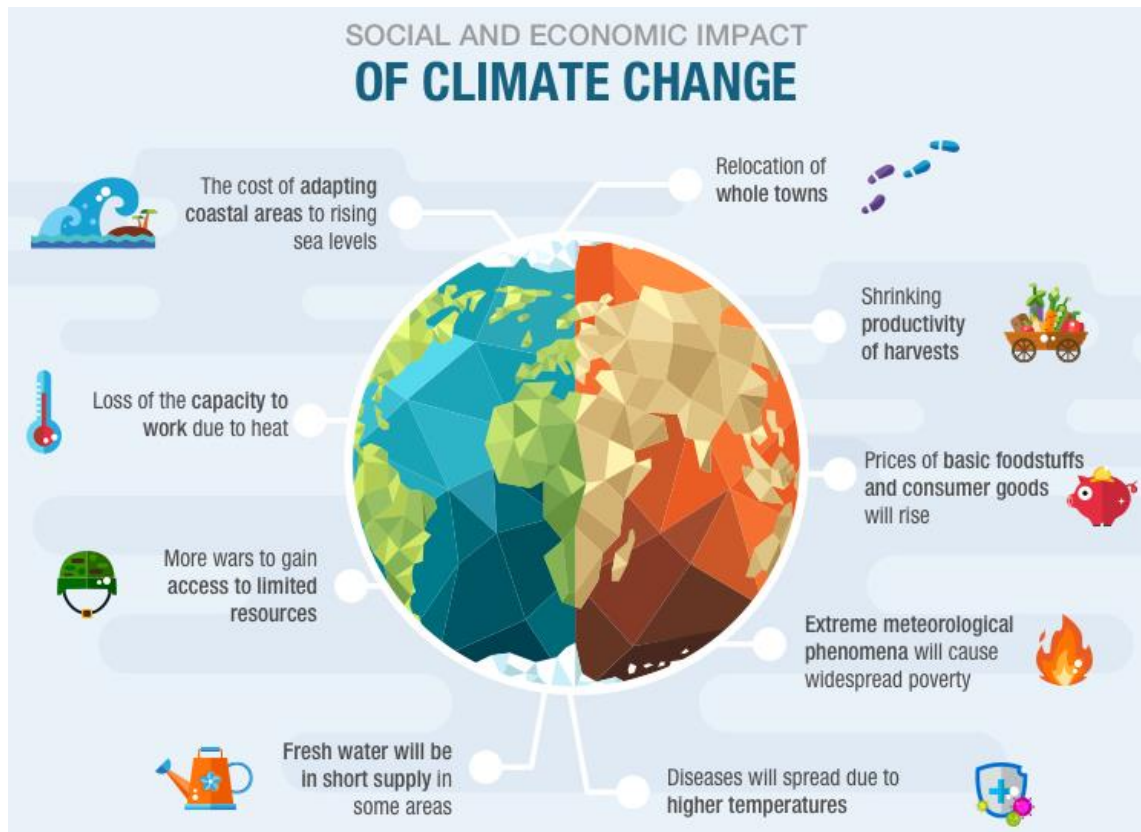




A monthly newsletter from Shakti Sustainable Energy Foundation delivering news, research and analysis covering the key pillars of the exponential energy transition—energy policy, the energy industry, climate change and clean energy

For nearly three decades, the UN has been bringing together countries for global climate summits, known as COPs, or the 'Conference of the Parties.' In that time, climate change has gone from being a fringe issue to a global priority. If no action is taken, climate change may transform now-familiar terrain into alien landscapes over the next few centuries. This is why summits like the COP focus particularly on the impact of climate change on the planet: rising GHG emissions, heat stress, failing crops, changes in land use and vegetation and others.



Credit : Iberdola

What COPs do for climate action

Climate impacts are visible everywhere. We are hitting new records every year, and the most recent IPCC report confirms that we need to correct our emissions trajectory immediately.

The Conference of the Parties (COP) and by extension the Paris Agreement and the UNFCCC process, puts climate on the global negotiation table once a year to create a collaborative framework for governments to tackle the climate crisis. This is a slow-moving process yet an absolutely necessary part of the solution.

A crucial aspect of COP beyond the negotiations themselves is the strong, powerful, interdisciplinary community of organizations and individuals who bring their experience from creating change at their own level to COP to support and influence the negotiation process. They learn, share, and contribute their knowledge to the agenda items being discussed, push for more ambitious, inclusive, and fair outcomes, and collaborate on projects on the ground.

