By Patrick Suckling June 2021

CATALYZING INDIA'S CLIMATE AMBITION

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INTRODUCTION

China's recent commitment to reach carbon neutrality before 2060 means that for the first time ever, India is on track to shortly become the world's largest emitter. At a time that demands urgent action if we are to stay within the goals of the Paris Agreement, this brings into contrast India's traditionally bifurcated approach that it has used to guard against taking greater action in light of the responsibility of the developed world to lead the way.

Nevertheless, in recent decades, a political appetite for climate action has been growing in India, including reinforcing its global leadership credentials at the behest of Prime Minister Narendra Modi. Climaterelated disasters have also driven public support for more constructive engagement by Delhi. However, this appetite does not yet match growing international expectations for Indian action, as momentum for global climate action and ambition accelerates rapidly around the world in the lead-up to the COP26 Climate Conference in Glasgow in November 2021. The election of U.S. President Ioe Biden and recent commitments to net zero by other Asian economies such as Japan and Korea underscore the weight of growing expectations on India.

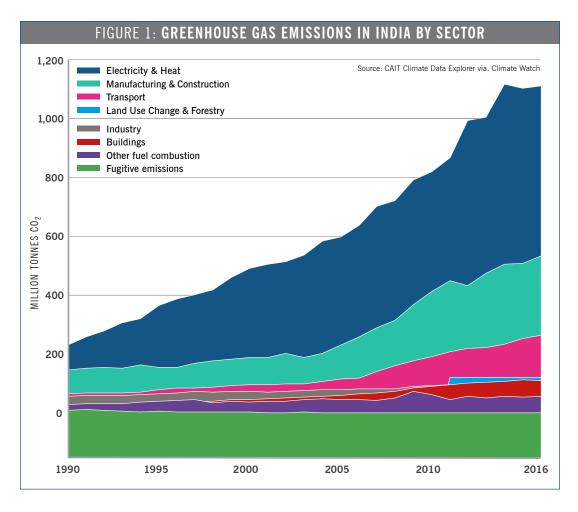
Hollow calls for greater ambition from India are likely to simply fall on deaf ears.

Instead, a sophisticated and holistic strategy to catalyze climate ambition from India is needed if the world is to succeed and help the country navigate a new low-carbon development model. India's recent establishment of an Apex Committee on the Implementation of the Paris Agreement and its commitment to produce a long-term strategy to reduce emissions provide two particular openings for this even if signals elsewhere are mooted, including the impact of India's economic response to COVID-19, particularly under the current circumstances. And at a geopolitical level, India's relations with the United States and China can help reinforce the need for action, and so too can India's shifting relations with the G77 group of developing nations.

This strategy must involve a mix of both greater political and policy engagement and deeper technical and financial support to help accelerate action—including through helping unlock greater private finance domestically, including from among the growing Indian business community that has committed to net zero. The recently announced U.S.-India Climate and Clean Energy Agenda 2030 Partnership is an excellent first step in this regard. This paper sets out how the wider international community should sensitively, constructively, and intelligently now work with India to catalyze greater climate ambition in the lead-up to COP26 and beyond.

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INDIA IS CRITICAL TO ACHIEVING THE PARIS AGREEMENT GOALS

India is among the handful of countries that will have a major bearing on whether the world successfully addresses the challenges of climate change. It is the third-largest annual emitter of emissions after China and the United States, at 14, 6.6, and 3.7 billion tonnes, respectively. India's emissions are also growing faster than those of any other major energy-consuming nation.¹

India's recent economic slowdown, compounded by COVID-19, saw a 10 percent drop in growth in 2020; even so, India is already the third-largest economy measured by purchasing power parity. It will be the same measured by market exchange rates

around the mid-2030s. By 2035, India will overtake China as the world's most populous country.²

The investments India makes in coming decades to fuel its economic growth and meet the aspirations of more than 1.4 billion people will determine the pace and extent of decarbonization across the economy, about which there is significant uncertainty.

India's energy sector, accounting for around 70 percent of India's emissions, is at the forefront of this uncertainty. Energy demand is projected to double by 2040, and electricity demand potentially triple.³ While renewable energy will be an increasing part of the mix, a significant propor-

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A central focus for the next decade, and beyond, therefore must be how the international community works with India to ensure the best prospects of emissions mitigation in support of the Paris Agreement goals.

tion of this expansion will be coal-fired power—set to increase from 200 gigawatts (GW) to 300 in the next decade. Should all this investment proceed, coal mining is also set to jump—from 700 million tonnes per year to a projected 1 billion tonnes by 2023–24.⁴

Other sectors of the economy are also challenged, notably transport and hard-to-abate industries like steel, cement, and chemicals; India's agriculture sector; and the built environment—where more than 800 million of India's population are projected to be living by 2040.

In this context, in all scenarios combining India's projected GDP growth and extant climate policies, its emissions growth looks set to double by 2030, or as Nicholas Stern has put it, "keeping the rise in emissions to just a doubling by 2030 would be truly remarkable." ⁵

A central focus for the next decade, and beyond, therefore must be how the international community works with India to ensure the best prospects of emissions mitigation in support of the Paris Agreement goals.

