# BALANCING INDIA'S ENERGY SECURITY AND CLIMATE CHANGE CONCERNS

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## INTRODUCTION

The recent Conference of Parties to the United Nations Framework Convention on Climate Change (COP27) was a reckoner to increasing impacts of climate change and significantly low progress on measures for the reduction of carbon emissions. Highlighting the urgency of the situation, UN Secretary-General Antonio Guterres emphasised the world was "on a highway to climate hell with our foot on the accelerator."<sup>1</sup> There is a continuing conflict between developing and developed countries on the standardisation of goals to mitigate climate change and the developmental needs of sovereign states. There is a looming climate change crisis accentuated by increasing emissions of GHGs by industrialised nations with China and India centred at the heart of the global climate debate. The international environmental law principle of "common but differential responsibility" (CBDR)

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1. Fiona Harvey and Damian Carrington, "World is on 'Highway to Climate Hell', UN Chief Warns at COP27 Summit", *The Guardian*, November 7, 2022, at https://www.theguardian.com/environment/2022/nov/07/cop27-climate-summit-un-secretary-general-antonio-guterres. Accessed on December 12, 2022.

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has evolved on the cornerstone of "equity", and it has gained rightful recognition and appreciation in the past decade for creating a level playing field for all countries.

This paper is an attempt to understand the role of the principle of CBDR in assisting developing countries like India to fulfil their climate change goals without compromising on achieving the energy security targets. The paper is divided into four parts: first, the current climate change scenario; second, India's energy security landscape; third, it lays down the historical background and definition of the principle of CBDR; and fourth, an analysis of India's application of CBDR for promoting its energy security goals.

# THE CURRENT GLOBAL CLIMATE CHANGE SCENARIO

As the concentration of greenhouse gases (GHGs) is increasing in the atmosphere, proportional damage can be seen through "climatic changes, unprecedented natural calamities, irregular weather patterns, and global warming".<sup>2</sup> The international community has come together to address the problem that finds its source inside the national borders but the impact of its damage is transboundary and global. Therefore, the nature of the emerging legal and political commitments is in the realm of international law and diplomacy. The onus to implement international law and to honour an international commitment rests with a sovereign country. It can be said that the global climate change war can only be won through independent and individual contributions made by each country, while they continue to prioritise domestic energy security. The three major concerns emerging from vulnerabilities faced by a nation's energy security-first, the question of who owns the energy source that a nation is consuming for its development, that is, 'sovereignty' of energy source and its generation. Second, the 'robustness' of the energy infrastructure against external threats of global nature such

IPCC, "Climate Change 2014: Synthesis Report: Summary for Policymakers. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change", [2014] [Core Writing Team, RK Pachauri and LA Meyer (eds.)] IPCC, Geneva, Switzerland, 2014. Available at https://www. ipcc.ch/pdf/assessment-report/ar5/syr/AR5\_SYR\_FINAL\_SPM.pdf. Accessed on December 10, 2022.

as geopolitics, terrorism, war, and international markets. Lastly, the 'resilience' of the energy system to respond and recover from a disruption that may be caused by a human element or by a natural catastrophe.

The word 'sovereign' also plays a critical role to establish in a linkage between achieving climate change targets and developmental targets for each country. National sovereignty<sup>3</sup> rests on the pillars of "legal equality among states"<sup>4</sup> and the interpretation of the word "equality" is generic yet state subjective, meaning thereby, the measure of equality cannot be on the same yardstick for all nations. Historically, the economically flourishing and developed countries have had a bigger role in causing climate change due to their pace of industrialisation and consumerism. In comparison, the developing countries that have arrived late in the industrialisation race. Now, as they are industralising, the climate change sensibilities are being targeted towards them.

The baton is in the hands of the international institutions to augment the issue of global energy transition through the UN Conference of Parties (COP), but the recent COP27 is being considered as a disappointing discourse to achieve the global climate change goals; furthermore, it is described as a "collective failure"<sup>5</sup> and "little more than a circus."<sup>6</sup> India proposed at the conference to phase down all fossil fuels, but it failed to make it to the final text. The challenge lies in the alignment of the energy security of a country with the global climate change goals, in the background of geopolitical fractures and energy poverty.

