

COP27 is an opportunity to boost renewable energy sources

How energy is used and sourced will determine whether it will be possible to reach net-zero carbon emissions by 2050.
By Vinod Thomas



THE impact of the demand for energy on climate change presents the toughest policy choice that will face the United Nations' COP27 climate summit in Egypt on Nov 6. How energy is used and sourced will determine whether it will be possible to reach net-zero carbon emissions by 2050, a goal Singapore has renewed its commitment to.

The worry is that rising energy prices will lead to an expansion of fossil fuel capacity as countries scramble to achieve greater energy security. Because energy is responsible for three-fourths of greenhouse gas emissions (GHGs), burning more fossil fuels will undoubtedly cause irreversible harm. To counter this, COP27 must set higher targets for all forms of renewable energy that too are incentivised to expand because of higher oil prices.

The demand for energy has been growing and is expected to continue to do so, which is a measure of economic expansion, and the energy needs of countries. Some 733 million people do not yet have access to electricity and nearly 2.4 billion are not cooking with clean fuel.

The availability of basic energy for the poor and vulnerable is part of energy security that is high on country priorities. Immediately, rising energy bills following Russia's war in Ukraine and the Covid-19 pandemic are a concern everywhere. But, to avoid a worsening of the climate crisis, energy shortages need to be bridged without a return to fossil fuels, especially coal.

Instead, massive support needs to go to renewable sources that the International Energy Agency is already benefiting from the hit from the war, especially on natural gas.

Indeed, the single biggest breakthrough needed to deal with the climate crisis will be

a much faster deployment of clean energy technologies. Electric power has made progress in adopting renewables in its energy mix, but a far bigger switch from fossil fuels is needed for domestic heating and cooling to lower GHGs.

Industry, the largest energy user, and transport are making disappointing progress in switching to renewables. According to the UN Environmental Programme, the "slow progress in energy conservation, energy efficiency and renewables prevent the transition away from fossil fuels".

The International Energy Agency has presented a framework for net-zero emissions by 2050. There needs to be a massive boost in renewable plant capacity and energy generated by renewables, including the trading of renewable energy across national borders.

The infrastructure for renewable energy in development, storage, and distribution, including advanced batteries, needs to be vastly improved.

Consumers, for their part, need to be convinced of the value of switching to renewable sources. Singapore with a carbon footprint of only 0.1 per cent may not move the needle on the global aggregates, but its all-out effort to promote renewables, including imports, for example of hydropower from Laos, and solar possibly from Indonesia and Australia, as well as research on green hydrogen and carbon capture, will make a difference to regional efforts.

It is also clear that far more resources will be needed for energy transition than was previously thought. That vast sums can be quickly mobilised to fix global emergencies – if the political will is there – was amply demonstrated by the US\$15 trillion stumped up in 2020 by the OECD's major economies to

COP27 must set higher targets for all forms of renewable energy. PHOTO: REUTERS

Consumers, for their part, need to be convinced of the value of switching to renewable sources.



fight Covid-19.

Meanwhile, and in the short term, existing fossil fuel stocks should be deployed and better use made of existing stocks of cleaner categories of non-renewables. But for net-zero emissions in 2050, it is vital that no new oil and gas fields and coal mines come on-stream.

On resources for energy, calls were rightly made in 2022 for taxing fossil-fuel companies both on the principle that polluters must pay and on grounds of equity. The huge financial windfall for oil and gas in 2022 resulting from high energy prices could be directed to clean energy investment.

UN Secretary General António Guterres has urged governments to levy windfall taxes on oil and gas companies and to use the proceeds to provide some protection for those who are vulnerable to climate calamities and food and energy price hikes.

The European Commission has proposed a temporary tax on the "surplus profits" on fossil fuel producers to help compensate for rising utility costs. The IMF is proposing a permanent tax on windfall profits from the extraction of fossil fuels.

Governments also need to take decisive steps to deal with the powerful fossil fuel interest groups that fight climate action and anti-pollution policies. Globally, the coal, oil and gas industries still receive various forms of subsidies from governments.

These subsidies should be going into increasing the capabilities and capacities of renewable energy firms.

A game-changer would be technological breakthroughs, such as carbon capture and green hydrogen, advancing at the level of decisiveness as vaccines were discovered to combat Covid-19. Societal and individual behaviour, and pressure for action, must change if government and private sector climate interventions are to be sustained.

COP27 in Sharm El-Sheikh during November 6-18 will need to confront the energy-climate conundrum. Energy security, especially for the vulnerable segments of the population, must be a top priority, as Singapore recognises with its carbon tax increases.

And all the more reason that commitments need to be sought, on the back of the promise of renewables, for a net-zero carbon agreement by 2050 across the broadest spectrum of participants as possible.

The writer, a former senior vice-president at the World Bank and director-general of the Asian Development Bank, is a visiting professor at the Lee Kuan Yew School of Public Policy at the National University of Singapore.