TRADITIONALLY, CLIMATE COOPERATION WITH INDIA HAS BEEN A CHALLENGE...

Historically, it has been challenging to work with India on climate change. In the early decades of climate action and throughout the Kyoto agreements, India was among the most opposed to developing country climate action and a key player in ensuring a hard-fought bifurcated international regime. Developed countries made binding emissions reduction commitments and developing countries had no legal responsibility, as enshrined in international climate architecture through the fundamental

principle of Common But Differentiated Responsibilities (CBDR), which India played a key role in advancing.

There was no domestic political imperative for India on climate action. Where considered at all, the issue was subsumed by the overriding priority of economic development—with climate action viewed as an unacceptable impost—or other environmental challenges considered more pressing, notably air and water pollution.⁷

Climate change was overwhelmingly approached through the prism of international geopolitics, in particular the north-south divide—which in India's case was reinforced through its long-held promotion of the Non-Aligned Movement (NAM) anchored in the G77 group of developing countries.⁸

Through this prism, India's focus was to resist any binding climate obligations on the basis of the historical responsibility developed countries bore for accumulated emissions, their need to bear the burden of reparation on the ground of equity—including on the basis of per capita emissions, where India's were among the lowest in the world—and India's right to development without a climate impost.

From a domestic political perspective, the litmus test for successful climate action was how successfully India defended its position, with the primary goal of holding developed countries to account rather than use of the international architecture to help address climate challenges in India. This effectively divorced it from domestic policy, reinforced by the lack of any domestic political pressure related to climate change. That translated into limited room to engage with India on practical climate action.

India is among the most vulnerable to climate change, with mounting significant impacts and risks related to sea-level rise, heat stress, drought, water stress and flooding, biodiversity, and natural disasters such as cyclones.

...BUT INDIA'S APPROACH HAS BEEN SHIFTING IN RECENT YEARS, PROVIDING SCOPE

Over the past decade or so, a distinct shift in India's positioning has occurred including under the leadership of Prime Minister Modi and as a result of his desire to see India play a greater role on the world stage.

This does not equate to India's departure from the fundamental principles of CBDR and equity reflected in the United Nations Framework Convention on Climate Change (UNFCCC) or India's insistence, along with that of all other developing countries, on the responsibility of developed countries to lead and for them to provide financial, technological, and technical support for developing country climate action. India will continue to underline its per capita emissions as remaining among the lowest, where a doubling of its emissions by 2030 would represent only half the level of China's emissions when the Paris Agreement was adopted in 2015. 10 Any attempt to engage with India that is insensitive to these core principles will flounder.

But a number of factors have come together to make India increasingly receptive to climate action and cooperation with others to that end, opening more space for international engagement with India.

Chief among these, as evident everywhere in the world, is the increasingly obvious adverse impact climate change is wreaking on India itself. India is among the most vulnerable to climate change, with mounting significant impacts and risks related to sealevel rise, heat stress, drought, water stress and flooding, biodiversity, and natural disasters such as cyclones. India experiences among the highest disaster risk levels in the world.¹¹ Christian Aid, for example,

has found that more lives were lost in India due to climate change in 2020 (more than 2,000) than in any other country. ¹² Cyclone Amphan alone displaced more than 4 million people in the country. At the same time, temperature rises on the Tibetan Plateau are causing the Himalayan glaciers to retreat and threatening the livelihoods of hundreds of thousands of farmers who depend on the Ganges, Brahmaputra, Yamuna, and other rivers.

Recognition is growing that it is in India's own national interest to address climate change. In 2020, for the first time, the government published a national assessment on climate change and its risks to India and is giving greater prominence to climate impacts in reporting under the UNFCCC.¹³ This is reflected in growing public concern, albeit from a low base, over climate change now consistently evident in polling.¹⁴ As has occurred in China over the past decade, community concern around other pressing environmental issues—notably air pollution, water stress, and waste—is sharpening focus on climate change.

Growing recognition of India's vulnerability is underlining the importance of addressing climate change for its continued economic development. More than a decade ago, India began to shift its view that climate action was at the cost of development to propounding the co-benefits of climate action and development including as a tenet of its National Action Plan on Climate Change.¹⁵ While there remains a way to go on integrating climate and development in India, the trend is accelerating as climate change is demonstrably exacerbating India's many development challenges and in some cases eroding progress made threatening up to 4.5 percent of GDP by 2030 in a recent McKinsey analysis. 16

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The shifting economics of climate technologies is also now positively playing into India's development story. This is particularly evident with renewable energy that is providing competitive solutions for India's significant energy needs. Domestic renewable energy tariffs are now two-thirds the cost of domestic coal-sourced power tariffs and tariffs in solar and wind are at record lows of around two rupees per kilowatt hour.¹⁷ Renewable energy delivered more than two-thirds of India's generating capacity additions in 2019–20, which is a remarkable turnaround from even five years ago.¹⁸

