



EXECUTIVE SUMMARY

FINAL REVIEW OF THE ROADMAP ON ASEAN COOPERATION TOWARDS TRANSBOUNDARY HAZE POLLUTION CONTROL WITH MEANS OF IMPLEMENTATION



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**Executive Summary of the Final Review of the Roadmap on ASEAN
Cooperation towards Transboundary Haze Pollution Control with
Means of Implementation**

The ASEAN Secretariat
Jakarta

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

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Executive Summary

The ASEAN region frequently suffers from transboundary haze resulting from land and/or forest including peatland fires. To address the transboundary haze pollution and its severe and widespread impacts, ASEAN Member States (AMS) have collaborated in one of the most significant endeavors: the ASEAN Agreement on Transboundary Haze Pollution (AATHP), which was signed by all AMS in June 2002 and entered into force in 2003, following the ratification of 6 signatory countries. By January 2015, all AMS had ratified the Agreement, which gave a new impetus for the implementation of the AATHP. To further operationalize the implementation of the Agreement, the 11th Meeting of the Conference of the Parties (COP) to the AATHP held on October 2015 in Hanoi, agreed to develop a Roadmap on ASEAN Cooperation towards Transboundary Haze Pollution Control with Means of Implementation or in short the Haze-Free Roadmap, 2016-2020 which was adopted by COP-12 on 11 August 2016 in Kuala Lumpur and was subsequently noted by the ASEAN Leaders at the 28th and 29th ASEAN Summits held in Vientiane, 6-7 September 2016. The overall aim of the ASEAN Haze Free Roadmap is to provide guidance on the implementation of AATHP.

The Haze-Free Roadmap serves as a strategic, action-oriented, and time-bound framework for the implementation of the collaborative actions to control transboundary haze pollution in the ASEAN region to achieve a vision of Transboundary Haze-free ASEAN by 2020, as expressed in the goal, “Regional transboundary haze pollution is eliminated through intensifying collective actions to prevent and control forest and/or land fires”. Three indicators have been established: (1) An increase of numbers of days having good or moderate air quality in terms of Pollutant Standard Index (PSI) or Air Quality Index (AQI) based on PM10 and/or PM2.5; (2) Reduction of hotspot numbers below alert level 2 under the ASEAN SOP on haze; and (3) Decrease of transboundary haze pollution area.

Final Review Objectives

The overall objective of the final review of the Roadmap is to allow AMS to take stock of the progress and sustain momentum in ensuring demonstrable improvements so as to achieve the vision of a haze-free ASEAN. A Final Report was produced to fulfill that objective and consisted of the following components:

1. A set of monitoring and evaluation guidelines and indicators agreed by AMS and developed based on the ASCC Blueprint 2025 Results Framework and the actions listed in the Roadmap that enables measurement of AMS progress in the implementation of the Roadmap;
2. The overall conclusions of the final review including progress made, areas for improvement and recommendations that are not binding, for deliberation by AMS, in pursuing transboundary haze-free ASEAN. It should also include recommendations for a revised or renewed Roadmap for ASEAN.

The Final Review focused on the eight key strategies towards attaining a haze-free ASEAN by 2020 and the activities as listed in the Roadmap. The Roadmap’s vision of a haze-free ASEAN by 2020 and all its other provisions are comprehensively discussed and evaluated in the Final Review and have been supported by evaluations by both technical and policy experts. The final review covered the period from 2016 to 2020. The eight key strategies towards attaining a haze-free ASEAN by 2020:

1. Implementation of the ASEAN Agreement on Transboundary Haze Pollution (AATHP)
2. Sustainable Management of Peatlands for Peatland Fires Prevention
3. Sustainable Management of Agricultural Land and Forest for Large Scale Forest and/or Land Fires Prevention

4. Strengthening Policies, Laws, Regulations and their Implementations, including to facilitate exchange of experience and relevant information among enforcement authorities of the Parties in accordance with the AATHP Article 16 (f)
5. Enhancing Cooperation, Exchange of Information and Technology, and Strengthening of Capacity of Institutions at All Levels
6. Enhancing Public Awareness and Cross-Sectoral and Stakeholders Participation
7. Securing Adequate Resources from Multi-Stakeholders for Transboundary Haze Prevention
8. Reducing Health and Environmental Risks and Protection of Global Environment

