



**April - May 2022**

## **Your bi-monthly climate connection is here!**

In the fight against climate change, entrepreneurship and innovation (known as greentech) are essential. Women are more affected by climate change than men, and yet greentech remains a male-dominated field. Investing in female entrepreneurs would generate higher returns for society as a whole, as women invest more of their income in their families compared to men. Female-founded businesses tend to employ 2.5 times more women than male-founded businesses; thus empowering female entrepreneurs would also mean that more women would access job opportunities. The best example of this is how several women, either by forming self-help groups (SHGs) or independently, have started mustard processing machines, flour mills, and other small enterprises to increase their income which they are using for a better education for their children.

In keeping with the theme of climate change, concentrations of carbon dioxide in the atmosphere in May were 50 percent higher than during the pre-industrial era, reaching levels not seen on Earth for about four million years. Scientists say the rising concentration of CO<sub>2</sub> in the Earth's atmosphere shows the need for a rapid transition from fossil fuels to renewables to avoid dangerous climate change.

This is our bi-monthly dispatch of updates and insights on renewable energy, energy transition, climate change, and the environment in general. We hope you enjoy reading it.

## Happenings from home



Coastal areas are home to species and habitats that are essential to many communities and natural ecosystems. Climate change, exacerbated by the burning of fossil fuels and emissions of heat-trapping gases into the atmosphere, is and will continue to lead to sea-level rising. This is resulting in coastal erosion thereby threatening the livelihoods of people dependent on the sea and allied businesses.

Speaking in the Lok Sabha, Minister of Science, Technology and Earth Sciences, Jitendra Singh, admitted the threat posed by climate change and also pointed out that for the period 1990 to 2018 in India, 34% of the coastline was under varying degrees of erosion, 26% is of accreting nature and the remaining 40% is in a stable state. The central government should take immediate steps to mitigate the effects of climate change on coastal areas.

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## From the corners of the country



Positive and inspiring stories like this from the Gumla district in Jharkhand give hope that with the right policies we can wean off from our dependency on fossil fuels. Gumla district is among the most backward districts in Jharkhand where 69 percent of the district's population belongs to a tribal community. Several women from these villages are using solar mini-grids to power mustard processing machines, flour mills, and other small enterprises to increase their income. This income is also helping to provide a better education for their children. In addition to providing 24X7 access to electricity, decentralised solar energy systems boost livelihood options, especially among the marginalised communities. Policies that create an ecosystem that facilitates the uptake of decentralised energy systems should be of utmost priority in India.

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## From around the world



Grids around the world rely on open cycle gas turbine technology during times when demand for electricity is at its highest. Open cycle gas turbine technologies often only run for a few hours at a time and a few times per year but are among the most polluting assets in the grid operator's toolkit for balancing energy supply with demand. While open cycle gas turbine technologies were state-of-the-art decades ago, offering the ability to start generating power within 15 minutes of starting up, lithium-ion battery energy storage can respond to grid signals in fractions of a second and can be charged with renewable energy sources like solar and wind. This move from the New York Power Authority (NYPA) to start the process of adapting sites that host fossil fuel-powered peaker plants in its service area to host battery storage will be a standard for the other countries to follow.

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## Global warnings



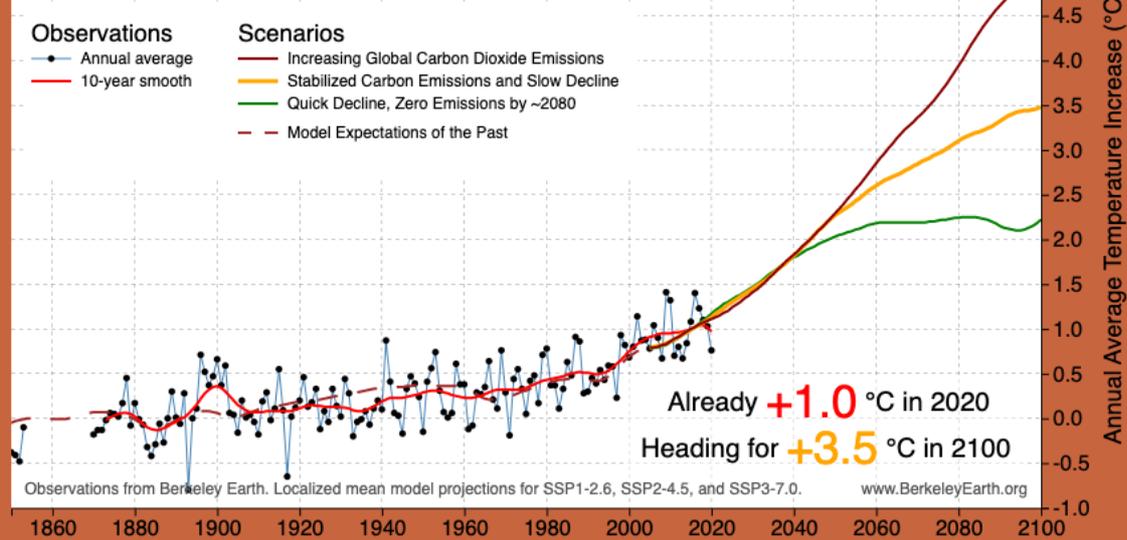
Photo: Luis Tato via Getty Images

Climate change is one of the most pervasive and threatening issues of our time, with far-reaching impacts in the twenty-first century. Climate change is expected to have unprecedented implications on where people can settle, grow food, build cities, and rely on functioning ecosystems for the services they provide. In simple words, climate change is the defining issue of our time and we are at a defining moment. Another factor that is being extensively researched these days is whether climate change will lead to conflict. Most scientists generally agree that climate change does not directly cause conflict, but that it may indirectly increase the risk of conflict by exacerbating existing social, economic and environmental factors. Do we have the ways to bring the science of food systems, agriculture and climate into security policy and peace-building efforts worldwide?

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## In a nutshell

### Warming in India



A heat wave occurs when the temperature crosses 40 degrees Celsius in the plains, 37°C in the coastal areas and 30°C in the hills. India is no stranger to extreme temperatures, but the blistering heat waves in the last few months stand out for their early-season timing, rapid onset, extent, and severity. We are observing these heatwaves when we are at 1C warming. If we continue our current emissions trajectory we are headed for around 3.5C warming by the end of the century with devastating and irreversible damages.

[Know more](#)

## Make it happen!



Photo: [www.boad.org](http://www.boad.org)

Twelve years ago, at a United Nations climate summit in Copenhagen, rich nations made a significant pledge. They promised to channel US\$100 billion a year to less wealthy nations by 2020, to help them adapt to climate change and mitigate further rises in temperature. That promise was broken. This call is to demand to establish a fund that will help frontline communities in the Global South respond to the effects of the climate emergency created due to Global North's historic and current emissions.

[Know more](#)

## Nugget



Photo: [www.carbonbrief.org](http://www.carbonbrief.org)

Do you know that coal mining emits 52.3 million tonnes of methane per year, rivalling oil (39 million tonnes) and gas (45 million tonnes), and comparable to the climate impact of the CO<sub>2</sub> emissions of all coal plants in China? And a slate of new coal mine projects currently under development could further emit 11.3 million tonnes of methane per year.

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# CAG

Citizen consumer and civic Action Group

Climate Connection is an initiative of Citizen consumer and civic Action Group (CAG) to assist and inform local communities, grassroots NGOs, environment and consumer groups, village representatives and media representatives on how to embrace renewable energy, navigate energy transition, mitigate climate change, and protect the environment they live in. We create change by developing and disseminating information resources on air pollution, climate change, environment and policies surrounding these issues.



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