

Atmanirbhar Bharat: Missing a Focus on Air Pollution and Climate Change

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ABSTRACT Will the government’s ambitious mission, ‘*Atmanirbhar Bharat* (self-reliant India)’ eventually prove to be a missed opportunity? Earmarking funds worth 10 percent of India’s GDP, the mission not only aims to respond to the devastating blow caused by the COVID-19 pandemic, but also to serve as a long-term roadmap to growth. It is largely hinged on business-as-usual practices, including providing a push to the coal sector, which may be understandable given the economic fallout of the nationwide lockdown. As a “vision” document, however, *Atmanirbhar Bharat* falls short of substantively addressing two bigger crises facing India: air pollution and climate change. This brief outlines why these two issues need to be front-and-centre of any policy, and why there needs to be a “greener” *Atmanirbhar Bharat 2.0*.

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INTRODUCTION

Amidst the surge of the COVID-19 pandemic in India, the government announced a INR 20.97 trillion¹ package to revive the economy. The 112-page, five-part “revival package” has been pitched as the Prime Minister’s vision² for a “Self-Reliant India” or “Atmanirbhar Bharat,” with the Environment Minister Prakash Javadekar calling it “historic”.³ It is therefore a matter of concern that such a landmark policy fails to address sufficiently either the environment or the risks India faces from climate change and air pollution. While the policy appears to be the popular move, it falls short of ensuring any major and rapid strides that India desperately needs.

One of the core features of the Atmanirbhar Bharat revival package is its focus on increasing the efficacy of coal use. Successive governments have made a compelling argument that India needs to rely on its abundant resources of coal to pull millions of people out of poverty. The current government ostensibly wants to make maximum coal available at the earliest.⁴ To this end, its plan for the sector has three main aspects:

1. Opening it up to the private sector;
2. Investing INR 500 billion in infrastructure; and
3. Incentivising coal gasification.

The Government of India (GoI) has pitched coal gasification as an environment-friendly move. However, the conversion of coal into synthesis gas, known as syngas or synthetic natural gas (SNG) emits substantial

amounts of carbon dioxide (CO₂), with the degree varying according to process. The capture-and-use method of coal gasification, on the other hand, has been shown to reduce greenhouse gas emissions by 45 percent,⁵ compared to the conventional process of coal gasification. So far, the method India plans to employ has not been announced.

According to a NITI Aayog report⁶ that analysed projects in Europe, given the scale of its generation and the heavy capex, it would be prudent to develop a common network for the capture and storage of CO₂. Thus, the GoI’s reasoning⁷ is that coal gasification will help meet India’s commitment to lessen its carbon footprint as well as reduce the import bill of natural gas. However, introducing coal ‘reforms’ without any substantive push for sustainable growth or reduction in emissions is a worrisome move. While the COVID-19 crisis requires urgent action, and indeed India must rely on coal for the foreseeable future, the government’s pragmatism of using the pandemic as an opportunity should extend to climate change and air pollution, which are arguably more threatening in the long run. The only nod to renewable energy in Atmanirbhar Bharat is a promise to incentivise solar photovoltaic manufacturing and advanced battery storage, which are necessary in light of the disruption in the international supply chains and have been bundled under “New Champion Sectors.” However, given the increasing likelihood that the government may miss the 2022 target of installing 175 GW of renewable energy,⁸ the pandemic should be used to give it a major push. As some argue,^{9,10} with low interest rates and

savings on cheap oil, sufficient funds can be allocated for renewables. Despite this, coal gets INR 500 billion to develop infrastructure while there is no similar move for RE.

Coal-fired electricity, like internal combustion engines, does not belong to the 21st century. The blue skies and birdsongs that have caught the imagination of many during the COVID-19 lockdown is proof of what is possible when the use of these outdated technologies is cut down. Due to the lockdown, air pollution in India is down¹¹ by 40–50 percent in major cities such as Delhi and Mumbai, and overall, global carbon emissions this year are expected to be down by eight percent.¹² Yet, before the COVID-19 pandemic, India had committed to increasing the production of coal-fired electricity. In a reply¹³ to Parliament in March 2020, the GoI had announced the ongoing construction of 114 units with a capacity of a little over 62 GW. The list shows that 10.6 GW (17 percent) of the total capacity was ordered after the Paris Agreement in December 2015, all of them either state or central government projects.

In response to a direct question in Parliament, Minister of State for Environment Babul Supriyo noted that coal-fired power is needed for the country's development and that the setting up of plants of over 100 GW capacity is unlikely to hinder the Paris Agreement goals. Now, the GoI has stated that the new, structural¹⁴ reforms in the coal sector will lead to additional coal production, lowering the imports of coal and natural gas.¹⁵ India is not alone in falling back on fossil fuel. According to the Climate Action

Tracker,¹⁶ Australia wants to expand coal mines; and China has already cleared five new coal-fired power plants, with a total capacity of around 8 GW, which is more than the total for 2019. There is a precedence of emissions decreasing during a crisis, only to rise again. After the 2008 global financial crisis, CO₂ emissions fell by 1.4 percent in 2009 but rose by over five percent the following year. In 2020, the world cannot afford this post-pandemic rise.