The final review was carried out using the following key instruments:

1. Literature review of existing relevant documents pertaining to the implementation of the Roadmap.
2. Data collection obtained from questionnaires distributed to key stakeholders and/or concerned parties directly involved or related to the subject matter.
3. Interviews conducted with selected groups of stakeholders.
4. A set of Monitoring and Evaluation (M&E) guidelines and indicators and methodology which received prior approval by AMS were utilized to help guide the assessment.

The primary document sources were provided by the ASEAN officials relevant to the issue and supplemented with references that the consultant team obtained from other secondary sources plus actual information gathered from the questionnaire responses, focus group discussions, and interviews conducted. **Table 1** provides a summary of the completion rates of each Measure of Progress set under the 8 strategies of the ASEAN Haze Free Roadmap.

Table 1 - Summary of Completion Rates of Measures of Progress Utilized in Roadmap Strategy

NO	MEASURE OF PROGRESS	COMPLETION RATE
STRATEGY 1 – Implementation of AATHP		
1	Establishment of ACC in 2016 and its full operation within 2018	Moderate
2	Institutionalisation of early international haze assistance	Low
3	Establishment and full operation of all National Monitoring and Warning Systems, coordinated by ACC	Moderate
4	Effective implementation of preventive measures	High
	Perception of overall progress for Strategy 1	Moderate
STRATEGY 2 – Sustainable Management of Peatlands for Peatland Fires Prevention		
1	Decrease in the number of hotspots in peatland area	Moderate
2	Decrease in area of peatland burnt	Moderate
3	Decrease in allowable controlled-burning cases	Moderate
4	Increase of protected peatland area	Low to moderate
5	Increase of area of peatland with zero-burning (managed by companies and local communities)	Low
STRATEGY 3 – Sustainable management of agricultural land and forest (non-peatland) to prevent large-scale land and forest fires		
1	Reduction of the number of hotspot and/or size of burnt area	Moderate
2	Decrease open burning activities in the agricultural land and forest areas by local communities and private companies	Moderate
3	Number of regulations and/or incentives for zero burning practice	Low

NO	MEASURE OF PROGRESS	COMPLETION RATE
STRATEGY 4 – Strengthening Policies, Laws, Regulations and their Implementations, including to facilitate exchange of experience and relevant information among enforcement authorities of the Parties in accordance with the AATHP Article 16 (f)		
1	Adequate number of laws and regulations developed	High
2	Effective enforcement of laws and regulations	Moderate
STRATEGY 5 – Enhancing Cooperation, Exchange of Information and Technology, and Strengthening of Capacity of Institutions at All Levels of Roadmap on ASEAN Cooperation towards Transboundary Haze Pollution Control with Means of Implementation		
1	Number of activities undertaken	High
2	Levels which the activities took place	Moderate
3	Sources of funding support	Moderate
STRATEGY 6 – Enhancing Public Awareness and Cross-Sectoral and Stakeholders Participation		
1	Adequate number of campaign programmes	Moderate
2	Adequate number of cross-sectoral and/or multi-stake holder dialogues/forums	Moderate
3	Adequate number of projects with cross-sectoral and/or multi-stakeholder participation	Low
4	Effective implementation of projects with cross-sectoral and/or multi-stakeholder participation	Moderate
5	Adequate number of private sectors implementing CSR with a focus on forest and/or land fires prevention and control	Low
6	Effective implementation of CSR	Low
STRATEGY 7 – Securing adequate resources from multi-stakeholders for preventing transboundary haze		
1	Adequate amount of resources mobilized	Moderate
2	Effective mobilisation of resources	Low
3	Adequate number of multi-stakeholder contribution	Moderate
4	Effective contribution from multi-stakeholders	Low
STRATEGY 8 – Reducing health and environmental risks and protecting global environment		
1	Common database created and maintained	Moderate
2	Assessment and monitoring of the health, economic, social, and environmental impacts of haze undertaken	Low
3	Health and environmental impacts avoided and/or reduced	Moderate
4	Effective communication to raise public awareness about haze pollution, health and environmental risks.	High