These developments are dovetailing with India's priority on energy security. There has been long-standing broad political support for India's energy security agenda in the context of domestic supply constraints, dependence on overseas markets, and associated fiscal pressures. India's oil consumption is expected to surpass that of China in the mid-2020s and import dependency is already more than 80 percent.19 Gas consumption faces a similar, although lesser, challenge. Renewable energy and other alternatives such as nuclear energy offer a partial solution producing a strengthening narrative in India that climate action and energy security are mutually reinforcing.²⁰

As the economics on climate change shifts and the energy equation strengthens, and as climate transition accelerates globally, an important influential constituency for climate action from Indian business is emerging. Leading Indian businesses are both signing up to engage in climate action and encouraging government action. More than 50 Indian companies are now setting science-based emissions reduction targets and more than 40 have committed to sourcing 100 percent renewable energy.²¹ Flagship groups like Tata, Mahindra, JSW,

and Reliance are positioning themselves to be leaders on climate transition, not just in India but globally.²² As is occurring elsewhere, this will increasingly drive progress.

Complementing these developments domestically, climate change is moving up the priority list of India's foreign policy as an aspect of its great power ambitions. India's geostrategic vision rests on it being a key pole in a multipolar world, whereby it envisages that from a position of strategic autonomy, it will be a leading player on addressing global challenges.²³ This approach is crystalized in India's arguments to be on a reformed UN Security Council.

This positioning coincides with climate change moving up the priority list of the global agenda, succinctly captured in December 2020 by the United Nation's Secretary General António Guterres emphasizing that climate action will be the barometer of global leadership.²⁴

Wanting to play in this league, witnessing shifts by fellow BRICS (Brazil, Russia, India, China, and South Africa) members—particularly China—in recent years in the face of growing concern over climate change, and reflecting its own strengthening equities on the climate agenda, India is increasingly engaged and constructive on the international climate agenda and through its bilateral relationships. This includes its modest development aid program, an indication of growing recognition of the importance of this agenda for promoting India's influence, particularly in Africa.

A factor in this is the strengthening strategic partnership between India and the United States. While this is principally founded on working more closely as balancing powers to China's rise and in reaping

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the benefits from closer engagement of two of the world's largest economies, finding areas for additional ballast is an enduring feature. India was receptive to the priority the Obama administration placed on climate action and cooperation, including as a means of advancing the primary objectives of the strategic partnership and is engaging with the Biden administration on this agenda.

THE PARIS AGREEMENT WAS A WATERSHED

With leadership from Prime Minister Modi, India's shifting approach was an important element in the achievement of the historic Paris Agreement. Modi's leadership was especially important for countering that of his more hard-line Environment Minister Prakash Javadekar; for this reason, outreach to Modi himself at the eleventh hour was particularly crucial for getting the final deal across the line. India therefore ultimately played an influential and positive role in delivering an international framework that has ended the bifurcated approach to developed and developing countries' climate contributions (although developed countries must continue to lead and provide support to developing countries) and where all countries have committed to escalating climate ambitions over time.²⁵

While there had been increasing movement and flexibility from India in the UNFCCC negotiations leading up to Paris, notably in the aftermath of the failed Copenhagen negotiations of 2009 under its forward-leaning Environment Minister Jairam Ramesh (for which he was lambasted by opposition parties),²⁶ Paris represented a decisive shift.

This included India's most ambitious climate commitments to date: a reduction

of the emissions intensity of GDP by 33 percent to 35 percent by 2030 (below 2005 levels); an increase in the share of non-fossil-based energy resources to 40 percent of installed electric power capacity by 2030; and creation of an additional, cumulative, carbon sink of 2.5–3 gigatonnes of CO₂ through forest and tree cover by 2030.²⁷

India has by and large continued in this constructive vein during the complicated, lengthy, and ongoing UNFCCC negotiations to conclude the implementing rules for the Paris Agreement.

DESPITE THE SHIFT, SIGNIFICANT CHALLENGES REMAIN

India's growing receptiveness to climate action and cooperation, its strengthening international engagement on the climate agenda, and its increasing consideration of climate change in domestic policymaking do not negate the very real and significant challenges India still faces in advancing climate action and ambition, the more so given India's stage of economic development.

Domestic political drivers for climate action and ambition remain weak notwith-standing increasing community concern, the growing intersection of climate change with development policy, and the political support for climate action in the context of India's energy security. Despite Prime Minister Modi's engagement, it is not a political issue that is given prominence by any influential political party in India.

At the previous federal elections in 2019, although climate change featured—albeit not prominently—for the first time in the manifestos of India's two major parties, the Bharatiya Janata Party (BJP) and the Indian National Congress (INC), it was a nonissue

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The politics of a dramatic shift away from coal appear prohibitive, with the government showing no indication it is willing to invest the significant political and financial capital required for transition.

throughout the elections.²⁸ Outside of elections, India's weak and ineffective opposition political parties will not be a driver for the foreseeable future, even were they to prioritize the issue.

The ruling BJP government does not therefore feel under any pressure on this front; conversely, it also means it does have the political space to act if it so wishes. Beyond remarkable progress on the renewable energy rollout, it is far from implementing an integrated and mutually reinforcing suite of policies necessary for economy-wide decarbonization.