A series of reports by the UN's Intergovernmental Panel on Climate Change (IPCC) and others have warned of the need to keep global warming under 1.5°C, since any further increase will lead to progressively catastrophic events, such as more frequent extreme weather events and entire species getting wiped out.¹⁷ While the government claims that India's nationally determined contributions are ambitious and have been well received,¹⁸ it set its target well above the ideal 1.5°C. Despite increasing India's renewable-energy target from 175 GW to 450 GW last September,¹⁹ the country has been failing to meet these targets for the last three years.²⁰

While some measures have been taken to reduce air pollution and emissions—e.g. the introduction of the tighter fuel standards in the form of Bharat Stage 6 and the National Clean Air Programme—India is lagging in key areas. Most coal power plants have not cut emissions as per the 2015 standards and, having failed to meet earlier deadlines, are unlikely to meet the 2022 one.²¹ Thermal power plants are seen as major polluters contributing approximately 60 percent of

particulate matter pollution of all industries, in addition to other toxic emissions linked to respiratory and other illnesses. The 2015 cuts would have reduced particulate matter pollution by about 35 percent.²²

AIR POLLUTION: A BIGGER KILLER THAN COVID-19?

The Union Budget has announced an unprecedented INR 44 billion to reduce air pollution in 50 cities. The Ministry of Environment was to publish the guidelines in early April 2020;²³ however, at the time of writing this in June 2020, this had not been done. It is possible that the government is too busy dealing with the pandemic and the lockdown, but this is exactly when the ministry should be prioritising clean air. According to a 2017 study by the Indian Council of Medical Research (ICMR), one in eight deaths a day (over 3,000 deaths annually) are linked to air pollution.^{a, 24} Moreover, air pollution has been linked to an increase in the COVID-19 death rate.

A Harvard study²⁵ found that long-term exposure to air pollution affects the body's ability to deal with the infection. An increase of just one microgram per cubic meter in the lethal, microscopic pollutant matter PM 2.5 is associated with an eight-percent increase in the death rate. Europe has reported a correlation between areas with high levels of air pollution and increased COVID-19

deaths.²⁶ A similar investigation is clearly needed in India, which has 10 of the 15 most-polluted cities in the world.²⁷

POST-PANDEMIC: BACK TO BUSINESS AS USUAL?

Work did not come to a standstill at the Ministry of Environment during the COVID-19 lockdown. In early April, Union Minister Prakash Javadekar tweeted that several wildlife clearances in many states have been approved;²⁸ this drew heavy criticism from activists across the country.²⁹ Yet, little has been done to tackle pollution. Indeed, Javadekar did write to the states on the 16 May 2020,³⁰ noting that the significant fall in pollution levels must be the “benchmark” to strive for in normal times. To this end, he wrote, state authorities must ensure strict enforcement of rules governing pollution. Javadekar further listed issues such as emission levels and waste management, which require “quantum improvement.” However, the letter did not mention the Centre’s role in attaining this benchmark, beyond imparting advice on environmental awareness and the philosophy of living in harmony with nature.

With public health at risk because of air pollution in most parts of the country and pollution ‘air-shed’ spilling over multiple states, the states alone cannot be held responsible. The Centre must take charge,

a The ICMR is now spearheading the medical response to COVID-19.

whether regarding the long-overdue clean-up of coal-fired power plants, the guidelines on spending the INR 44 billion budget to cut air pollution, or installing continuous air-quality monitors. According to experts, India should have about 4,000 such monitors, and states such as Uttar Pradesh (UP) should have over 550. Currently, India has only 230 air-quality monitors, while UP has 25.³¹

The funds allocated to the Ministry of Environment is also a cause for concern. The INR 44 billion air-quality budget has been allocated to the Ministry of Housing and Urban Affairs, not the Ministry of Environment, and this sum is more than the latter's entire budget for 2020–21.³² Part of it is supposed to be upfront, while part of the disbursement is incentive-linked—full details of which are yet to be announced. Moreover, budgetary allocations for the Central Pollution Control Board and the Control of Pollution scheme remain unchanged at INR 1 billion and INR 4.6 billion for the second consecutive financial year. A Ministry of Environment official told a Parliament committee that they had requested INR 6.6 billion for the Control of Pollution scheme and that the shortfall was likely to impact their activities, especially after 20 new cities were added to the list of 102 cities on a National Clean Air Programme watchlist.

COVID-19 CRISIS: MISSED OPPORTUNITIES?

On 28 April 2020, during the Petersberg Climate Dialogue—a forum for international, informal political climate action and negotiations—the Indian representative,

Prakash Javadekar, stressed that climate technology and climate finance must be made available to the developing world.³³ It is a longstanding and well-reasoned demand, and the minister drew a parallel with the global coordination for a COVID-19 vaccine.