SCORING SCALE

Scale	1-5 Scale	0-5 Scale
Very low	1.00-1.80	0.00-1.00
Low	1.81-2.60	1.01-2.00
Moderate	2.61-3.40	2.01-3.00
High	3.41-4.20	3.01-4.00
Very high	4.21-5.00	4.01-5.00

External Constraints and Limitations

The absence of a Mid-Term Review prevented a fuller picture of the implementation process and measurement of progress during the timeframe of the Roadmap. This Final Review benefitted from the Final Review of the ASEAN Peatland Management Strategy (APMS) 2006-2020, which was published in January 2021, and factored in the findings and recommendations of mid-term review of the ASEAN Socio-Cultural Community (ASCC) Blueprint 2016-2025 completed in October 2020. Notwithstanding limitations, this assessment does at least provide a snapshot of the activities undertaken of both the more successful accomplishments as well as the shortcomings. The findings were by no means complete due to the limitations of time and data availability coupled with COVID-19 restrictions limiting all interactions related to the Review to be online only. The Report also presents a set of recommendations for further consideration by ASEAN on how to move forward in addressing land and/forest fire management to reduce transboundary haze pollution in the region.

The Final Review Report provides an overview of the ASEAN Haze-Free Roadmap, and defines the mandate and accountability arrangement, the strategic results framework, the governing mechanism, and the monitoring and reporting arrangement. The Report also presents the analysis and findings of the Roadmap's 8 strategies, and underlying actions and logical frameworks, and identified a series of strategic level recommendations, and within the Roadmap strategies, several cross-cutting thematic recommendations were laid out as summarized below:

STRATEGY	STRATEGY LEVEL RECOMMENDATION	CROSS-CUTTING THEMATIC RECOMMENDATION
1	<p>Expedite the establishment of the ACC with a high-level ASEAN task force and technical team</p> <hr/> <p>Reconceptualise Panel of ASEAN Experts on Fire and Haze Assessment and Coordination as a multi-stakeholder platform</p> <hr/> <p>Enhance the SOPMAJER to include After-Action Review</p>	<p>The main cross-cutting issue for Strategy 1 is the establishment of the ACC. While it is identified as Measure of Progress 1, the completion of the other Measures of Progress, especially 2 and 3, also hinges upon this Measure of Progress. However, despite a strong commitment from AMS to establish the ACC, there remains confusion over the relationship of the ACC with other ASEAN Centres. Resolving this uncertainty should be expedited. The AMS broadly hold three differing views on how to move forward (in no particular order): (1) the ACC should not duplicate the functions currently performed by other ASEAN Centres, (2) the function of the ASMC should be transmitted to the ACC upon full establishment, and (3) the ACC should be established and operationalised first, putting aside existing differences to be resolved later.</p>
2	<p>Keep peatlands moist and wet all year in order to control the flammability of peats</p> <hr/> <p>Subsidence control</p>	<p>Peat fire is currently moderately managed. To realize peatland fire prevention, AMS need to shift from an approach of technical hotspot monitoring and ban of fire to the development of sustainable management of peatlands for</p>

