

AKHBAR	:	NEW STRAITS TIMES		
TARIKH	:	16/2/2017	MUKA SURAT	: 16
JABATAN	:	JAS / BPASPI		
KLASIFIKASI	:	PERHATIAN		



MANAGING PEATLANDS SUSTAINABLY

KEEPING ASEAN HAZE-FREE

Members must strengthen science-policy interface on environmental issues to translate targets into actions

THE great peatlands of Southeast Asia are incalculably valuable, both within the region and to all humanity.

Not only are they highly biodiverse, they play a crucial role in world climate regulation, storing an estimated 120 billion tonnes of carbon – roughly five per cent of all the carbon in Earth's near-surface.

Covering about eight per cent of Malaysia, peatlands have enormous local economic, ecological and hydrological value as well, providing timber and non-timber forest products, regulating and purifying water supplies, controlling floods and offering many other benefits on which our well-being depends.

In efforts to improve socio-economic conditions, Malaysia and many other neighbours have converted peatlands and other types of forest to plantations, sometimes burning biomass to clear or prepare the land.

Alarmingly, these fires now cause up to 90 per cent of the haze that plagues health at a regional level, releasing three to six times more unhealthy airborne particulate matter than fires on other types of soil.

Since the early 1980s, haze has reached menacing levels many times,

the 1997 episode remembered as one of the worst ever, prolonged by dry weather and aggravated by emissions from vehicles, industries and the open burning of waste.

A 10-day emergency was declared in Sarawak when the Air Pollutant Index topped 500 – far exceeding the "unhealthy" threshold (101 to 200 range), and well beyond even the "hazardous" 300 breakpoint.

The three-month episode of 1997 caused huge direct regional economic losses, conservatively estimated at US\$9 billion (RM39.6 billion). And, the cost to human health and biodiversity, if they could be quantified, would likely represent even more staggering sums.

In response, Malaysia introduced many local reforms, including regulatory measures to prevent open burning, with high penalties for non-compliance. The 1997 haze also served as a wake-up call for the region, with countries teaming up through Asean to create an Agreement on Transboundary Haze Pollution, adopted in 2002, and since ratified by 10 countries, most recently Indonesia in January 2015.

Parties to the agreement meet at least once a year. A Coordinating Centre for Transboundary Haze Pollution Control was created, with an

associated fund to facilitate rapid action during episodes.

Based in Singapore, an Asean Specialised Meteorological Centre supports tracking of hotspots and haze movements, and monitor regional weather. A region-wide Fire Danger Rating System helps guide and monitor atmospheric and ground conditions.

Asean's Peatland Management Strategy to 2020 was translated by Malaysia into a National Action Plan on Peatlands, launched on the United Nation's International Day for Biodiversity, 2011. And, I laud these major strides and success stories.

However, the region continues to endure serious haze episodes, the latest lasting from June to October 2015. Reports suggest that the 2015 haze cost Indonesia alone around US\$16 billion in losses – double the damage and losses inflicted by the 2004 tsunami.

As the science adviser to the prime minister, as well as chair of the National Professors Council (MPN), I have given the haze issue a lot of attention.

Last year, the Haze Task Force of the Academy of Sciences Malaysia outlined several recommendations in a paper that also incorporated the outcomes of a meeting between the MPN and Indonesian academicians, held in Pekanbaru in November 2015.

The recommendations include:

Rather than burning the biomass cleared during replanting and land preparation operations, industry

and researchers should cooperate to find productive ways to use it, supplementing farmers' incomes in the process;

The Asean peatland management strategy should be translated into national plans and implemented with a complementary resource mobilisation plan. Simply put, a good plan without resources will not work;

The destruction of biodiversity, the production of haze and related environment problems are both a security and environmental issue. Enforcement of all domestic laws and regulations to control fires must be strictly enforced, with courts taking a no-compromise position in sentencing to deter offences;

Enhanced collaborative research and development is needed covering all aspects of the haze issue – from soil science, ecology, atmospheric science, climate change to alternative biomass uses. We need to better understand the effects of haze on human, animal and plant health and diversity, as well as its socioeconomic impact; and,

Improving communication, education and public awareness can bring about the attitude change needed for people to act responsibly and live in harmony with nature, and to facilitate both top-down and bottom-up actions, translating policies and laws into action.

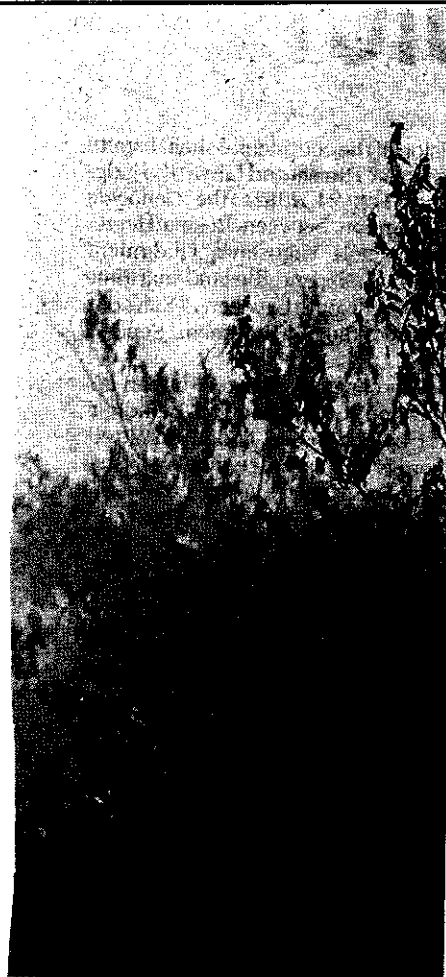
I encourage non-governmental organisations and industry leaders to assist governments in these efforts.

Consumers, meanwhile, have started using their purchasing pow-



KERATAN AKHBAR

AKHBAR	:	NEW STRAITS TIMES			
TARIKH	:	16/2/2017	MUKA SURAT	:	17
JABATAN	:	JAS / BPASPI			
KLASIFIKASI	:	PERHATIAN			



Firemen carrying their equipment into the bushes to put out a peat fire near a highway in Sepang in 2014. PIC BY AHMAD IRHAM MOHD NOOR

er and voices to demand that all companies act responsibly to avoid haze episodes.

I also urge governments in this region to strengthen the science-policy interface on peatland management, as well as on wider biodiversity issues. Globally, we have established the Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES), which I had the privilege to serve as the founding chairman.

As a biodiversity hotspot, Asean nations need to effectively implement the Aichi Biodiversity Targets. This requires more science-policy interactions at national levels.

Finally, I would like to suggest that a round-table dialogue be established at national levels involving all sectors – government, NGOs, private sector, indigenous and local communities, farmers and scientists – to openly discuss this issue and serve as a participatory and inclusive platform to strengthen governance and mitigation of the problem.

We need profound transformations. But creating an Asean that is free from haze can be achieved if we all work together.

zakri@pmo.gov.my

The writer is science adviser to the prime minister and chairman of the National Professors Council. This is an excerpt of a keynote address at the Regional Peatland Governance Workshop in Putrajaya on Feb 13