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A climate for change

Environmental issues are making headlines. Beyond protests, there is much that companies and governments can do to curb carbon emissions and temperature rise

Simon Tay

For The Straits Times

Despite sceptics – most notably US President Donald Trump – people today are increasingly concerned about climate change and are calling for action.

Governments are responding, with some 60 world leaders gathered for the climate summit last month. Singapore's Prime Minister Lee Hsien Loong attended for the first time and highlighted Singapore's climate commitments, outlined earlier at the National Day Rally. Thailand's Premier Prayut Chan-o-cha also presented what the Asean region can do, with Thailand as the current chair of the group.

Expectations will increase. Next year, national commitments made under the Paris Agreement will be assessed. Already, it is becoming clear that current cuts fall short of what is needed to keep global temperatures within the 1.5 deg C to 2 deg C rise to avoid potential catastrophe.

Citizens are speaking up. About four million people filled city streets worldwide and masses of children skipped school to participate in a global strike against climate change. Swedish teenager Greta Thunberg admonished governments and leaders with the refrain, "how dare you!" at the UN climate summit.

BEYOND PROTESTS

However, it will take more than protests, indignation and anger. Urgency and effective implementation are key.

Business is a major constituency to combat climate change. Many, including American multinationals, are making shifts to their operations such that their values have a ripple effect on suppliers. They also work with non-governmental organisations to better align their business values and employee engagement with green causes.

At a side event I attended during Climate Week, a number of major American multinationals pledged to work with the Arbor Day Foundation to scale up tree-planting efforts. Many will be in fire-hit California but efforts to reach out to other countries will also be made. Carbon sequestration technology is currently limited and controversial, so trees are a well-established way to store carbon.

A recent study suggests that this could be the most cost-effective method to combat climate change. The estimate is that if an area the size of the United States is reforested, this could absorb up to 205 billion tonnes of carbon – almost two-thirds of what humanity has already emitted. The challenge would be to increase these efforts dramatically.

Such possibilities need to be considered and much depends on science. The voice of scientists and experts is critical to effective climate policy, especially through the Intergovernmental Panel on Climate Change (IPCC).

THE INFLUENCE OF SCIENCE

The IPCC comprises experts worldwide and, while appointed by governments, the panel provides independent assessments of the complex and much contested science surrounding climate change. Since its formation in 1988 by the World Meteorological Organisation and the United Nations Environment Programme, the IPCC has issued five assessment reports that have come to be accepted by almost all governments.

Its Special Report this year concludes that sea level rise is accelerating as ice losses from Greenland and Antarctic increase, and the ocean is getting hotter, more acidic and less oxygenated.

While the rise is conservatively estimated at between 61cm and 110cm, a 10cm increase can mean 10 million more people being exposed to flooding. Moreover, there are credible scientific evaluations that suggest considerably higher potential rises and IPCC experts said these "cannot be ruled out".

The 2019 IPCC Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, And Greenhouse Gas Fluxes In Terrestrial Ecosystems (or IPCC SR on Climate Change and Land for short) had earlier assessed that about 23 per cent of global human-caused greenhouse gas emissions come from agriculture, forestry and other land uses.

Land use change, such as clearing forest to make way for farms, drives these emissions. Additionally, 44 per cent of recent human-driven methane, a potent greenhouse gas, came from agriculture, peatland destruction and other land-based sources. It is clear that it will be impossible to limit temperature rise to safe levels without fundamentally altering the way the world produces food and manages land.

HOW ASIA NEEDS TO RESPOND

In this process, more and more countries have begun to understand their own vulnerabilities. This is especially important for Asia, where science suggests more severe impacts. Countries have already submitted their nationally determined contributions, based on their different strengths, to commit what they can and will do. Next year, there will be a need to revisit them with a view to not only ensure the due implementation of current undertakings, but to increase their ambition.

In so doing, governments will do best to emphasise cost-effective measures and viable technologies. These steps must be specially embedded in the development of Asia's infrastructure for energy, transport and urban settlements.

Moreover, Asia and other developing countries need to align national priorities with the global agenda. Take for example, the fires across the world that commanded headlines and public attention in the weeks leading up to the UN meetings – none more so than the fires raging across the Amazon.

This is not an isolated tragedy. With drier and hotter conditions over the past year, many regions of the world have been on fire, including areas within the Arctic Circle, or experienced intense and even deadly heatwaves.

Closer to home, countries including Indonesia, Malaysia, Thailand and Singapore continue to suffer from transboundary haze pollution due to forest fires.

According to the 2019 IPCC Report on Climate Change and Land, "Fires have significant societal impacts; for example, the 2015 fires caused over 100,000 additional deaths across Indonesia, Malaysia and Singapore and this event was more than twice as deadly as the 2006 El Nino event".

Despite these stark findings, forest fires have reared its ugly head again this year. Apart from negatively impacting the lives of people in the region, these fires are negating the ongoing efforts by the international community to reduce global emissions.

According to the EU Copernicus Atmosphere Monitoring Service, forest fires in Indonesia released 360 million tonnes of carbon dioxide (CO2) emissions between Aug 1 and Sept 18. This is more than Spain's CO2 emissions of 332.8 million tonnes last year.

The Asean Specialised Meteorological Centre (ASMC) plays a key role in monitoring and issuing alerts for land and forest fires. ASMC is also conducting research and development into an atmospheric dispersion modelling system that it uses to improve the prediction of transboundary smoke occurrence and its impact in the Asean region. This will help stakeholders take early mitigation actions.

The push to take climate action is increasing. This is not only from concerned citizens but also corporations; not only from the West but from the developing world too; driven not only by sentiment but hard, verifiable science. Asians need to be part of that movement and bring their concerns and contributions forward for a global solution.

stopinion@sph.com.sg

• Associate Professor Simon Tay is chairman of the Singapore Institute of International Affairs.