This is most apparent in the government's contradictory emphasis on dramatically increasing thermal coal mining and the associated rollout of coal-fired power stations—coal still provides around 70 percent of the country's electricity—and aiming for 450 GW of renewable energy by 2030. In 2020, the government sought to further boost the domestic coal-mining sector with a series of commercial auctions and continued to delay the implementation of pollution regulations for coal plants.²⁹

As with so many countries, coal is the fault line running through India's climate agenda. On the one hand, the economics of renewables—coal plants in India are operating at around 50 percent capacity as less expensive renewable power is favored on the grid—points to an accelerating shift away from coal.³⁰ On the other, rapidly growing energy demand and the absence of sufficient reliable, flexible clean energy will continue to lead to increasing absolute demand for coal for decades according to present projections.³¹

That aside, the politics of a dramatic shift away from coal appear prohibitive, with

the government showing no indication it is willing to invest the significant political and financial capital required for transition. This would involve significant economic transformation for key eastern Indian states dependent on coal production, such as Odisha, Jharkhand, and Chhattisgarh.

The consequence of all this is that the government will continue to seek to bet each way, crystalized by Indian Power Minister R. K. Singh, who in 2020 both endorsed scheduled closure of 29 coal plants and acted to keep many others open.

In addition to India's still relatively weak political drive on climate transition, the complexity of its federated government—which includes 28 states and eight union territories—and its development challenges, institutional and policy weaknesses also hinder climate action. India's National Action Plan on Climate Change (2008) with its eight national missions on related action is widely dismissed as outdated and has never provided a strategic, integrated, and unifying policy framework for national action.³²

Climate responsibility at the federal level is spread across more than 14 ministries with limited central drive coordination provided by the Ministry of Environment, Forests, and Climate Change, which has nominal oversight of the agenda. At the state level, planning and initiatives are rudimentary at best, although some states are strengthening such as Gujarat, Rajasthan, and Maharashtra but were barely mentioned in India's latest reporting on climate action to the UNFCCC. Recognizing the hand brake this represents, in December 2020 the federal government established an Apex Committee for Implementation of the Paris Agreement to be led by the Ministry

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India's economic performance may become a serious drag on its climate ambition.

of Environment to oversee India's climate action.³³ However, absent significantly strengthened institutional policy and a current national strategy, the ministry is likely to struggle and has met infrequently since its establishment.

Significantly, India's economic performance may become a serious drag on its climate ambition. At times of economic contraction, economies around the world do not have a good record of investing in climate transition, defaulting to status quo stimulus investing.³⁴ India is currently in its worst contraction for decades. The economic slowdown had started well before COVID-19 struck, when persistent deferral by India of key structural reforms—land, labor markets, capital markets, and trade liberalization in particular—had become a significant headwind for economic growth.

In 2019, India's growth slowed to just over 4 percent, a halving of Prime Minister Modi's aspiration for 8 percent or more since coming to office. COVID-19 saw India's economy shrink more than 10 percent in 2020; although the International Monetary Fund (IMF) predicts a bounce back this year of 8.8 percent, that will depend on progress against COVID-19, which remains uncertain, particularly given current circumstances.³⁵

Fiscal repair is likely to constrain significant investments by the government in climate transition, and it has already shown a preference for status quo spending in its modest—only around 2.5 percent of GDP—stimulus packages. Vivid Economics Greenness Stimulus Index has ranked India as among the worst in the world for climate transition investments, although this improved throughout 2020 with announced spending on the electrification of Indian railways and

the solar economy.³⁶ It is also concerning that the government has been diluting a number of India's environmental rules and regulations, including related to environmental impact processes, as pro-business initiatives that could cut-across transition.

PROGRESS ON COMMITMENTS IS MIXED, AND INDIA NEEDS TO LIFT ON AMBITION

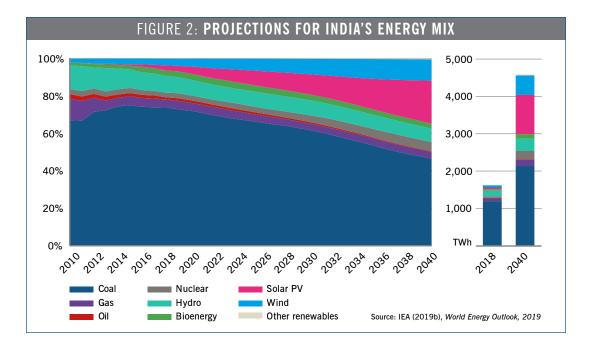
India's performance against its Paris Agreement commitments reflects both the positives and challenges outlined.

On the one hand, it is well on track to achieve its emissions intensity target, with current indications that a more than 40 percent intensity reduction will be easily achieved. India is also set to significantly exceed its target of 40 percent of nonfossil-based energy resources by 2030. International Energy Agency (IEA) projections show electricity generation from renewables increasing from 18 percent today to 45 percent by 2040. In 2018, India's investment in solar photovoltaic (PV) was greater than that in all fossil-fuel sources combined, and the pace of this investment is set to continue.