STRATEGY	STRATEGY LEVEL RECOMMENDATION	CROSS-CUTTING THEMATIC RECOMMENDATION
	<p>Standardized methods and techniques for peatland inventory and monitoring</p> <hr/> <p>Practicing community-based peatland management (putting local people first in the management of peatlands)</p> <hr/> <p>ASEAN collaboration on peatland uses and ecosystem management for climate change mitigation and adaptation</p>	<p>better community livelihoods and responsible peatland users. There is a need to have peatland lead agency that creates a strategic planning and monitoring, supports the implementation of peatland restoration and conservation, and develops programs of community-based peatland management through multi-stakeholder participation.</p>
3	<p>Future roadmap needs to specify improved monitoring of the inputs, outputs and impacts with proper benchmarking for analyses to be conducted at the level of strategy-specific measures.</p> <hr/> <p>Disseminate regionwide efforts to strengthen rules with economic instruments such as payments for ecosystem services</p>	<p>The measures to address fires in non-peat forests appear to be effective, as a result of country level efforts as well as catalyzing concerted regional efforts. The gradation of practices in fire prevention and early fire detection from the regional to the ground levels works and should continue to be supported. Progress towards achieving zero burning with known alternative technologies could be accelerated by addressing the economic constraints particularly faced by small scale producers in both forest and agricultural lands where burning continue to be practiced.</p> <p>Disseminating lessons from the use of economic (dis)incentives, of which payments for ecosystem services appear promising, and successful use of technologies that complement various rules and deter the use of fire in agricultural land are only beginning to be practiced in a few AMS. While knowledge of the fire-avoidance technologies, change in attitudes and perceptions and specific regulations are necessary conditions, economics (supply cost and market demand) provide the sufficient conditions for permanent shifts to reduced burning.</p> <p>Scaling up ASEAN-wide collaboration on information sharing, and for coordinated funding support should be undertaken. Broader analysis of regional strategies that fulfill multiple objectives, including of</p>

STRATEGY	STRATEGY LEVEL RECOMMENDATION	CROSS-CUTTING THEMATIC RECOMMENDATION
		<p>late, food security, economic recovery as well as the ASCC Blueprint (and SDG goals) need to be examined through tools such as impact analysis and Benefit-Cost Analysis, where the welfare impacts on the environmental and health are economically valued.</p> <p>Supporting institutions (bodies of governance, laws and enforcement) are also important to examine through approaches such as Strategic Environmental and Social assessment, and such activities, high transactions costs need to be funded, including technological and economic approaches on specific future measures.</p>
4	<p>Increase capacity of governmental and enforcement agencies</p> <hr/> <p>Formulate non-regulatory measures (incentives & supporting policies)</p> <hr/> <p>Strengthening reporting mechanism and coordination among enforcement agencies</p> <hr/> <p>Formulate similar domestic laws, allowing haze victims to file lawsuits against perpetrators</p>	<p>The scope of this strategy encompasses a range of activities as well as regulatory and policy instruments. To make the implementation and assessment more focused and manageable, the strategy should attend only to the issue of law enforcement. A new set of measures of progress with measurable definitions is also needed to avoid differing interpretations and standards. Besides, a new strategy may be created to focus on non-regulatory instruments and supporting policies to intensify coordination and encourage compliance, including strategic campaign (in relation to Strategy 6) to raise legal awareness. Resources mobilization and new mechanisms may also be explored through collaboration and synergy between ASEAN and other cooperation frameworks (such as the Ayeyawady – Chao Phraya – Mekong Economic Cooperation Strategy and the Lancang-Mekong Cooperation), which address sustainable agriculture and also forest fires and haze.</p> <p>At the national level, the elevation of solving the problem of PM2.5 to the national agenda as in the case of Thailand can increase public awareness on air pollution and stimulate multi-stakeholder efforts to curb air pollution from various sources (see Strategy 6).</p>

STRATEGY	STRATEGY LEVEL RECOMMENDATION	CROSS-CUTTING THEMATIC RECOMMENDATION
		<p>Hence, it may be considered a model for other ASEAN states. Besides, there is a need to solve the gaps and conflicts arising from unclear land tenure and uncertain status of land and forests in many member states. Indonesia's One Map Policy is a notable initiative that other members can follow.</p>
5	<p>It is highly recommended that a more tangible and measurable set of indicators be introduced to replace the existing set of indicators for Strategy 5, as proposed in the report. This would then be more in line with the ASCC Monitoring and Evaluation framework adopted for tracking progress under the ASCC Blueprint 2025 and also consistent with the SDG alignment process.</p> <hr/> <p>It is also strongly recommended that the ASEAN haze institutional structure should try to expand its collaborative engagement on activities in the land/forest fire management and transboundary haze pollution control activities to include more stakeholders such as the academic and research community, the private sector, civil society as well as local governments and communities.</p>	<p>The status report of the Implementation of the ASCC Blueprint 2025 as of 21 May 2020 for COP-AATHP, there is a reference made which states</p> <ul style="list-style-type: none"> • On regional level, the cross-sectoral coordination with ASEAN Senior Officials on Forestry (ASOF) is needed to stocktake the best practices from the completed, ongoing, and pipeline projects/ programmes/ activities related with the sustainable management of forest and agricultural land. • On national level, sharing of best practices activities under the National Actions Plans on Peatlands (NAPPs) need to be identified. <p>The SOM-AMAF side did report periodically on the progress that it has committed to undertake in relation to addressing forest fire in the ASEAN region as reflected in its Action Programme on "Address the issue of forest fires, especially forest peatland fires in a comprehensive manner, through close inter-sectoral cooperation and by the implementation of the ASEAN Agreement on Transboundary Haze Pollution and the ASEAN Programme on Integrated Peatland Management". The associated KPI for this Action Programme is "Annual report on the frequency of forest fires, including peatland fires and the status of implementation of the ASEAN Peatland Management Initiative (APMI) prepared and shared with ASOEN".</p>