<sup>3.</sup> J. Brunnée, "Climate Change, Global Environmental Justice and International Environmental Law", in Jonas Ebbesson and Phoebe Okowa (eds.), *Environmental Law and Justice in Context* (Cambridge University Press, 2009), p. 11.

<sup>4.</sup> Philippe Cullet, *Differential Treatment in International Environmental Law* (Ashgate, 2003), p. 1.

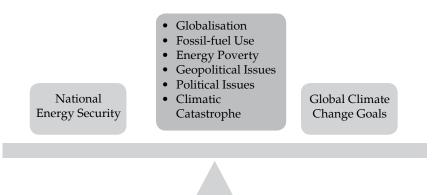
Terry Slavin, "After 'Disappointing' COP27, calls Grow for a New Approach to Fighting Climate Change", Reuters, November 28, 2022, at https://www.reuters.com/ business/sustainable-business/after-disappointing-cop27-calls-grow-new-approachfighting-climate-change-2022-11-28/. Accessed on December 19, 2022.

<sup>6.</sup> Ibid.

## INDIA'S ENERGY SECURITY LANDSCAPE

The terminology of 'energy security' cannot be looked at in isolation as an absolute concept; but it has a strong correlation with environmental, social, political, and security issues. As shown in Figure 1, the effects of climate change, the uncertain future of fossil fuels, and globalisation have added a new dimension to national energy security. This changing trend can be identified in India, through the inclusion of sustainability, energy efficiency, GHGs mitigation, and energy security in its energy policies.

Figure 1: Energy Security and Climate Change Challenges



Source: Compiled by the author from sources such as World Meteorological Organisation, at https://public.wmo.int/en; International Energy Agency, at https://www.iea.org/. Accessed on December 26, 2022.

India is a fossil fuel-dependent economy but it is now transitioning to an energy basket with a balanced mix of renewable and non-renewable energy sources. India's integrated energy policy has ambitious decarbonisation targets that focus on the use of diverse sources of energy generation, enhancing storage solutions, and modernising the transmission grid infrastructure.<sup>7</sup> India's

Rajnish Gupta, "Policy Roadmap to Realising India's Green Energy Potential", EY, August 8, 2022, at https://www.ey.com/en\_in/energy-resources/policy-roadmapto-realizing-india-s-green-energy-potential. Accessed on December 16, 2022.

current energy dependence is primarily on coal and crude oil, and multitudes of efforts are being put in place to replace these with clean energy sources. India has set a target of becoming net-zero by 2070, in addition to setting targets for 2030 that comprise the use of renewable energy to meet 50 per cent of energy requirement, reaching a nonfossil fuel capacity of 500 GW, reducing carbon emission by one billion tons and reducing carbon intensity by 45 per cent. There are several policy initiatives taken by the Government for the fulfilment of its energy requirements and commitments, like the Green Hydrogen policy, offshore wind policy, promotion of electric vehicles, and introduction of the Green Day-Ahead Market, which is a marketplace for trading renewable power on a day-ahead basis<sup>8</sup> and easing the terms for open access for procurement of green energy. Furthermore, the Government of India launched National Action Plan on Climate Change (NAPCC) on June 30, 2008 outlining eight national missions on climate change, including National Mission on Solar, Enhanced Energy Efficiency, Sustainable Habitat, Water Mission, Sustaining the Himalayan Ecosystem, Green India, Sustainable Agriculture and on Strategic Knowledge for Climate Change.

The Reserve Bank Governor, Shaktikanta Das, expressed that India is projected to be among the fastest-growing economies in the world with a likely growth rate of 7 per cent in 2022-2023 on the back of strong macro-economic fundamentals and financial sector stability.<sup>9</sup> According to the Central Electricity Authority (CEA) estimates, India would require 3.5 trillion units (TUs) of electricity by 2036-2037 to support a growth rate of 7.3 per cent, as compared to 1.37 TUs in 2021-2024.<sup>10</sup> These projections rest on the prerequisite of the availability of stable, secure, and competitively priced energy. To simultaneously meet the targets of electricity generation and decarbonisation for climate change, the Government of India has devised policy measures to fulfil its energy security requirement.

Furkan Ahmad and Mohammad Saad Alam, "Assessment of Power Exchange based Electricity Market in India", *Energy Strategy Reviews* 23 (2019): 163-77.