The huge increase in attention to issues of diversity, inclusion and engagement of marginalized groups in decision-making processes over the past few years has helped move the climate needle in the right direction at global and local levels.

From Madrid to Glasgow

COP25 in Madrid was mired in the politics of low ambition and there was widespread disappointment that no overall consensus was reached on increased climate action. Even as differences between governments were evident, the larger question of dealing with carbon credits to offset emissions and, more importantly, the issue of providing aid and support to vulnerable and poor countries for loss due to climate change, was not addressed adequately.

The clock was ticking, and to have a chance of limiting the rise, the world needed to halve greenhouse gas emissions by 2030. This gigantic task was one that leaders attending COP26 had to grapple with—through bold, time-bound and front-loaded plans to transform their economies to reach net zero emissions.

Already delayed by the COVID-19 pandemic, COP26 was held in Glasgow a year after countries were expected to update their emissions reduction targets in light of the latest science, under the Paris Agreement. Most countries, but not all, have done so.

At COP26, nations agreed on the Glasgow Climate Pact, which states that carbon emissions will have to fall by 45% by 2030 to keep alive the 1.5°C goal, but they still fell short of the action needed to keep global warming within manageable levels. Here are some of the key take aways from COP26

10 KEY TAKEAWAYS



While the Glasgow Climate Pact (Pact) will not achieve the goal of limiting global warming to 1.5°C, the Pact does provide a path forward to meeting this goal.



The two-year Glasgow-Sharm el-Shiekh work programme was established at COP26 to facilitate continued work towards the global goal at COP27 in Egypt.



The Pact urges nations to further integrate adaptation into local, national and regional planning.



Developed nations are encouraged to double their collective climate financing commitments for adaptation in developing countries and achieve balance between mitigation and adaptation efforts.



The goal of developed countries to jointly mobilize \$100 billion per year to fund meaningful mitigation actions, as well as the inclusion of private financing, in developing nations was reinforced.



The Pact recognized and expressed concerns with the failure of nationally determined contributions (NDCs) under the Paris Agreement to achieve climate goals.



All nations were asked to accelerate the development, deployment and dissemination of technologies and adoption of policies, to transition towards low-emission energy systems, including rapidly scaling up the deployment of clean power generation and energy efficiency measures.



COP26 was the first to tackle the challenging issue of fossil fuel transition by encouraging the acceleration of efforts towards the phase-down of unabated coal power and fossil fuel subsidies while recognizing the need for a just transition.



Participants were directed to submit their plans and metrics by November 2022 to facilitate the Global Stocktake which will monitor the implementation of the NDCs and evaluate the collective progress in achieving the agreed goals.