STRATEGY	STRATEGY LEVEL RECOMMENDATION	CROSS-CUTTING THEMATIC RECOMMENDATION
		<p>Two successive Strategic Plan of Action for ASEAN Cooperation on Forestry during 2016-2020 and 2021-2025 which is under the responsibility of ASOF have included in one of its Activities “Detect, prevent and suppress forest fires, including peatland fires to reduce the risk of fires and transboundary haze pollution through the implementation of the ASEAN Peatland Management Initiative”.</p> <p>Indications obtained from the reports is that the interaction between the Environmental and Agricultural/Forestry sectoral bodies of ASEAN so far is limited to exchange of information and reporting at each other’s meetings of any relevant activities undertaken but without any substantive and closer collaboration as such despite having expressed mandates to address the land/forest fires and transboundary haze pollution in a concerted manner. It is recommended more intimate coordination and cooperation be forged between the two sides as otherwise the root causes or sources of the land and/or forest fires are not likely to be satisfactorily addressed in a timely and effective manner as a low hanging fruit.</p>
6	<p>Increase local participation & capacity in policy formulation</p> <hr/> <p>Promote socially-sustainable community development as part of CSR</p> <hr/> <p>Tap expertise of academic institutions (Panel of Experts, AUN), private sector (ASEAN-CCI) & CSOs</p> <hr/> <p>Include fires & haze as part of global citizenship & sustainable development education</p>	<p>In relations to Strategy 4 of the Roadmap, overlapping, duplicate and inconsistent policies and regulations, especially those related to land tenure and forest rights, should be revised and recognized by both governmental agencies, communities and other stakeholders. This would increase the communities’ sense of ownership of land and forests they manage, prevent land dispute, and reduce mistrust between local communities and government officials. The revision should also allow prompt fire suppression in protected areas. Besides, more incentives are needed to encourage the private sector’s implementation of CSR.</p>

STRATEGY	STRATEGY LEVEL RECOMMENDATION	CROSS-CUTTING THEMATIC RECOMMENDATION
		<p>In line with SDG 12 on Responsible Production and Consumption, school and higher education curricula should be reviewed and revised to promote active participation in solving the haze issue as part of global citizenship and sustainable development education. Collaboration among different stakeholders should also be sought. National academic institutions, for instance, can work with local communities in the development of innovations in biomass and waste conversion. Multinational and national companies can also create a partnership project with local communities to develop sustainable technologies and environmentally friendly products.</p> <p>For local communities, capacity building projects should include knowledge on business planning, product design, and marketing to increase local entrepreneurial capacity.</p>
7	<p>Integrated resource mobilization and stakeholder partnership building strategy</p> <hr/> <p>Broaden funding sources base and convene regular structured dialogue on financing</p> <hr/> <p>ASEAN Haze Fund to be focus of study aiming at increasing capitalization, redefining seed grants, and autonomy in fund raising</p> <hr/> <p>Enhance resource mobilization Measures of Progress by setting measurable indicators</p>	<p>Clearer alignment in the Roadmap's results framework with the ASEAN corporate and community results framework will help enhance in planned and intended results.</p> <p>Clear and focused resource mobilization objectives should be an integral part of the successor Roadmap. Haze impact studies should look at losses, damage and cost of control, remediation, and sustainable socio-economic transformation and assess feasibility of establishing budget targets and benchmarks.</p> <p>A Whole-of-ASEAN approach in financing for Community Vision should be considered rather than piecemeal, community or sectoral-centric approach.</p> <p>The successor Roadmap needs to be supplemented with an effective Resource Mobilization and Stakeholder Partnership Strategy that can also be used as an outreach tool for donors, private sector and other potential stakeholders and partner. This would help to underline the</p>