 <sup>&</sup>quot;India Likely to Remain Fastest Growing Major Economy: Das", *The Hindu*, November 12, 2022, at https://www.thehindu.com/business/Economy/india-likely-to-remainfastest-growing-major-economy-das/article66129407.ece. Accessed on December 16, 2022.

<sup>10.</sup> n. 8.

These measures rely on scaling the domestic capabilities in clean energy generation and storage so that the domestic energy market is least affected by the volatility in global energy prices, as seen post-Russia-Ukraine conflict. Section four of the paper further elaborates and analyses national energy security in the backdrop of Indian law, policy, and diplomacy in promoting and protecting its interests in international treaties and agreements.

## COMMON BUT DIFFERENTIAL RESPONSIBILITY

In order to balance the responsibilities of developing and developed countries towards climate change mitigation the concept of CBDR has evolved. To establish a nexus between energy security and CBDR, it is critical to first recognise CBDR and later justify the use of CBDR in climate change debates. The CBDR is enshrined in Earth Summit 1992, held in Rio de Janeiro, Brazil; it is a principle within the United Nations Framework Convention on Climate Change (UNFCCC), it acknowledges different capabilities and differing responsibilities of individual countries in addressing climate change as per their national priority. This principle has evolved from the ideals of the "common heritage of mankind", which recognises historical differences in the contributions of developed and developing states to global environmental problems and differences in their respective economic and technical capability to address the same.

The principle of CBDR signifies the common responsibility of all nations to mitigate climate change since the effects are global, yet it is a different consideration for each country due to their historical differences, current economic disparities, and future vulnerabilities.<sup>11</sup> The CBDR accounts for the economic inequality in treaty obligations for all nations, as an extension of 'climate justice', often defined as assured representation, inclusion, and protection of the rights of those most vulnerable to the effects of climate change.<sup>12</sup> The principle

<sup>11.</sup> Jutta Brunnée, "The Stockholm Declaration and the Structure and Processes of International Environmental Law", in Aldo Chircop and Ted McDorman (eds.), *The Future of Ocean Regime Building: Essays in Tribute to Douglas M. Johnston* (Kluwer Law, 2009), p. 7. Brunnée writes that it is the concept of sustainable development that factors in future needs for developing countries, while CBDR is more focused on past activities to determine current responsibilities.

<sup>12.</sup> Alice Venn, "Social Justice and Climate Change", in *Managing global warming* (Academic Press, 2019), pp. 711-28.

of CBDR rests on the premise that climate change is a universal phenomenon and all countries have a responsibility to address it through their individual capabilities while distinguishing and acknowledging their own limitations. The concept of CBDR is not defined in any piece of legislation but it is manifested in Multilateral Environmental Agreements (MEAs), which can also be referred to as treaties, constituting the primary source of international law.<sup>13</sup> The problems arising from climate change are often referred to as the "tragedy of the commons" since the atmosphere is a common but limited resource for all countries, they all benefit from its usage, and at the same time the usage generates a communal loss.<sup>14</sup>

#### Historical Evolution of the Principle CBDR

A brief history of the evolution of the principle of CBDR as outlined in Figure 2 will put in context the need to recognise this principle in international discussions on sustainable development and climate change and its instrumentality in India's international climate change negotiations.

The Brundtland Commission is known to have a linkage with the principle of CBDR, as the report addresses the concern that "economic growth needs to be confined within the limits of our environmental resources while also reducing the growing global poverty."<sup>15</sup> The New International Economic Order (NIEO) started as a movement that emerged parallel to the global environmental negotiations,<sup>16</sup> which had an evolving and strong voice of the developing countries that were previously sidelined. The formal expression of the intention

<sup>13.</sup> Statute of the International Court of Justice (adopted June 26, 1945, entered into force on October 24, 1945), 59 Stat. 1031 (ICJ Statute), article 38.1(a); Vienna Convention on the Law of Treaties (adopted May 23, 1969), 1155 UNTS 331, article 2.1(a).

<sup>14.</sup> The term is attributed to Garrett Hardin, from an article in *Science Magazine*, December 13, 1968, in which he describes the problem of overpopulation as a "Tragedy of the Commons" that will never be solved without regulation. The term has since been adopted by many scholars within environmental law as well as economics.