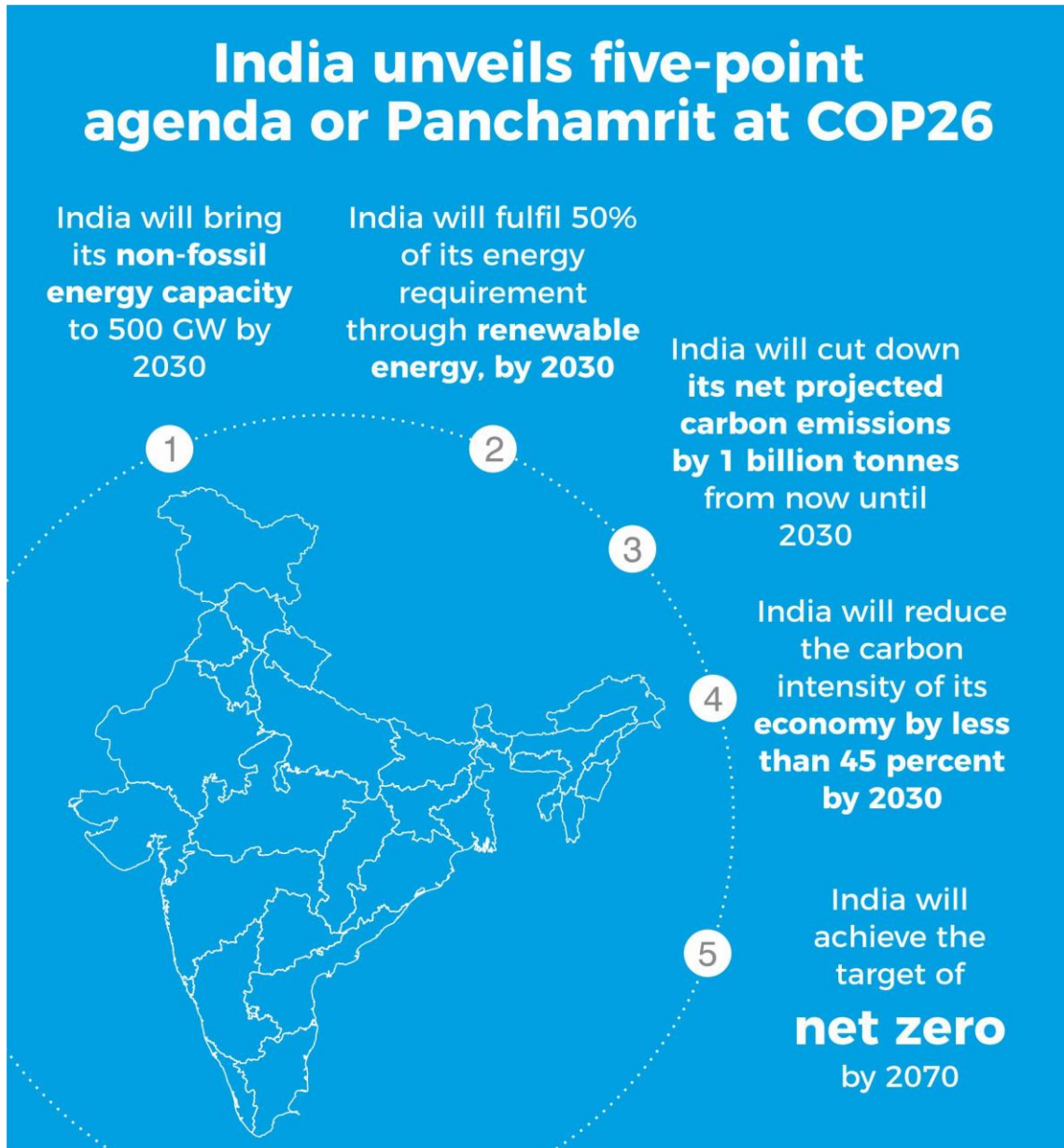


More than \$20bn in pledges to support developing countries such as:

- The South Africa Just Energy Transition Partnership
- Climate Investment Funds Accelerating Coal Transition facility (CIF ACT)
- The new \$10 billion energy fund, the Global Energy Alliance for People and Planet.

COP26 : India in the spotlight

India has always had an important role to play in COP negotiations but at COP26 announced far-reaching ambition on a scale of never before. Here is a snapshot of PM Modi's five-point plan or *panchamrit*:



Credit : Shakti Sustainable Energy Foundation

India's stance, however, was not always this clear. Just a few short months ago, on more than one occasion, India politely declined to pledge net zero emissions, arguing that countries should instead deliver on the promises they had made in the past.

Practically speaking, India's commitment of net zero means phasing out coal, which fuels 70% of our electricity, switching to electric vehicles, decarbonizing

polluting industries like cement and steel, creating forests to absorb carbon dioxide, and installing more solar power plants, all in the next few decades.

COP26 provided India with an opportunity to align more closely with the interests of the climate-vulnerable countries, and use its position to push for stronger provisions on climate justice and climate finance for people of the Global South. They, like India, are facing the impacts of a climate crisis caused by the historical emissions of rich countries. Hopefully, India will take a more proactive role at next year's COP to push for a stronger mandate on climate justice, finance and loss and damage funds.

Climate Conversations on Net Zero with Professor Sam Fankhauser

We spoke with [Sam Fankhauser](#), Professor of Climate Change Economics and Policy at the Smith School and the School of Geography and the Environment at Oxford University. He is also Research Director of [Oxford Net Zero](#). Before moving to Oxford, Sam was Director of the Grantham Research Institute on Climate Change and the Environment at the London School of Economics. Here's his take on COP26 and the way ahead for India and the world.



You've written and researched extensively on climate change for over three decades now. Can you tell us a defining moment in your life where you decided to work on climate research and action?