STRATEGY**STRATEGY LEVEL
RECOMMENDATION****CROSS-CUTTING THEMATIC
RECOMMENDATION**

need for buy-in from stakeholders and beneficiaries and help in customizing presentations to potential partners and stakeholders. A relationship of trust should be a sine qua non in managing ASEAN Dialogue and Development Partnerships, and the introduction of transparent and certified performance and financial reports.

COP/COM AATHP should consider structured dialogue not limited only to review of development cooperation project and other prospects, but to include structured dialogue on financing between AMS and Dialogue and Development Partners, private sector and other potential funding sources. The objective of a financing dialogue is to share information and synchronize and follow-up on topics such as effectiveness and adequacy, ensuring predictability of financing, develop transparency, trust and accountability, and align regional programmes, and information on finance, human, and technological resources. Such dialogue would also reduce the dependency on a limited number of donors and programmes, and to reach out to new donors, non-traditional donors, and financial technology opportunities through raising domestic and region funding sources, crowd-funding and other means.

8

Accelerate the establishment of the common database on impacts of haze on public health

Expedite the assessment and monitoring of the health, economic, social, and environmental impacts of haze including climate change warming and add this task to the recent AWGCC's action plan

Providing additional health risk reduction measures to poor, children, and vulnerable people

Standardization of the common database on impacts of haze on public health among AMS: The main cross-cutting issue for Strategy 8 is the establishment of the common database on impacts of haze on public health among AMS. The success of this action depends on the establishment of the ACC THPC in Strategy 1 as stated in Strategy 1 since there are several issues that need collaboration among AMS. For example, each AMS has different air quality standards. Also, some AMS still do not incorporate PM2.5 in the calculation of air quality index. Moreover, several areas of some AMS do not have adequate

STRATEGY	STRATEGY LEVEL RECOMMENDATION	CROSS-CUTTING THEMATIC RECOMMENDATION
	<p>Reframing the haze issue as a public health issue and regularly raise the public awareness</p> <hr/> <p>Establish the knowledge-sharing platform to enhance the public awareness among AMS</p> <hr/> <p>Encourage more donors from private company and international organizations to support necessary resources</p>	<p>number of reliable ground-level air quality monitoring stations making it difficult to establish the air quality monitoring networks with rigorous quality assurance and quality control regimes. In addition to the collaboration aspect, these concerned issues depend on whether each AMS has adequate resources from multi-stakeholders as mentioned in Strategy 7.</p> <p>Standardized methods and criteria used to undertake assessment and monitoring of the health, economic, social and environmental impacts of haze including climate change/global warming: Another main cross-cutting issue for Strategy 8 is the standardized methods and criteria used to undertake assessment and monitoring among AMS. The transferred knowledge of experts plus joint research and development, and exchange programme of experts may be needed and can be implemented with the support of Chiang Rai 2017 Plan of Action for Transboundary Haze Pollution Control in the Mekong Sub-Region that includes Strategy 8 as a priority area of cooperation.</p> <p>Increase public awareness about the impacts of haze pollution on health: This main cross-cutting issue of Action 4 depends on the success of Actions 1 and 2 of Strategy 8. Without common database and the assessment and monitoring of haze impacts, it is difficult to obtain the useful information for enhancing public awareness. The success of Action 4 also depends on the completion of Strategy 6 that emphasizes the cross-sectoral and stakeholders' participation in the form of forums/dialogues, projects and CSR activities. The knowledge-sharing platform is an effective way to share best practices, stories and develop more nuanced more sophisticated views about haze. More importantly, it can synthesize the difficulty haze-related information to be easy for the local people.</p>

The Final Review also analysed and tested the components of the Monitoring and Evaluation System and set out the guidelines and indicators employed in preparing the first output of the final review process. It outlines several recommendations and considerations for an enhanced Road Map Strategic Results Framework, including linkages with the ASCC Blueprint, the ASEAN Community Key Results Areas, and the Sustainable Development Goals, and proposes new measures of progress to be considered under a new Roadmap.

