

Notes from the 1st Clean Fuels and Vehicles Forum in the ASEAN Region

The 1st Clean Fuels and Vehicles Forum in the ASEAN Region brought together key stakeholders to engage, network, and discuss stricter and harmonized clean fuels and vehicles standards at the regional level.

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The Southeast Asian road transport sector consumes an estimated 139,874 kilotons of oil annually.¹ As a result of a rapid increase of private cars and motorcycle use in recent years, the region's energy demand has greatly expanded and current transport policies fall short to meet the transport emission reductions targets for carbon dioxide (CO₂) by 2050.² While most Association of Southeast Asian Nations (ASEAN) countries have set cleaner vehicle and fuel quality roadmaps, there's a wide variation between standards and their implementation among the different member countries, which was one of the topics of discussion during the 1st Clean Fuels and Vehicles Forum in the ASEAN Region, held November 2013 in Singapore.

The event was organized by Clean Air Asia and the Singapore National Environment Agency (NEA). Supporting partners included the Climate and Clean Air Coalition and Partnership for Clean Fuels and Vehicles under the United Nations Environment Programme (UNEP) and the German International Cooperation (GIZ), with private sector support from MAHA, Asian Clean Fuels Association (ACFA), and Shell.

High-level government officials from Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Singapore, Thailand, and Vietnam, including a representative from the ASEAN Secretariat, as well as government representatives from China, Hong Kong, and Australia, participated in the Forum.

Clean Fuels and Vehicles Forum, November 2013. Photo courtesy of the Singapore NEA.

Experts were invited to present master classes designed for senior policy-makers in the ASEAN region. The master classes included:

- Strengthening fuel quality and emission standards for light-duty vehicles. led by Dr. Axel Friedrich, GIZ consultant, and Vance Wagner of the International Council on Clean Transportation with inputs from the Vehicle Emissions Control Center of the Ministry of Environmental Protection in China;
- Formulating fuel economy policies and standards, led by Bert Fabian of UNEP Transport Unit and Rob Earley of Clean Air Asia with country experiences from government representatives of Indonesia, Thailand, and Vietnam; and
- Periodic testing and inspection for in-use vehicles, by Michael Walsh, an international expert on fuels and vehicles.

Forum participants,
November 2013.
Photo courtesy of the
Singapore NEA.



Motor Vehicle Pollution and Health

In his keynote speech, Michael Walsh, gave an update on the global trends in motor vehicle pollution control. He underscored that health concerns continue to be the major driver of vehicle emission regulations, particularly ultrafine particles, which is becoming one of the more serious concerns at the global level. Road transport is a significant source of these toxic pollutants, especially in urban areas where these are often highly concentrated.

Recent studies completed by the World Health Organization confirm that outdoor air pollution causes lung cancer. Sufficient evidence points to diesel exhaust as a carcinogen and particulate matter, a major component of outdoor air pollution, as carcinogenic to humans.³

Walsh also revisited the elements of a comprehensive vehicle pollution control strategy: clean vehicle technologies, transport and land use planning, clean fuels, and appropriate maintenance. "It is important that fuels and vehicles must be viewed as part of a single system, rather than as individual components independent of each other," Walsh noted.

Roadmap for Clean Fuels and Vehicles

Clean fuels and vehicles policies are instrumental in reducing transport energy demand and associated environmental and health impacts from vehicle emissions. The Roadmap for Cleaner Fuels and Vehicles in Asia is the outcome of a long process that began with a meeting 10 years ago in July 2003 in Singapore, where Clean Air Asia held the Dialogue for Cleaner Fuels in Asia with 12 major multinational and national oil companies. The dialogue was the first regional effort of this scale to bring the oil companies in Asia around the table to discuss how they plan to introduce cleaner fuels for transportation in the region.

Since the launch of the Roadmap in 2008, various developments have been taking place as governments adhere to the adoption of a national roadmap aligned to this regional document.

Thailand moved to Euro 4 vehicle emission standards

and 50-parts per million (ppm) sulfur in fuels as of the end of 2012 and Singapore mandated 10-ppm sulfur in diesel in July 2013 in anticipation of the move to Euro 5 diesel vehicles starting January 2014. Euro 4 standards for gasoline vehicles will be implemented in Singapore by April 2014.

The Vietnamese government has confirmed availability of 50-ppm sulfur in fuels by 2016 to meet Euro 4 vehicle emission standards and the move to Euro 5 and 10-ppm sulfur in fuels by 2021. Brunei Darussalam, Malaysia, and the Philippines are also planning the move to Euro 4 and 50-ppm sulfur in fuels by 2015/2016.

It was proposed during the Forum that all ASEAN member countries target to move to fuels of 50-ppm sulfur by 2015/16 and 10-ppm sulphur by 2019, and vehicle standards of Euro 4 by 2015/16 and Euro 6 by 2020. The development of a harmonized roadmap for cleaner fuels and vehicles, including fuel economy policies, will be raised officially at the relevant ASEAN working groups.

Way Forward

Air pollution from road transport is increasingly becoming a challenge as countries in the ASEAN region increase cross-border trade. The wide variation of standards and policies implemented among member countries potentially impedes the move toward a single ASEAN Economic Community, which, when fully implemented, will create an integrated market and production base for vehicles in the region. As a region, it would be essential for the countries to aim for harmonized regulations and approach toward cleaner fuels and vehicles.

This highlights the importance for collaboration among ASEAN member countries. The need to harmonize vehicles and fuel quality standards was acknowledged by Forum participants, but may require varying time frames for implementation depending on the readiness of the countries.

References

1. Clean Air Asia, 2010 estimates.
2. Low-Carbon Transport Study in Southeast Asia. See www.cleanairinitiative.org/portal/whatwedo/projects/LowCarbonTransportSoutheastAsia.
3. World Health Organization, 2013. See www.iarc.fr/en/media-centre/iarcnews/pdf/pr221_E.pdf.

► 1st Clean Fuels and Vehicles Forum in the ASEAN Region, Singapore, November 2013

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Forum participants expressed that the Forum has been a very useful platform for knowledge-sharing and networking. Because achieving consensus among all member countries within the formal ASEAN framework could be a long-term process, events such as this one held in Singapore help increase awareness on the issues, identify next steps toward development of more stringent vehicle emission and fuel standards for the ASEAN member states, and provide impetus for harmonization of these standards.

A complete report and Forum presentations are available online at www.cleanairinitiative.org/portal/node/12102. **em**

Asian Connections is a quarterly column sponsored by A&WMA's International Affairs Committee. A&WMA has invited Clean Air Asia (www.cleanairasia.org) to contribute one column each quarter to highlight air quality and climate change issues in Asia. The Clean Air Asia Center serves as the secretariat of the Clean Air Asia Partnership, a nonbinding, multi-stakeholder network of government agencies, nongovernmental organizations, research institutions, international organizations, and private sector firms committed to improving air quality in Asia. A&WMA has collaborated and partnered with Clean Air Asia dating back to 2006.