<sup>15.</sup> World Commission on Environment and Development, Our Common Future (Oxford University Press, 1987). In Preamble, para 3. The report defines sustainable development as "Development Which Meets the Needs of Current Generations Without Compromising the Ability of Future Generations to Meet their Own Needs".

<sup>16.</sup> United Nations Framework Convention on Climate Change (adopted May 9, 1992, entered into force March 21, 1994), 1771 UNTS 107 (UNFCCC) article 4.8(a)-(b).

Conventions Historic Development	
Brundtland Commission 1987	<ul> <li>Historic Development</li> <li>1987 World Commission on Environment and Development</li> <li>First reported the concept of Sustainable Development</li> </ul>
NIEO (1960-70)	<ul> <li>Wealth sharing by developed countries</li> <li>Transfer of technology and resources</li> <li>Decision-making procedures in favour of developing countries</li> </ul>
Stockholm Declaration 1972	<ul> <li>Formal expression of the intention behind CBDR - Non-binding</li> <li>For developing countries-Inclusion of the development potential and need for technical, financial assistance by developing countries</li> <li>Recognition of unwarranted social costs of implementing environmental standards</li> </ul>
Noordwijk Declaration 1989	<ul> <li>Ministerial Conference on Atmospheric Pollution and Climate</li> <li>Responsibility of the industrialised nations to take a lead on initiatives to mitigate climate change and provide financial assistance</li> <li>Transfer of technology from the developed countries to the developing countries.</li> </ul>
Kyoto Protocol 1997	<ul> <li>Codification of CBDR</li> <li>Classification into Annex I and non-Annex I, refereeing to developed countries and developing countries</li> </ul>
Paris Agreement 2015	<ul> <li>Introduced bounded self-differentiation of countries responsibilities through their national climate action plans</li> <li>Gives solidarity to national sovereignty</li> </ul>

# Figure 2: Historical Evolution of the Principle Common But Differential Responsibility

Source: Compiled by the Author from multiple agreements on UNFCC website, at https://unfccc.int/process-and-meetings/the-paris-agreement/the-parisagreement#:~:text=The%20Paris%20Agreement%20is%20a,compared%20to%20 pre%2Dindustrial%20levels. Accessed on December 27, 2022. behind CBDR was laid down in the Stockholm Declaration in 1972<sup>17</sup> for the inclusion of the development potential of the developing countries during the formulation of new laws and policies for the environment. Building on the confidence instated by the Stockholm Declaration, in 1989 the Noordwijk Declaration took the baton forward, emphasising on the responsibility of the industrialised nations. The codification of CBDR took place in 1997 with the Kyoto Protocol; the convention assigns a greater mitigating role to developed countries than the developing countries. In 2015, the Paris Agreement introduced bounded self-differentiation of countries' responsibilities through their national climate action plans, gives solidarity to national sovereignty while implying an obligation on the states to accept international commitments. As the effects of climate change are ever-changing, so is the country's ability to evolve with the changing requirements of carbon emission reduction and other measures to mitigate the effects of climate change.

#### **CBDR** and Climate Change

The impact of climate change is multidimensional and it is seen to affect developing and developed countries without prejudice, but the mitigation of the damage caused by events triggered by climate change differs drastically between the two. The impact of economic prowess, technological know-how, reliable healthcare, and robust infrastructure stands to benefit developed countries in times of climatic peril. The loss and damage caused by the impacts of climate change are not easily adaptable by developing countries and this often pushes their economic growth backward by decades. Under such circumstances, the debate of "reparation of damage" to the developing countries by the developed world through a financial measure for the losses incurred due to the damage caused by climate change calamities has gained significance. It is for the first time that this issue was formally recognised and introduced at COP27 agenda. The poorer countries accentuated a creation of a multilateral funding mechanism by the end of COP27, whereas the developed countries pushed the final decision to 2024 along with designing an insurance

<sup>17. 1972</sup> UN Conference on the Human Environment, Stockholm and its result was the Stockholm Declaration.

instrument to cover it. A relevant example in recent times is that of the Pakistan floods, the magnitude of damage is hard to ignore and it has pushed countries like China, Saudi Arabia, Qatar, Turkey, and Malaysia to contribute towards the rebuilding and restoration of the climate change-triggered damages. The European Union (EU), New Zealand, and Canada have pledged 340 million euros for loss and damages.