In the early 1990s, I was a young environmental economist looking for a Ph.D. dissertation topic, and the topics of the day were ozone layer depletion, acid rain and the circular economy. Climate change was a niche thing for the future. It was not viewed at all as the defining environmental problem of the time, but for me it was intellectually stimulating. I was fascinated by the first IPCC report that had just come out and wanted to find solutions in that area. My supervisor showed it to me and said, "Look at this, it's brand new, it's interesting. No economics in it, maybe there's something interesting in that." I never looked back. I persevered, because it became more and more important, more and more interesting over time.

Do you believe that COP26 has been a success?

Each COP meeting is an opportunity for negotiators to take stock of progress and increase their ambitions in tackling climate change with the backdrop of scientists' latest findings. When COP26 is compared to the previous COP25, I believe it was actually quite successful. We've seen COPs like Copenhagen where

the outcomes were less than expected, and then there was Paris where we were elated at the progress made. Most COPs, including COP26, are in between.

For me, it was significant to see the eye-catching announcements that happened at the start of COP 26, including India's 2070 net zero target and the announcements for example on deforestation, methane and coal, which gave a sense to world leaders of ratcheting up their ambitions. The second part of the meeting was about the technical details, and it made clear just how much work remains to implement all these commitments.

What is the impact of the COVID-19 crisis on net zero?

The economic slowdown triggered by COVID-19 could make it harder to close the gap between climate objectives and actual carbon policy. There are some 2,000 climate laws in the world. Statistical analysis of the time when those 2,000 climate laws were passed shows that lawmakers are demonstrably less willing to act on climate change in difficult economic times.

There has been no shortage of exhortations to use the COVID-19 recovery for a "great reset" and to "build back better," that is, to align recovery packages with the Paris Agreement. However, to date, only a small fraction of the massive fiscal support packages to cushion the impact of the pandemic is Paris aligned. How can we make economic recovery spending compatible with Net Zero? The US and the EU have attempted to do this with Green Deals. The benefits of such programmes are real. For example, building refurbishment or investment in green infrastructure fits the bill of a good fiscal stimulus. It can have a high multiplier effect, is timely and has immense environmental potential. But we are not living it yet, and it will be a while before things change on the ground.

The fiscal stimulus story is absolutely important for helping unemployed, underemployed workers back into the workforce. So, green labor-intensive activities like building refurbishment that we mentioned before have both economic and environmental benefits.

What can developed countries do to meet their commitment of \$100bn of climate finance a year to support developing nations? Developed countries have said they will deliver on this pledge by 2023.

The \$100bn climate finance commitment is about fairness and trust. It was promised and not delivered, and low-income countries are right to feel let down. In the post-COVID world, where massive amounts are spent kick-starting the economy, \$100bn does not sound like that much money anymore, and the gap that remains to reach the \$100bn is smaller still. So this should really not be that difficult to do.

But beyond the trust and the fairness and the symbolism of the \$100bn, there is also the question of how we fix the problem, and here we are talking of tens of trillions of dollars, not hundreds of billions. Some of this is additional money, but most of it is about redirecting existing capital flows from dirty to clean. This will require not just public money but a lot of private investment. Some of the signals from Glasgow sound very promising in this respect, actually, but a lot of work will be needed to unlock these flows.

In your opinion, what is the significance of the India's 2070 net zero pledge globally and for the country?

India's emissions per capita are much lower than other major world economies, around 1.9 tonnes of CO2 per head of population. But on aggregate, India is a big emitter, and was the last of the big emitters to come into the net zero-fold. India's 2070 target is actually consistent with the spirit of the Paris agreement, which encourages countries to move toward economy-wide targets over time in their different national circumstances.

The country now needs to lay out a clear road map for how it will achieve net zero, but I am optimistic that in the end India will decarbonize faster than it promised in Glasgow. The economic opportunities are too significant.

Global estimates of the size of the green economy vary quite a lot. Analysis from FTSE Russell estimate that globally, the proportion of green revenues generated by listed companies (those it tracks) is equivalent to a market capitalization of US\$4.3 trillion, or 5.4% of the total value of globally listed equities. This makes the green economy larger than the oil and gas sector. Going ahead, one can see that there are definitely big opportunities for all countries, including India.

What are your expectations from COP 27 in Egypt?

