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1.5°C Too Soon: More Must Be Done

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Synopsis

The latest IPCC special report released in early October 2018 estimated that global temperature increase may reach 1.5°C anytime between 2030 and 2050. This is much sooner than the end of the century timeframe set in the 2015 Paris Agreement. Will this report lead to more ambitious and aggressive emission mitigation efforts?

Commentary

THE 48th SESSION of the Intergovernmental Panel on Climate Change (IPCC-48) held in early October 2018 released a summary report for policymakers highlighting that the Earth may get warmer by 1.5°C above pre-industrial level anytime between 2030 and 2050. The report further demonstrates that while a temperature increase of 1.5°C will result in more hot days and extreme heat events, changes in rain patterns and volume, biodiversity loss, increase in ocean temperature and acidity, decrease in oxygen levels, and bring negative impacts on health, food security, water supply, human security and economic growth, letting it rise further to 2°C will cause even more catastrophic outcomes.

The emphasis on 1.5°C and comparison to 2°C are modelled after the 2015 Paris Agreement that aims to "keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius." The report, therefore, provides a review of the current status of global emission pathways pertaining to the 1.5°C goal. The final message is then clear: the Earth potentially has only 12 years left before hitting the 1.5°C mark; as such, countries must urgently make concerted efforts to reduce greenhouse gas emissions and ensure that global warming does not go beyond it thereafter.

Implications on Southeast Asia

Although this latest report may sound alarming, the consequences of a changing climate have been reported years back. In its regional assessment report published in 2014, the IPCC has identified that the temperature in Southeast Asia has risen since the 1960s, and there are more hot days and warm nights and less cool weather now. It also rains more although the pattern varies across different regions and seasons.

Furthermore, the changing climate will lead to drought in lowland, biodiversity loss, wildfires and smoke exposure, sea surface temperature increase, and dengue outbreaks. Among all, flooding poses the biggest climate risk in Southeast Asia. This is consistent with the reality on the ground. In the last two decades, climate-related disaster events especially floods and storms made up the most frequent and the most devastating disasters in Southeast Asia. Since 1998, floods and storms have affected close to 250 million people and incurred a total cost of about US$89billion in the region.

Except for the shortening window gap, therefore, the warnings that come with the 1.5°C report do not really come as a big surprise. In fact, the earlier-than-expected attainment of the 1.5°C limit is also hardly surprising. The Climate Tracker Action noted that emissions pathway based on the Nationally Determined Contributions (NDCs) pledge submitted as of November 2017 has 90% likelihood to exceed 2°C by 2100.

Similarly, although climate change-related policies and regulations have exploded exponentially throughout the globe from 60 in the 1997 to more than 1,200 in early 2017 (Grantham Research Institute 2017), policy pathways have 97% likelihood of going beyond 2°C by 2100. As such, at the current going rate from the time the 2015 Paris Agreement was signed, the world is already projected to miss the 2°C mark at the end of the century.

Most Climate-Vulnerable States in the World

The expansion of climate change laws and policies also took place in Southeast Asia. At the international level, all Southeast Asian countries are signatories of the 1992 United Nations Framework Convention on Climate Change (UNFCCC), the 1997 Kyoto Protocol and the 2015 Paris Agreement. At the regional level, a common attitude towards climate change is reflected in the Declaration on ASEAN Post-2015 Environmental Sustainability and Climate Change Agenda.

At the national level, countries have put in place relevant policies and laws for green growth and sustainable development targeting carbon-emitting sectors including energy, transportation, and land use. This is despite Southeast Asia emitting only about 7.7% of total global carbon emission in 2014 (CAIT Climate Data Explorer 2018).

Southeast Asian countries have also formulated climate adaptation policies and action plans. Although they have identified vulnerable sectors and segments of society and included measures to increase resilience in the face of climate change, some Southeast Asian countries are still regarded as the most climate vulnerable states in the world.

According to the 2017 German Watch report, Myanmar, the Philippines, Vietnam, and Thailand ranked the third, fifth, eighth and ninth among the top 10 countries having the highest long-term climate risk index measured from 1997 to 2016. This implies that much more needs to be done to achieve societal adaptation and resilience against the fast rising global temperature.

More Ambitious Policy Needed

The 1.5°C summary report that the UN Secretary-General Antonio Guterres referred to as "an ear-splitting wake-up call to the world" prescribes some recipes including, among others, a major and sweeping overhaul in energy, land, urban and infrastructure (including transport and building) and industrial system that result in emission reductions by 2030. The IPCC advises that this is technically possible but it needs to happen sooner than later because the costs of doing so will only get much more prohibitive if it starts later.

This prescription is, again, nothing quite new. The numerous green growth plans and climate mitigation policies and regulations across Southeast Asia have incorporated this approach in various ways. The more critical questions will then be: have they been fully implemented and are they sufficient? More ambitious and aggressive climate mitigation policies and actions may be needed to save the Earth from getting warmer too much too soon.

Similarly, as the consequences of the changing climate are certain, more ambitious and aggressive climate adaptation policies and actions are needed to save the population and the environment from climate-induced disasters. Will the 1.5°C summary report generate the desired reactions from relevant parties, particularly the governments?

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