Concluding this section, it stands justified that CBDR is emerging as a popular choice amongst developing countries. The concept of 'differential treatment' and 'differential responsibility' is well recognised in international law for many decades.<sup>18</sup> The CBDR application is seen in the law of the sea, ozone layer regime<sup>19</sup> and predominantly sustainable development. Some India-specific examples are in the next section.

# INDIA'S APPLICATION OF CBDR FOR PROMOTING ITS ENERGY SECURITY GOALS

India is geographically poised to be extremely vulnerable to climate change for several reasons. Firstly, the majority of the Indian population is dependent on rain-fed agriculture. Secondly, India has a 7,500 km coastline inhabiting 175 million people facing a high risk of sea-level rise and extreme weather events.<sup>20</sup> Thirdly, global warming is accelerating the melting of glaciers in India and its neighbours, Nepal and Bhutan, which are contributing to India's water supply; this is also threatening the low-lying communities at the base of the Himalayas.<sup>21</sup> With the increasing population, mounting climate

<sup>18.</sup> Christopher D. Stone, "Common but Differentiated Responsibilities in International Law" [2004] 98(2), *American Journal of International Law*, pp. 276-301. 'Differential Treatment' is found as far back as in the Versailles Peace Treaty (adopted June 28, 1919, entered into force January 10, 1920), 13 AJIL Supp. 151 (Treaty of Versailles), where the labour movement recognised the need for demands based on different premises of the parties.

<sup>19.</sup> Regulatory instruments that mention CBDR in these areas are the United Nations Convention on the Law of the Sea (adopted December 10, 1982, entered into force November 16, 1994), 1833 UNTS 3 (UNCLOS) and the Montreal Protocol on Substances that Deplete the Ozone Layer (adopted September 16, entered into force January 1, 1989) 1522 UNTS 3 (Montreal Protocol).

<sup>20.</sup> GoI, India's INDC, pp. 20, 23.

<sup>21.</sup> Samjwal Ratna Bajracharya, Pradeep Kumar Mool, and Basanta Raj Shrestha, "Impact of Climate Change on Himalayan Glaciers and Glacial Lakes: Case Studies on GLOF

vulnerability, and augmenting energy insecurity, it becomes critical for India to assess its climate and energy policy and re-evaluate the Intended Nationally Determined Contribution (INDC) on carbon emission reduction without jeopardising its economic development. India is confronted with the dilemma of committing to a low-carbon economy and simultaneously developing a robust energy sector to provide energy access to all its citizens.

The national laws are a reflection of India's international commitment towards climate change while protecting its energy and developmental interests and goals. India is a developing and industrialising economy but the numbers reflect that despite the high GHG emissions, India has contributed less than 3 per cent of cumulative GHG emissions, while having 17 per cent of the world's total population.<sup>22</sup> Whereas, the developed countries bear the responsibility of being the historical polluters that resulted in global warming. The reality that in India millions are without access to electricity cannot be ignored while evaluating India's development and energy security projections. Therefore, dependence on coal has been a compulsion for India to meet its rising energy demands.<sup>23</sup>

#### Indian Law and Policy Framework for Climate Change Mitigation

The Indian law and policy framework on the environment and climate change reiterate the centrality of sustainable development while promoting economic development as a policy goal. The energy security goal has taken precedence in India's international negotiations and national law and policymaking under the umbrella of CBDR, and a broad sense of this response can be inferred through

and Associated Hazards in Nepal and Bhutan", International Centre for Integrated Mountain Development (ICIMOD), 2007, at http://lib.riskreductionafrica.org/ bitstream/handle/123456789/295/impact%20of%20climate%20change%20on%20 himalayan%20glaciers%20and%20glacial%20lakes.pdf?sequence=1. Accessed on December 12, 2022.

 <sup>&</sup>quot;India Offers Generous Commitment for Climate Change", Business Today, October 26, 2015, at https://www.businesstoday.in/latest/economy-politics/story/ india-offered-generous-commitments-to-combat-climate-change-says-arvindpanagariya-56760-2015-10-26. Accessed on December 13, 2022.

