We take this opportunity to wish all of you a Happy New Year! While many of us are still processing the year that was 2020, it showed us that a cleaner and more sustainable future is within our grasp. In 2021, we hope to learn from the lessons of 2020 and use them to build the future we dream of—that of a sustainable, secure, and inclusive society. CSTEP wishes you health and happiness this new year.

**Featured Story**

Extreme weather events are becoming the norm as a result of the climate crisis. In 2019, nineteen extreme weather events across the globe claimed 1,357 lives. In this month’s featured article, *State Action Plan 2.0: Time to Get Vocal for Local*, CSTEP researchers Roshna N and Dr Indu K Murthy discuss how state action plans for climate change, currently being revised, are a crucial platform to drive key levers from policy to action and why local buy-in can help find long-lasting solutions to regional climate issues.
The central government recently sanctioned subsidies for ~7,000 electric buses, hoping to provide an impetus to electric bus–based public transportation. But a limited understanding of this novel technology and the associated infrastructure is a major obstacle in achieving the government’s goals. CSTEP is building a planning tool that can expedite the deployment of electric buses in India. The tool will provide intricate details to relevant stakeholders on how best to use the technology.

—Dr Vinay S Kandagal, Research Scientist

CSTEP in the News

Our work is being covered by prominent mainstream news publications. The Hindu interviewed Dr Jai Asundi, ED, in which he spoke about the need for implementing clean air action plans to reduce air pollution.

Sreerekha Pillai, our Chief Editor, wrote in the Deccan Herald about how policy interventions have helped the state of Karnataka stand apart from the rest of the country with regards to child nutrition during the pandemic. While the rest of the country struggled to cope with forms of malnutrition such as stunting and wasting, Karnataka managed to buck the trend with good governance.

Viswanath Dibbur wrote about how the adoption of hydrogen could help India retain its edge as one of the leading steel producers in the world.

Dhruv Rajeev and Abhishek Nath wrote about why the rooftop solar segment is a boon for India’s energy transition and how greater cohesion between stakeholders can accelerate India’s transition to clean energy.

Priyavrat Bhati and Dr Pratima Singh wrote about how central funds of INR 2,200 crore to fight air pollution can be misallocated without a proper guiding framework on how to use these funds.

Solutions

The India Energy Transformation Platform identified key interventions to help achieve a renewable-energy dominant future for India. These include deploying complementary energy storage solutions, implementing sector coupling to fully take advantage of
opportunities in renewable energy, establishing standard guidelines for procurement of storage solutions, increasing investments in R&D for technologies to enable this transition, and creating an enabling ecosystem (markets) for emerging technologies such as hydrogen. Read more about IETP here.

Tipping the Scale

CSTEP researcher Poornima Kumar presented the Sustainable Alternative Future for India (SAFARI) model at the AGU Conference. The model is a decision-support system for policymakers to assess and visualise the materials and resource demand likely from meeting the Sustainable Development Goals. It acts as a test bed of policy decisions and helps balance our developmental aspirations with our climate goals.

Events

In December 2020, CSTEP conducted the second edition of our discussion series on the Role of Science & Technology in Society. The two-day event saw prominent figures working at the intersection of science, technology, and society discuss the most pertinent issues in science and applying science to solve society's challenges. The full recording of the discussions is available here: Day 1 and Day 2.

On Our Minds

Over the last year, we published four newsletters exploring studies conducted by the India Energy Transformation Platform (CSTEP is the secretariat of this platform). The platform was founded in 2019 with support from the Swiss Development Agency and Shakti Sustainable Energy Foundation, and it examines how technologies can accelerate and shape India's transition towards energy-efficient and clean energy. You may read the newsletters here:

- Technology and policy solutions for renewable energy
- Urban space cooling
- Distributed energy systems
- Decarbonising opportunities in industrial heating systems

Tickle Tales

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