration, mobilization resources, along with other two important documents, namely the second version of APMS & Investment Framework.
- In order to enable the roadmap contribute to the national and local engagement processes and, *vice versa*, the national and local actions could contribute to various actions of the roadmap, panelists pointed to the need for (a) translating the roadmap strategies and actions into national and local actions, and (b) dealing with people who are allegedly causing the fire, and (c) coordinating national and international organization actions for resource mobilization (e.g. more resources have been mobilized in the southern region but less in north region and for exchange of knowledge (e.g., Mekong Region). It is also important for international

organizations through the ASEAN Secretariat to support piloting on the ground and capacity building efforts.

- It is critical to increase the sense of belonging among local communities and to empower them if haze-free policies are to be effective. To this end, measures include granting a permit, developing mechanisms or ways to improve their farming and livelihoods, and making affordable technology available. An agency or private sector can play an important role in bringing local communities as producers and users together and create added values to the product through circular economy modes.
- Despite various efforts and achievements, panelists cited some challenges that actors are facing in implementing the Roadmap. They raised concerns about (a) regulatory and economic instruments to incentivize farmers and lack of affordable alternatives and technologies for farmers to prepare lands for agriculture crops without burning (e.g., Thailand, Indonesia); (b) lack of stakeholder awareness and capacities which impede the translation of regional and national policies into local actions, and (c) inadequate investment and funding support for either policy implementation, management, or research.

Session 2. Group discussions: Opportunities for collaboration and alignment of efforts

In break-out discussions, policy dialogue participants further identified key actors who are instrumental for the Roadmap implementation and discussed the best ways to connect or engage with these actors. They also identified mechanisms or platforms to strengthen cross-sectoral coordination and to promote active involvement of key implementers in advancing actions and relevant programs. Some existing platforms considered successful for cross-sectoral coordination or stakeholder engagement were also identified.

Key actors or institutions identified at various levels included (1) national government institutions; (2) subnational government agencies; (3) actors at different levels; and (4) other key actors mentioned to be playing a role in supporting the implementation of the Roadmap. Specific examples under each of these categories is summarized below.

National government institutions	Subnational government agencies	Other actors at different levels	Other mentioned key actors
<ul style="list-style-type: none"> Ministries in charge of forestry, environment, agriculture Ministries of economic development and defense, foreign affairs, cooperatives and small- and medium size enterprises, transportation, national planning agency, spatial planning, health department Relevant department and ministries, special agencies responsible for disaster management Army 	<ul style="list-style-type: none"> Forestry services State/provincial and district planning agencies Other relevant agencies 	<ul style="list-style-type: none"> Private sector Agriculture and forest plantation industries Land clearing contractor, concessionaire or companies association Local-owned business enterprises Village government, tribunal chief, etc. Local communities, indigenous peoples, Farmer groups Forest ranger or fire brigade, fire care community Land owners 	<ul style="list-style-type: none"> ASEAN multilateral institutions Academic and research institutions Non-profit researchers Public figures Banking or other financial institutions International organizations or donor institutions and agencies (e.g., IFAD, JICA, GEF, GCF, biodiversity fund)

The best ways to connect with various key actors were identified through discussions including some examples as well as factors that need to be considered when connecting with stakeholders. The results of these discussions have been summarized in the table below.

Best ways to connect (incl. examples)	
Participation in decision-making processes	<ul style="list-style-type: none"> Development of policies such as government regulations, presidential decrees or instructions, gubernatorial or provincial decree Long-term development plans
Partnerships, collaborations, and engagements	<ul style="list-style-type: none"> Through ASEAN Secretariat, and ACC THPC Business marketing Strategic plans of institutions involved
Scientific studies and monitoring & assessment	<ul style="list-style-type: none"> It is considered urgent to engage academics or universities to involve in problem-focused assessment and identification of variables causing haze and fires Community engagement, training, education Capacity building through learning by doing, training of landowners
Use of variety of communication channels for stakeholder consultation and dissemination	<ul style="list-style-type: none"> Focus group discussions and regular meetings Social media Youth outreach Farmer-to-farmer dialogues
Establishing demonstration plots or pilot projects	<ul style="list-style-type: none"> Plots/projects to provide hands-on learning experiences & lessons learned

Factors and considerations when connecting with actors				
Take account of technology, infrastructure and innovative ways for effective participation of actors	Promote knowledge & technology transfer and sharing experiences, and build network	Conduct a regular monitoring of milestones and progress made by actors towards the shared goals	Mobilize resources	Engage skillful facilitators from government and NGOs to help mediate company-community conflicts

Mechanisms or platforms were identified during discussions that would strengthen cross-sectoral coordination and to promote active involvement of key implementers. Additionally, factors and considerations to make stakeholder platforms and involvement effective were also identified. The table below provides a summary.