Brian Palmer, "As India Goes, So Goes Civilization," On Earth, January 22, 2016, at http://www.onearth.org/earthwire/india-climate-changerenewable-energy; https://www.brookings.edu/wp-content/uploads/2016/07/india\_energy\_climate\_ policy\_ebinger.pdf. Accessed on December 20, 2022.

the reading of the Constitution of India, National Environment Policy 2006, the National Action Plan on Climate change (NAPCC) 2007, and India's INDC.

The National Environmental Policy of 2006 promotes sustainable development along with ecological constraints and the imperatives of social justice.<sup>24</sup> The NAPCC is promoted through eight National Missions and it emphasises sustainable development as a primary goal while simultaneously addressing climate change and pursuing economic growth. Under India's INDC, all the states have inaugurated the State Action Plans on Climate Change to ensure that the issues on climate change are integrated into the planning process. Additionally, the policies formulated under INDC are supplemented by legislations and guidelines such as the Energy Conservation Act, the National Policy for Farmers, the National Electricity Policy, and the Integrated Energy Policy 2006.<sup>25</sup>

India has consistently maintained an irrefutable and nonnegotiable global stance on its development goals, including providing energy access and gainful employment opportunities for all Indian citizens in any global agreement on climate change. The key examples could be seen in the policy initiatives like 24×7 Power for all and the Make in India campaign that aims to accelerate industrialisation while generating high-paying jobs.<sup>26</sup> Energy generation, efficiency, and conservation are critical to achieving energy security. India has put forth the largest energy generation expansion plan in the world, whereby the share of renewable capacity will be raised to 300 GW capacity, which is a six-fold

<sup>24.</sup> Ministry of Environment and Forests, National Environment Policy 2006, Government of India, May 18, 2006, at http://www.moef.gov.in/sites/default/files/introduction-nep2006e.pdf. Accessed on December 20, 2022.

<sup>25.</sup> Energy Conservation Act of 2001, 60 Gazette of India 52 (2001); Government of India, Department of Agriculture and Cooperation, National Policy for Farmers, 2007, New Delhi; Government of India, Ministry of Power, National Electricity Policy, Pub. No. 23/40/2004- R&R (Vol. II); Government of India, Planning Commission, "Integrated Energy Policy: Report of the Expert Committee", 2006, New Delhi.

<sup>26.</sup> Ministry of Power, "24×7 Electricity Supply", Press Information Bureau, Government of India, August 4, 2014, at http://pib.nic.in/newsite/mbErel.aspx?relid=107956. Accessed on December 20, 2022; Ministry of Commerce & Industry, "Prime Minister to Launch 'Make in India' Initiative", Press Information Bureau, Government of India, September 24, 2014, at http://pib.nic.in/newsite/PrintRelease.aspx?relid=109953. Accessed on December 15, 2022.

increase on the current level by 2029-2030.<sup>27</sup> Government of India has taken corrective measures to enhance energy efficiency through several policy initiatives like the National Mission for Enhanced Energy Efficiency that creates a favourable regulatory and policy environment resulting in energy savings. Another such policy measure is Perform, Achieve and Trade<sup>28</sup> designed to create a market-based energy efficiency trading mechanism, that targets industries like aluminium, railways, thermal power plants, cement, etc.,<sup>29</sup> which comprises more than half of the total energy consumption in the country.<sup>30</sup> The Zero Defect Zero Initiative is also a part of Make in India campaign that focuses on the Micro, Small and Medium Enterprises to manufacture goods in the country with zero defects in the product and zero effect on the environment, it is a programme designed for enhancing energy efficiency while reducing pollution and improving waste management.<sup>31</sup>

### India's Change of Approach

In 2015, India's PM Narendra Modi declared at the 21st session of the Conference of Parties (COP21) to the United Framework Convention on Climate Change (UNFCCC) that India would not be able to achieve its Intended Nationally Determined Contribution (INDC) without financial assistance. To this effect, PM Modi also stated, "Climate change is a major global challenge. But it is not of our making. It is the result of global warming that came from prosperity

 <sup>&</sup>quot;Dramatic Solar Capacity Rise Across Asia; India's Sprint Towards 2030 Goal", Saur News Bureau, September 7, 2022, at https://www.saurenergy.com/solar-energynews/expect-dramatic-solar-capacity-across-asia-indias-sprint-towards-2030-goal. Accessed on December 20, 2022.

Bureau of Energy Efficiency, "PAT", Government of India, Ministry of Power, April 8, 2016, at https://beeindia.gov.in/content/pat-3. Accessed on December 18, 2022.