Energy intensity has also significantly declined by 27 percent over the past decade. A large part of this is attributable to improvements in energy efficiency. Large-scale public procurement of efficient products such as LED lighting and the introduction of tradeable energy efficiency certificates have led to India avoiding an additional 15 percent annual energy demand, mitigating an estimated 300 million tonnes of CO₂.³⁷

India, however, is not on track to meet its third target to create a carbon sink of 2.5–3

[Ensuring India exceeds its Paris targets] should be a major focus of international effort over this and successive years...



billion tonnes. The current afforestation rate of 35 million tonnes of CO₂ per year is not enough to meet the target, and evidence shows India going backward on this front.³⁸ A combination of capacity and policy challenges; encroachment on forests by mining, agriculture, and industry; and legal and regulatory problems mean sufficient progress is unlikely absent a major reorientation and investment.

In addition, India's current commitments are not commensurate with the degree of climate ambition increasingly characterizing international climate action. Galvanized by the Intergovernmental Panel on Climate Change's 1.5-degree report in 2018 and increasing global evidence of the threats of climate change, the global center of gravity for climate ambition is shifting to net-zero emissions by 2050 and an approximate halving of current global emissions by 2030.³⁹

In the face of a majority of countries now committing to higher ambition, India remains reluctant. Given that India is set to readily overachieve on its emissions intensity and non-fossil-based energy targets, there clearly is room for higher ambition. Prime Minister Modi has said India will exceed its Paris targets; in 2020 in a joint communiqué with French President Emmanuel Macron, he indicated some preparedness to increase India's Paris Agreement commitments, even if at the same time India has batted away suggestions that countries should be increasing the level of their ambition before the 2023 Global Stocktake under the Paris Agreement.

Ensuring that this occurs should be a major focus of international effort over this and successive years given India's importance in addressing the threat of climate change.

THE STARS ARE ALIGNING GLOBALLY FOR STRONGER INDIAN CLIMATE AMBITION...

Accelerating global momentum on climate action and ambition by governments, businesses, and communities, combined with

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This is a timely moment for the new [U.S.] administration to press for stronger Indian ambition, including through a meaningful bilateral—or broader—package of cooperation that substantively supports climate action.

India's increasing receptiveness to climate action, presents an unprecedented opportunity to encourage higher Indian ambition.

This year, in particular, presents a major moment with the most important UN Conference of the Parties (COP26) meeting since the 2015 Paris Agreement squarely focused on countries updating their climate commitments with increased ambition, and outlining longer-term plans for decarbonization (increasingly centering on net zero by 2050).

Fortuitous sequencing and chairing of other recent and upcoming meetings will reinforce momentum, notably President Biden's special climate Summit in April, the G7 in June (India is invited) chaired by the UK—with an eye on supporting a successful COP26 in Glasgow in what it wants to be a successful double act of global Britain after Brexit, and the G20 in October chaired by Italy also intent on success at COP26. India will chair the G20 in 2023, which is the year of the Global Stocktake assessing performance against the Paris Agreement goals, providing a unique scope to leverage India on maintaining and contributing to a strong climate drive.

More than 100 countries have already indicated an intention to increase their ambition at COP26 and to submit long-term strategies. 40 More than 60 percent of global GDP is now covered by countries committed to net-zero emissions reductions by 2050. 41 Traditionally, India has wanted to be in good company on the global climate agenda and is almost never prepared to be isolated. Historically, that has meant alignment with the weight of developing countries, notably the BRICS and especially China. The fact that China has already broken away from the unified

BRICS approach provides rare scope to orchestrate a developed and developing country pincer for higher Indian ambition.

This especially applies to the United States and China. India is sensitive to President Biden's significant climate ambition and commitment to strengthening global momentum on this agenda. This is a timely moment for the new administration to press for stronger Indian ambition, including through a meaningful bilateral—or broader—package of cooperation that substantively supports climate action.

China has a similar interest in pressing India. Having recently committed to net-zero emissions by 2060 or earlier and currently in the process of developing updated short-term commitments for possible announcement this year, China wants to see other key emerging markets follow suit.

Both the United States and China should explore how best to work together, and with others, on India, putting into practice President Biden's stated intent, within the framework of managed strategic competition with China, to forge constructive areas of bilateral cooperation where possible—particularly when related to global challenges. Or, alternatively, the United States should see working with India through a sophisticated strategy such as this as another important lever in their efforts to seek greater ambition from China.

Like China, the United States is currently continuing to look at ways to increase ambition this decade. Both are looking to sway each other's ambition in this process and should look to bring India into this equation as part of leveraging Indian ambition.

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The large number of countries vested in pressing India presents an unusually rich range of options for coalitions...

In keeping with U.S. and Indian strategic competition with China and the complex balancing act between engagement and hedging that characterizes both countries' relations with China, the United States also has a parallel opportunity to encourage a stronger Indian climate agenda and ambition as part of strengthening the bilateral strategic partnership.