Mechanisms or platforms to strengthen or promote cross-sectoral coordination	
Engagement through workshops, dialogues, seminars	Public-private partnerships on transboundary haze-free and related issues
Multi-stakeholder platforms, and those with specific themes such as multi-stakeholder haze-free alliances, blended finance stakeholder forums	Cross-sectoral ASEAN platforms, such as the Committee of the SOC-COM (ASEAN Socio Cultural Community) which is considered to play an important role in enhancing coordination.
Penta-helix model for stakeholder engagement and management involving public, private, social entrepreneurs, academic and civil society	Working groups or task forces within the region and broadly dealing with specific issues and time-bound goals
Financial collaboration	

Factors and considerations for effective stakeholder platforms and involvement			
Clearly define the haze-free 2023-2030 targets on yearly basis, and quantify and monitor, report and verify implementation progress through MRV systems	Use various technologies for communication (e.g., internet, social media, webinar, FGD, newspaper, radio)	Mobilize resources (e.g., funding for conservation, investment organizations, scholarships)	Connect with groups of experts, extension workers and university's community development engagement programs and the private sector's Corporate Social Responsibility
Develop or utilize effectively existing data centers, systems or tools for sharing and monitoring (e.g., ASMC, SiPPEG ¹ , SiPongi ²)	Consider bottom-up methods for communication and be adaptive and take account of local wisdom	Engage public figures and millennials who could help educate and increase public awareness and change behavior changes	Outreach & communication campaigns and learning media and experience sharing (e.g., field visits, exchange program)

Closing remarks

Swetha Peteru, Scientist of CIFOR-ICRAF, on behalf of MAHFSA Programme, expressed her sincere appreciation to those who have contributed to the policy dialogue sessions and to the ongoing efforts to combat transboundary haze in the region. She reiterated the region's collective commitment to safeguard regional health, environment, and economies from the devastating effects of transboundary haze and the related climate impacts. This policy dialogue enabled participants to learn

about the roadmap's strategies and actions, and perspectives from different stakeholders that highlighted how they see and plan to engage with the roadmap. Peteru hoped that with the support of governments, non-governmental organizations, businesses, academia, and communities, we can successfully implement the strategies outlined within this Roadmap. Our collaborative efforts will pave the way for innovative solutions, technological advancements, and policy reforms that will ultimately lead us closer to achieving our common goal—a future free from transboundary haze.

¹ Information systems for peat ecosystem protection and management, by the Indonesian Minister of Environment and Forestry

² Systems for monitoring forest and land fires, by the Indonesian Minister of Environment and Forestry

Annex A

Event agenda

Time	Activity	Speakers
08:00 – 09:00	Registration	
09.00 – 09.10	Opening and Welcome Remarks Mr. Lonkham Atsanavong , Chairperson of the Committee under the Conference of the Parties to the AATHP (COM), Lao People's Democratic Republic (Lao PDR)	Lao PDR
09:10-09:25	Roadmap Launch! The Second Haze-Free Roadmap is launched and showcased Remarks by Mr. Ky-Anh Nguyen , Director for Sustainable Development, ASEAN Secretariat Remarks by Ms. Yumi Sakata , Deputy Country Director, International Fund for Agricultural Development (IFAD) Southeast Asia and the Pacific Sub-regional Hub Photo session	ASEAN Secretariat IFAD
9:25 – 9:45	Presentation: What is the ASEAN Haze-Free Roadmap? Q&A	Dr. Vong Sok , Head of Environment Division, Sustainable Development Directorate, ASEAN Secretariat
9:45-10:45	Talk Show: Perspectives on the Second Roadmap and associated strategies	Dr. Kessinee Unapumuk , Environmentalist, Senior Professional Level, Air Quality and Noise Management Division, Pollution Control Department, Thailand Dr. Israr Albar , Deputy Director, Land and Forest Fire Management, Ministry of Environment and Forestry, Indonesia Dr. Supat Wangwongwatana , Faculty of Public Health, Thammasat University Ms. Elim Sritaba , Chief Sustainability Officer, Asia Pulp & Paper
10:45-11:00	Coffee break	
11:00-11:45	Group Discussions: Opportunities for collaboration and alignment of efforts	Facilitated by MAHFSA – CIFOR
12:00-12:10	Closing	Dr. Swetha Peteru , Scientist and MAHFSA Coordinator, CIFOR-ICRAF
12:10-1:30	Lunch	