 <sup>&</sup>quot;Climate Change Mitigation in Developing Countries: Brazil, China, India, Mexico, South Africa, and Turkey", Center for Climate and Energy Solutions, October 2002, p. 2, at https://www.c2es.org/document/climate-change-mitigation-in-developingcountries-brazil-china-india-mexico-south-africa-and-turkey/. Accessed on December 18, 2022.

International Energy Agency (IEA), "India Energy Outlook 2021", IEA, Paris, p. 72, at https://www.iea.org/reports/india-energy-outlook-2021. Accessed on December 15, 2022.

 <sup>&</sup>quot;Brief History—About ZED—Zero Defect, Zero Effect", MSME, at https://zed.msme. gov.in/brief-history. Accessed on December 18, 2022.

and progress of an industrial age powered by fossil fuel."<sup>32</sup> India's reliance and dependence on coal are often criticised by the West, whereas India has maintained a steadfast stand since 2015 that India will build renewable "in addition" and not "instead" of fossil fuels, while maintaining an ambitious target of constructing 500 gigawatts (GW) of renewable capacity by 2030.<sup>33</sup> India's motivation behind having multiple sources of energy in its energy basket is also its security concerns of a large-scale energy trade with its neighbours for electricity and natural gas.

India took an undeterred stance at COP27 in Sharm el-Sheikh, where the Indian environment minister, Bhupendra Yadav, said while releasing India's long-term low-emission development strategy to the UN climate body: "We cannot have a situation where the energy security of developing countries is ignored in the name of urgent mitigation, while developed nations put their energy security above their duty to increase their ambition to mitigation through practical action."<sup>34</sup>

Minister Yadav recognised and acknowledged the principle of CBDR and equity as essential for making a "livable" world and he also said, "In setting our targets for 2030, and our enhanced ambition in mitigation, we cannot forget that achieving the Sustainable Development Goals (SDGs), whose target date is also 2030, is the overriding priority for developing countries. Ending hunger and malnutrition and ensuring food security globally must be an essential part of our perspective on climate action. Mitigation alone, one SDG among all others, cannot be singled out for consideration."<sup>35</sup>

To conclude, India's geopolitical identity has evolved from being a leader of the non-aligned movement, representative of the

33. n. 13.

<sup>32.</sup> Chetan Chauhan, "Climate Change not of India's Making, Rich Nations to Blame: Modi", *Hindustan Times*, November 30, 2015, at https://www.hindustantimes.com/ india/climate-change-not-of-india-s-making-rich-nations-to-blame-modi/storyelBz5hUGR1CFNNiczGVCWP.html. Accessed on December 18, 2022.

<sup>34.</sup> Vishwa Mohan, "Energy Security of Developing Countries can't be Ignored: India Sets Tone for Negotiations", *Times of India*, November 15, 2022, at https://timesofindia. indiatimes.com/india/energy-security-of-developing-countries-cant-be-ignoredindia-sets-tone-for-negotiations/articleshow/95518481.cms. Accessed on December 15, 2022.

<sup>35.</sup> Ibid.

developing nations—to now, as a member of G-20, leading the world's industrialised and emerging economies. Energy geopolitics has made a shift in the last few decades from being purely state-centric to now an international, intergovernmental, and multilateral affair due to interdependence for energy sources, technology, and know-how. Whereas this is not the most ideal situation for any country since "the geopolitical energy policy must be independent of energy policy for each nation".<sup>36</sup> It remains critical to balance India's energy security while managing climate actions that need to follow the fundamental and agreed principles of international environmental law; the most relevant in India's context is CBDR. This forms a pathway for the country to strive towards affordable and sustainable energy for all its citizens while striving to achieve net-zero emissions by 2070, as indicated by the Prime Minister at the COP26 in Glasgow.

<sup>36.</sup> IRENA and UN DESA, "A New World: The Geopolitics of the Energy Transformation", IRENA, 2019, at https://www.irena.org/-/media/files/irena/agency/publication/ 2019/jan/global\_commission\_geopolitics\_new\_world\_2019.pdf. Accessed on December 15, 2022.

<sup>61</sup> Defence and Diplomacy Journal Vol. 12 No. 2 2023 (January-March)