The Final Review enumerated on the Final Recommendations, provided an overview and overall assessment, and set forth recommendations covering regional and sub-regional levels, stakeholders, and partnership. Final recommendations also focused on the need for a haze-related database, information sharing and public awareness; analytical tools/policies/implementation approaches, and resource mobilization. The final recommendations are summarized below:

1. Regional Level

- 1.1: Roadmap indicators should be based on specific targets
- 1.2: Consider rationalising the institutional framework of the AATHP, taking into account the views of AMS in conjunction with corresponding aforementioned strategic level recommendations

2. Sub-regional Level

- 2.1: Mekong subregion strategic plan to prevent and minimize land and forest fires is of critical importance
- 2.2: Align synergies with other sub-regional cooperation frameworks to optimize resource sharing and mobilization
- 2.3: Enhance Mekong sub-region institutional capacity in meteorological and air quality monitoring

3. Connecting Stakeholders, Expanding Partnerships, Reaching Local Communities

- 3.1: Expand stakeholder partnerships to be more inclusive
- 3.2: Strengthen collaboration between academia, private sector, and local communities

4. Haze-related Database, Information Sharing and Public Awareness

- 4.1: Common database on correlation between public health and haze should be established
- 4.2: Increase public awareness about the impacts of haze pollution on health
- 4.3: Elevate national discourse and public awareness on air pollution such as the problem of PM 2.5
- 4.4: Prioritize strategic development of information sharing, database management and communications to support field surveillance and monitoring

5. Analytical Tools, Policies/Implementation Approaches

- 5.1: Introduce a more robust and standardized socio-economic analytical assessment approach for each Roadmap Strategy to include impact, cost-benefit, environmental, health, and social protection platforms
- 5.2: Strengthen collaboration to enhance results-orientation in formulation and implementation of special projects and programmes
- 5.3: Regulatory and policy instruments that are manageable and focused on enforcement
- 5.4: Examine strategic environmental and social assessment approaches in capacity building of supporting governance and justice sector institutions
- 5.5: Capacity building of governmental and enforcement agencies at all levels should apply rights-based approaches
- 5.7: Appropriate focus on non-regulatory instruments and measures
- 5.8: Aim for air quality monitoring that is regional in scope and develop a regional index

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- 5.9: Driving and championing sustainable peatland management policies in AMS with peatlands should be undertaken by an identifiable national coordinating agency
- 5.10: Identify best practices that can help address gaps and conflicts in land tenure and status of land and forests

6. Resource Mobilisation

- 6.1: The governance framework should have a solid resourcing mechanism with advanced financial technology and budget planning and earmarking systems
- 6.2: A Redesigned Roadmap Resource Mobilization and Stakeholder Partnership Strategy
- 6.3: Structured dialogue on financing and investing in managing transboundary haze pollution
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Towards a New Roadmap

In ascertaining the proposed elements for a new Roadmap, the Final Review Report makes the following assertion:

A New Roadmap should integrate the following dimensions and concepts:

- Have a broadened vision to reflect the complexities revolving around the regional/national, land/forest fire and transboundary haze pollution issue.
- Emphasize on fire prevention/suppression measures
- Include a results strategy framework which have quantifiable indicators, measures of progress, and actions that are harmonized
- Incorporate alternatives to Zero Burning Policy for community livelihood
- Contain economic instruments to complement regulatory ones
- Consider unique sub-regional needs
- Implement more innovative, inter-sectoral/cross-pillar/multi-stakeholder, sustainable and inclusive approaches
- Align more to SDGs & ASCC Blueprint objectives

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