Indeed, the COVID-19 and climate crises are interlinked, and this must be addressed by the government. Many participants at the Petersberg dialogue discussed a 'green' recovery, which would result in a resilient economy and rapid job creation.³⁴ The pandemic and the subsequent damage to the economy are here to stay for some time. To be sure, the government's revival plan has got some parts right,³⁵ especially with regard to the immediate crisis; a long-term roadmap, however, should be rooted in a 'green' recovery for sustainable growth, instead of attempting to return to business-as-usual, which is usually a political priority.

Oxford University's Smith School of Enterprise and the Environment analysed 300 economic rescue and revival packages cleared by all G-20 nations in April, collectively worth over US\$7.3 trillion. According to this assessment, over 90 percent of the policies are aimed at maintaining the status quo, with only four percent being green.³⁶ According to Sugandha Srivastava, an environmental economist who participated in the study's global survey of fiscal recovery policies, the INR 500 billion currently earmarked for the coal sector would be better directed towards renewable energy. "Unlike coal, which has been experiencing a sustained decline

in jobs due to mechanisation, renewable energy tends to be more labour-intensive and can create new jobs.”

In a report published soon after many countries started to impose lockdowns, McKinsey found that climate action could create jobs and increase economic resiliency.³⁷ Therefore, countries should focus their recovery plans on this. To contain global warming at the recommended 1.5°C, global GHG emissions must be reduced by 7.6 percent every year from 2020 to 2030.

The Atmanirbhar Bharat plan could have included details on how to address the problem of extremely hazardous air pollution from farm fires, creating opportunities for farmers to get rid of the crop stubble without burning them. Some have advocated the use of rice husk in the gasification process.³⁸ If INR 5 billion from the INR 20,970.53 billion package could be allocated for beekeeping, it could have addressed the issue of stubble burning with a similar granular focus.

Is India’s stimulus and reforms package also a missed opportunity for mainstreaming carbon pricing? As an economic tool to mitigate emissions, it gets polluters to pay for their carbon emissions and opens up trade opportunities.³⁹ Surat began a particulate matter emissions trading system; EPIC India estimated that this would cut emissions by 29 percent and increase profit margins for businesses in the area.⁴⁰ Further, a policy touted to be a visionary move should have considered mandating the mainstreaming of the conversation on ESG (environmental,

social, governance) disclosures. The US’ Securities and Exchange Commission has been cautioned by its investor advisory committee that if this is not made mandatory, the US could lose out on capital to businesses in countries where ESG standards have been introduced.⁴¹ India’s fossil fuel giants NTPC and ONGC have signed an MoU⁴² to set up a renewable-energy business, wherein they will make their plants ESG-compliant.

To work towards sustainable growth, it would be useful to introduce and incentivise circular economies in small municipalities, e.g. Rajkot or Satna, under India’s Smart Cities programme.⁴³ The concept is to avoid waste (e.g. use-and-throw clothes and electronics) by prolonging the lifecycle of products and producing the same amount but with less raw materials. Amsterdam has adopted this from 2020, with the goal of halving the use of primary raw materials by 2030.⁴⁴ It is rediscovering the value of second-hand stores and a series of ‘R’s—reuse, repair, recycle, repurpose, refurbish. According to city planners, even though some jobs will disappear, there will be a net increase in new opportunities.

COVID-19: NATURE’S WARNING SHOT?


While announcing the “reforms” in the coal sector, Finance Minister Nirmala Sitaraman acknowledged that coal is not quite environment-friendly but said that the gasification of coal would help honour India’s environmental commitments. Many in the government are aware of the environment risks India faces. In 2019 alone, eight cyclonic storms formed over the Indian seas against

the usual of five and five in the Arabian Sea against a normal of one; this set a 117-year-old record. Moreover, last year's monsoon was recorded to be the warmest since 1901, a +0.58°C anomaly. The India Meteorological Department⁴⁵ notes that there have been increased "high-impact" weather events, such as extremely heavy rainfall, floods and heatwaves. Bihar lost the most lives, at approximately 650. The Parliamentary Committee on the Environment has called the changing rainfall patterns in the country "alarming." Officials told the panel that the number of dry days during the southwest monsoon is "significantly increasing," and it is not raining enough to recharge groundwater in Delhi, UP, Bihar, West Bengal and in the peninsula. The states of UP, Bihar and West Bengal have also shown a decreasing trend in monsoon rainfall.

Minister of States for Finance Anurag Thakur announced on the last day of the five-day presentation of the stimulus that 2020 will be seen as a year of reforms in

India.⁴⁶ Addressing the humanitarian crisis sparked by the lockdown as well as the finance, power, agriculture sectors, Thakur stated that the biggest reform would be to change India's growth path.

The Atmanirbhar Bharat programme has been billed as a game changer⁴⁷ in terms of historic and structural reforms. Yet, there is barely any emphasis on climate change and air pollution. Scientists have long been studying the link between climate change and new viruses and pathogens infecting humans. In May 2018, one such study⁴⁸ showed how the Nipah virus jumped from bats to humans when their natural habitat was destroyed: they took to licking the sap of a fruit, which was later consumed by humans.

The COVID-19 outbreak has become a primary concern across the world, making it difficult for some governments to see beyond it. However, such a myopic vision can prove to be disastrous in the long run. 

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