Timing on this front is propitious in the context of China's increasingly aggressive behavior toward India in recent months, notably over Sino-Indian border skirmishes sparked by Chinese incursions. For the first time in decades, these confrontations have seen serious casualties, framing Chinese rivalry in stark terms for New Delhi and putting new impetus into strengthening India's strategic partnership with the United States and others. 42

It would be counterproductive, however, to seek to use the climate agenda overtly against China, for example, by making it an explicit part of a converging Indo-Pacific strategy by key regional players as part of balancing China. The recent Quadrilateral Security Dialogue meeting of the United States, Japan, India, and Australia balanced this well, by prioritizing climate action on the one hand but focusing especially on cooperative efforts to bolster the region's resilience rather than as an overt lever over China. The world needs to work as much with China as with India, possibly more so, to successfully address climate change. India also has a long history of working with China and other BRICS on climate change and will continue to do so. And India's cherished commitment to strategic autonomy means it will only ever go so far.

The EU and UK will reinforce pressure on India, along with other developed countries

like Canada and New Zealand, with their already announced significantly more ambitious commitments for 2030 and legislated commitment to net zero by 2050 neutralizing usual Indian arguments about not moving until developed countries pave the way. The same is true for recent announcements by Japan and South Korea committing to net zero by 2050.

Like the United States, all these countries have an interest in elevating climate change as an instrument of Indian strategic and foreign policy, including as ballast in dealing with China, providing further incentive for strengthened engagement and new patterns of cooperation.

A majority of G77 countries now actively support stronger global climate action and ambition and are pressing for a significant lift at COP26, where absent Chinese solidarity India will not find succor among the other BRICS, which in any case are under heavy pressure (Brazil has already signaled some commitment to net zero by 2060)⁴³ and are considering their options. Many of these G77 countries are African and small island developing states—such as those in the Indian and Pacific Oceans-which India has been cultivating as part of its expanding influence and whose relations will become strained if India falls short on climate ambition. In this context, India is also sensitive to Chinese leadership on climate change undercutting Indian influence, which offers a further spur.

The large number of countries vested in pressing India presents an unusually rich range of options for coalitions to that end, including within and across traditional climate negotiating blocs and extending well beyond key progressives like the well-established High Ambition Coalition,

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India is deeply wedded to the UN Framework Convention and associated mechanisms to drive the global climate agenda. Cooperating for the right compromises that can accommodate, not concede to, India's interests and priorities can be a conduit for bolder action.

the EU, the Alliance of Small Island States (AOSIS), and the Independent Alliance of Latin America and the Caribbean (AILAC) groups, including, as has not been possible before, harnessing the three key North Asian countries in China, South Korea, and Japan. Maximizing these opportunities should be a focus for the year and into the future.

...BUT POLITICAL PRESSURE MUST BE UNDERPINNED BY PRACTICAL COOPERATION FOR SUCCESS

How practically to encourage India and work with it on climate action and higher ambition will require a range of different, mutually reinforcing approaches and, like most things with India, will not be a straight line. No ready-made blueprint is available, but a number of combined elements increase prospects of success.

Building genuine, sustained, and mutually beneficial partnerships is an obvious but often underused prerequisite with India. The history of its relations with many countries since independence has been one of waxing and waning with recurrent mutual disappointment. U.S.-India relations provide a case in point over decades, although the past decade appears to be breaking this cycle with significant and purposeful efforts to entrench the strategic partnership across the economic, security, and community spectrum. This is what will be required to advance meaningful climate cooperation with India.

Intensifying high-level political engagement with India on climate change will be key. While this has always been a feature of climate diplomacy with India, unlike previous Indian leaders, Prime Minister Modi's climate interest and leadership provide valuable scope. As chief minister of

Gujarat, he was the first in India to establish a climate change agency and as prime minister has articulated the importance of India addressing climate change in a way his predecessors never did. This includes his pressing his sometimes truculent bureaucracy to be more engaged and constructive on the global climate agenda.

He has been the driving force in the dramatic increase in India's ambition on the rollout of renewable energy, from a commitment of 175 GW by 2022 to 450 GW by 2030. He has also been instrumental in two flagship Indian climate initiatives: the International Solar Alliance to accelerate the development and deployment of solar technologies, with around 70 countries now members, and the International Coalition for Disaster Resilient Infrastructure. The United States and others supporting both projects are easy wins on stronger engagement. But Modi is not driving a strategic and nationally integrated and comprehensive agenda for transition; as some criticism points out, he is only focused on renewables and has been retrograde on environmental regulations and civil society, which stronger engagement should seek to encourage.

Strengthening Prime Minister Modi's relationships with his key ministers and their departments needs to be part of this agenda, including through bolstered senior officials-level frameworks and dialogues. While fourteen ministries are actively involved in India's climate agenda, two particularly important ones are the Ministry of Environment, Forest, and Climate Change and the Ministry of External Affairs.

Like Modi, External Affairs Minister Jaishankar recognizes elevating climate change as an instrument of Indian foreign policy linked to standing, energy security,

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ultimately...what will matter most is concrete and significant cooperation with India on the ground in support of strengthening its climate action and ambition. This must be the other side of the coin to political engagement for success to be assured.

and the global political realignment occurring with China's rise. He, generally supported by his ministry, is more forward-leaning on the climate agenda than Environment Minister Javadekar, who is less strategic and also restricted by a bureaucracy in many cases schooled by the receding era of India's climate opposition. Other important ministers are R. K Singh (Power), Nirmala Sitharaman (Finance), and Piyush Goyal (Railways, which are electrifying).

