

at the UN Climate Action Summit on Sept.23 was followed by Donald
Trump's mocking tweet: "She seems like a very happy young girl looking forward to a bright and wonderful future." But we all know that the 16-year-old Swedish schoolgirl-activist is right. The warnings are crowding in,

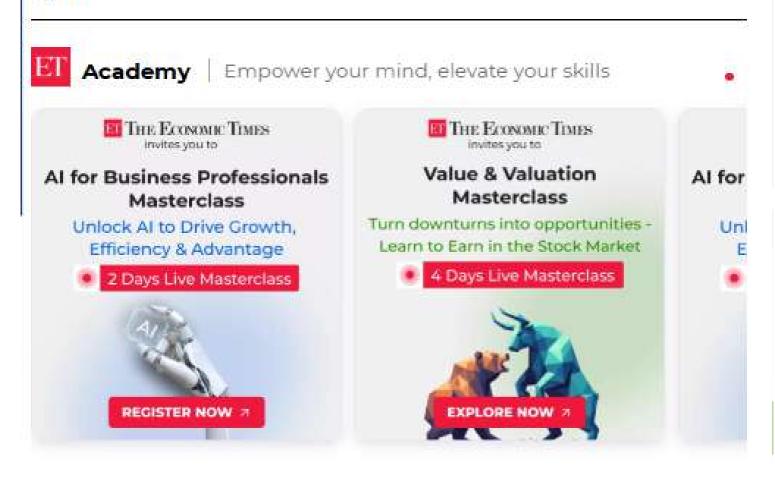
fast and ominous.

The devastation caused by the 'stationary' Hurricane Dorian in the Bahamas in early September was shocking, but so is every bit of news outside of geopolitics and terrorism. Bird censuses in different countries speak of billions fewer feathered friends. Marine life is fast depleting. Glacier melt is accelerating as the cryosphere – the frozen parts of the Earth — shrinks day by visible day, as in the latest news from Mont Blanc. On Tuesday the World Meteorological Organization said rising sea levels, ice loss and extreme weather caused 2015-2019 to be the warmest five years on record. On Wednesday the Intergovernmental Panel on Climate Change (IPCC) said warming oceans and rising sea levels as well as ice erosion affect 1.35 billion people in high altitudes and low-lying regions. Urgent action will only make the consequences of global warming more manageable, but not fend them off. "What is at stake is the health of ecosystems, wildlife, and importantly, the world we leave for our children," said Ko Barrett, vice-chair of the IPCC.

Modi told the UN climate summit that India would spend \$50 billion over the next few years on the Jal Jeevan Mission: water conservation and rainwater harvesting. He has also pledged piped water in every rural household by 2024.

Currently only 18% of rural households have water on tap. This is a cart before the horse challenge – how can you ensure universal water supply without water? India consumes more groundwater than the United States and China combined. I wrote recently about our vanishing groundwater and also the shocking evidence of the speed at which himalayanglaciers are vanishing — which will lead to flooded rivers and more landslides.

In policymaking, the longest distance is between how it is and what you want it to be. This is true of India's efforts to keep its promise to limit its contribution to global warming and trim greenhouse gas emissions by 33-35% by 2030.



In his brief climate summit speech, Modi said India's policy was need, not greed. "We believe that an ounce of action is worth more than a ton of preaching," he said, adding that India was committed to expanding its non-fossil fuel renewable energy capacity to 175 gigawatts by 2022, and beyond that to 450 GW. He did not say by when, but industry experts say it is doable by 2030, if the government attacks it on a war footing.

Take solar panels. Last year the Modi government abruptly imposed a 25% 'safeguard' duty on imports of solar panels from China and Malaysia; this is to be 'diluted' to 15% by March 2020. The duty has severely hit solar power providers. Then, the new Andhra Pradesh government headed by Y.S. Jaganmohan Reddy abruptly reneged on solar and wind contracts signed by his predecessor, asking for a halving of tariffs to Rs 2.44 per unit, making first-mover projects unviable. The AP High Court has set aside the swingeing cuts but ruled that the state regulator will have the final word. Tariff cuts should only go hand-in-hand with concessional loans for wind farms and solar parks — and the savings passed on to consumers. The trouble is, Vaibhav Chaturvedi of the Council on Energy, Environment and Water (CEEW) told me, 60% of a solar-power company's costs now go towards servicing debt.

There is much symbolism. Modi spearheaded the International Solar Alliance in 2015, and last week inaugurated the Gandhi Solar Park on the rooftop of the UN headquarters in New York. India's \$1 million gift of 193 panels, one for each UN member country will generate 50 MW of electricity.

India has promised to generate 40% of its electricity from renewable sources by 2030. Will this happen? Renewable energy capacity stood at just above 80 GW, or 7%, at the end of June. The truth is that in absolute terms our carbon emissions will not reduce because of our growing economy and population.

The government's policies are bafflingly countradictory. The day after Modi's UN speech, Coal Minister Pralhad Joshi announced that India plans to sharply increase coal production from the current 730 million tonnes to 1.15 billion tonnes by 2023. Last month the government announced it would welcome 100% foreign direct investment in coal mining. Joshi said "despite the push for renewable energy, the country will require base load capacity of coal-based generation for stability." Coal currently accounts for 75% of electricity generation. The government is opening new mines, expanding the capacity of existing mines and creating new evacuation infrastructure to ramp up domestic output, Joshi said.

Nevertheless, a <u>recent paper</u> by Chaturvedi and fellow researchers at the CEEW is cautiously optimistic. It sees solar-powered electricity generation rising rapidly over the next three decades. Non-fossil fuels could contribute 48% of electricity by 2030 and even 65% if the cost of solar and wind-based electricity generation drops sharply. It needs to rise to 98% of electricity generation by 2050 if India sticks to the target of limiting the rise of global temperatures to under 2°C.

India urgently needs a robust, non-partisan, strategic framework for climatefriendly development; the mission should be headed by a powerful figure, possibly even a deputy prime minister said Leena Srivastava, Deputy Director-General designate of science at the Austria-based International Institute for Applied Systems Analysis.

Is Modi listening?