Substantively and more consistently engaging with India in the formal international climate architecture should also be a high priority. India is deeply wedded to the UN Framework Convention and associated mechanisms to drive the global climate agenda. Cooperating for the right compromises that can accommodate, not concede to, India's interests and priorities can be a conduit for bolder action. For COP26, ensuring a pathway to finalize the Article 6 rules on markets in a way that accommodates India's strong interest in some transfer of carbon credits for the Kyoto mechanism (where a compromise has been apparent since COP24 in Katowice) and, as always, appropriate progress on climate finance are veins to seek to tap.

Strengthening informal mechanisms should be part of stronger engagement with India, including supporting working more closely on the formal climate architecture. These mechanisms have a solid record in helping build the understanding and trust necessary for brokering progress on climate. President Donald Trump disbanded the most effective of these mechanisms, the Major Economies Forum (MEF), whose replacement, the EU-Canada-China-led Ministerial on Climate Action, suffered from the lack of

U.S. leadership and incompatible interests of the co-convenors. The revived MEF, which met in April, could therefore pay dividends and provide an additional bridge to India. The same applies for two-track processes, where the U.S.-India Climate and Energy Dialogue provides a good model for strategic and systematic development of avenues for bilateral cooperation.

Ultimately, however, what will matter most is concrete and significant cooperation with India on the ground in support of strengthening its climate action and ambition. This must be the other side of the coin to political engagement for success to be assured.

While a large number of areas of potential focus for cooperation exist, the following are particularly prospective for the sort of step change required if India is to put itself on the pathway to success on transformative decarbonization.

Policy engagement. There is significant scope to work with India as it continues to develop the enabling environment, policies, and measures for climate transition. Through its new Apex Committee for the Implementation of the Paris Agreement and commencement of work on a long-term low greenhouse gas emission development strategy, India is actively looking to bolster national development and coordination of climate objectives and policy. Cooperating with India in support of stronger and more strategic and integrated policy frameworks and sharing relevant lessons learned from elsewhere would build on long-standing successful broader policy engagement over decades.

A critical area for such engagement is India's post-COVID-19 economic recovery. A global focus is growing on reaping a

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double dividend from stimulus measures that support both growth and jobs and climate action, notably evident in the EU's Green Deal; President Biden's climate package; and increasing policy recommendations from the IMF, World Bank, and OECD.⁴⁴ Cooperation with India on this agenda, including on continued integration of climate change into development policy, would provide a strong platform for India to strengthen its climate action and ambition.

Cooperation on carbon markets to support transition is another key area. India is not implementing market-based solutions, beyond a modest tax on coal to support renewable investments.45 Knowing it needs big levers to support transition and aware of carbon markets now covering more than three-quarters of Asia's GDP and the proposed carbon border adjustment mechanisms of the EU and the United States, Indian officials have recently floated the idea of a domestic emissions-trading scheme.46 The significant technical, commercial, and political complexities involved and the extensive experience around the world present a significant opportunity.

Energy transformation. While India has had remarkable success with the rollout of renewable energy (around 90 GW to date with total generating capacity around 373 GW), the scale and associated challenges—even to meet its 2030 target of 450 GW—mean successful transition is not assured. The IEA has outlined the challenges in detail, including the need to further strengthen energy markets including at the wholesale level, improve distribution and transmission infrastructure where significant congestion already exists, strengthen flexibility between energy sources for successful system integration, address the

financial stress of India's distribution companies, and improve policy formulation and coordination.⁴⁷

The criticality of this sector for India advancing climate action and ambition; the priority the Indian government places on progress in this area; and the significant policy, technical, technological, and financial challenges involved in transitioning to clean energy evident around the world make this sector the highest priority for international cooperation. Dovetailing a meaningful package of cooperation in this area, for example, as an initiative of the new Biden administration, either bilaterally or in concert with others, with political efforts this year to raise India's ambition would significantly bolster the prospects.

Climate financing. The same occurs with climate financing, which India will continue to heavily emphasize as a precondition for increased climate ambition. It has calculated the cost of meeting its 2030 Paris commitments at US\$170 billion per annum, with donor financing currently providing around 10 percent of this amount.⁴⁸ Continued donor support for financing mechanisms like the Global Climate Fund will be important.

However, given the constraints of donor funding, India's growing wealth, and the fact that the vast majority of financing for climate transition must flow from the private sector (India's own public financing for climate itself only sits at around 10-15 percent of the financing need), an increasing aspect of international engagement with India needs to be on mobilizing private sector financing for transition.

This is becoming an increasingly sophisticated area of global activity that offers the potential for the development of new and

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more innovative ways to work with India on obtaining financing from the private sector. This could include cooperation on a stronger enabling environment for private sector investment and green financial instruments such as green bonds or transition funds, as well as support to align investment portfolios in India with the Paris Agreement goals and leveraging public sector financing to mobilize private sector capital—for example, through blended finance instruments.

Decarbonization technologies in hard-to-abate industries. Absent the deployment of significant new technologies at scale, major emitting and hard-to-abate industries in India will significantly hinder decarbonization—particularly steel, chemicals, and cement. For example, India's steel production is projected to increase from 106 million tonnes per annum to 470 million tonnes per annum by 2050 and is set to overtake China well before then as demand in China plateaus. 49 More than 90 percent of India's steel making comes from high-emitting coking coal furnaces with shelf lives of several decades.

Advanced technologies such as carbon capture, use, and storage (CCUS) and hydrogen and direct air capture will be required to achieve significant abatement in these industries. Cooperating with India through forums like Mission Innovation or the Clean Energy Ministerial, bilaterally and more broadly; through public-private partnerships; and, where applicable, through possible Article 6 carbon trading would strongly support higher Indian climate ambition.

Development of natural capital. A significant opportunity exists to work with

India in meeting its nature-based target—currently badly off track—under the Paris Agreement, and beyond. Nature-based solutions, such as using forestry, mangroves, or regenerative farming as carbon sinks, are estimated to provide around one-third of the solutions for meeting Paris Agreement goals. They are also set to become a major revenue stream globally as carbon markets grow, which India should harness as a powerful incentive to further protect its natural capital. Areas of prospective cooperation include carbon measurement and accounting systems, trading platforms, and related financing instruments.

Just transition. Escalating Indian ambition on climate will ultimately have to grapple with the transition of communities, if not some state economies such as those of Jharkhand and Chhattisgarh. Most obvious is thermal coal mining. India must deal with the political economy of this, and it will be highly sensitive to what it perceives as any outside interference. Just transitions now beginning in parts of the world—for example, Germany's transition away from coal—provide the basis for some discussion with India, but any traction on this issue will only come in the context of very significant financial support for the relevant economic restructuring.⁵⁰ Absent this, the focus should be elsewhere.

HARNESSING BUSINESS AND CIVIL SOCIETY

Sustained engagement with India should increasingly extend beyond government, especially to business and civil society more broadly.

While more Indian companies are focused on climate action, and increasingly so given corporate trends globally, they remain a

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Forging a genuine partnership with India will be the work of decades, not years, and many partnerships; coalitions of activity—between states and non-state actors and public and private sectors—must become an increasing part of successful engagement with India.

fraction and even fewer are active on this agenda globally. Encouraging stronger engagement will help engender a powerful constituency.

Initiatives could include networking key Indian businesses more strongly into international business organizations on climate transition such as We Mean Business and the World Economic Forum and partnering with Mission Innovation, support for adoption of climate risk and opportunity as part of core business strategy (including disclosure using the Taskforce for Climate-Related Financial Disclosures—TCFD guidelines), promoting understanding and access to green finance and development of frameworks for Paris Agreement-aligned capital allocation, and promoting carbon trading as an element of successful climate action.

Finding ways to work with and support broader civil society efforts on climate transition is another important avenue. India has the largest number of NGOs in the world, many focused on the environment and climate change, and a wide range of expert and influential nongovernment institutions such as The Energy and Resources Institute and the Center For Policy Research.

In another indication of the complexities and challenges of climate transition in India, as part of a concerning broader pushback against civil society, the Modi government has been cracking down on environmental groups. This includes the recent arrest of prominent activist Disha Ravi and measures against Greenpeace.⁵¹ Sensitively navigating appropriate and productive ways to engage with civil society and harness the world's largest democracy

as oxygen for decarbonization should be an enduring, if at times delicate, priority.

CONCLUSION

There has never been a better time to engage with India on climate change, with converging domestic and international forces shaping a genuine moment for significant progress.

It is a realistic prospect that India can still be successfully encouraged in this year of climate ambition to do more, given the U.S. resurgence of climate change action and China's change of tack to raise its 2030 ambition and commit to a longer-term goal for net-zero emissions.

India's own recognition of the imperatives of climate action for its national interest, lack of insuperable political impediments, and impressive over performance on its current leading targets provide a fair runway, although the economic turbulence of COVID-19 could be a spoiler, underlining the importance of reinforcing with India the double dividend achievable when recovery stimulus is focused on growth, jobs, and climate transition.

The best prospects for successfully working with India on higher ambition are a combination of concerted political and practical engagement, which match in ambition that sought from India. Modest incrementalism of the kind that has so often characterized previous climate engagement will not support the step change required. In that context, working with the grain of India's priorities offers the most opportunity, which is why significantly boosting cooperation on transitioning India's energy sector should be a major focus. The recent announcement of



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...Climate change [must be] at the heart of relations with India...if we are to meet the challenge of our generation... a U.S.-India Clean Energy Partnership aimed at mobilizing finance, accelerating clean energy development and deployment, scaling new technologies and building capacity is an encouraging step in the right direction, although details are still to emerge.

Forging a genuine partnership with India will be the work of decades, not years, and many partnerships; coalitions of activity—between states and non-state actors and public and private sectors—must become an increasing part of successful engagement with India.

It must also be one that puts climate change at the heart of relations with India and its place in the world if we are to meet the challenge of our generation and be the change we want to see.





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