COP27 will be of much lower profile than COP26. This is the usual cyclicity of COPs, where exhausting high-profile sessions (Kyoto, Copenhagen, Paris) are followed by technical COPs to consolidate and take stock. But the same issues will very much be on the agenda, and the relative lack of limelight may not be a bad thing.

We will be looking for stronger 2030 emission reduction plans – the long-term targets are now broadly there, but we need tangible measures to implement them, particularly over the next decade.

The debate about "phasing down" or "phasing out" coal, which dominated the final moments of COP26, was less about wordsmithing than mindsets. The actual words in the agreement matter less than the fact that India and China felt they needed them. The underlying motivations is what we now have to work on. And linked to this, of course, will be all the non-emissions issues COP26 left open, despite progress – climate finance, and loss and damage in particular.

Egypt will be a particularly appropriate host for COP27, which should be the African COP. The issues of climate finance, adaptation, and loss and damage should all be high on the list of priorities, and all are of particular importance to Africa, which is home to many of the most vulnerable people to the impacts of climate change.

At Shakti, we are beginning to look at policy interventions that will be able to cushion the states and communities who will be impacted by the move to clean energy. How can we make just transition and climate justice more inclusive?

Yes, these are the big challenges ahead. We need to do this right both because this is an issue of justice and because the opposition to net zero will be too big otherwise. The transition for those in high-carbon jobs must be as smooth and as easy as possible.

We are talking about deep structural transformation. Every part of the economy has to reinvent itself, and that is hugely disruptive in terms of the skills that are required. We shouldn't kid ourselves because if you do hugely disruptive things, there will be pockets of people whose skills are no longer in demand. We have to help them to acquire new skills and become successful in the new economy. Countries like India and Africa have a young workforce, which may help make the transition easier because such a workforce is not necessarily locked into their current jobs. There is still the need to educate and train the next generation in the right way, of course, as a part of the education system itself.

Globally, there are only a few examples of industrial transitions having been done in a just and equitable manner. The UK's journey out of coal back in the 1990s was brutal and the scars are still there. The Ruhr Valley, in Germany, is a good example on the pivot from coal mining to a hub of green industry. It is a story of successful collaboration between the government, trade unions and the private sector with strategic investment planning, support for education, and underwriting pension for coal miners and those who lost their jobs due to the closing of mines.

Outside academia, Professor Fankhauser is an Associate Director of economics consultancy Vivid Economics. He was an inaugural member of the UK Climate Change Committee and its Adaptation Sub-Committee, and he served as a non-executive Director of CDC Group, the UK's development finance institution. You can read more about his work and projects [here](#).

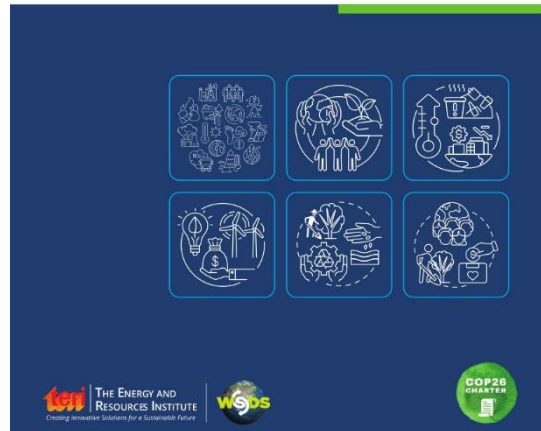
Updates from Shakti at COP26

India's new pledges, including its net zero target, are certain to provide an overall guiding signal to ministries, regulatory bodies and industries and for sectoral interventions. What are some of the decarbonization pathways that India can adopt to turn this new climate ambition into a reality? And how can this transition be just and inclusive?

Shakti and World Resources Institute (WRI) jointly contributed a chapter on 'Modelling Decarbonization Pathways for the Indian Economy' as part of a research compendium by the Observer Research Foundation (ORF) on [pathways and policies for a net-zero transformation](#). The compendium features together a fantastic set of perspectives from The Fletcher Business School, Climate Policy Lab, MacArthur Foundation, National Investment and Infrastructure Fund, iFOREST and others. Released by ORF at a COP side event, this was a timely publication, coming in just after India announced its net zero by 2070 target.

Shakti also contributed to the development of the COP Charter of Actions published by The Energy and Resources Institute (TERI). The charter is a knowledge document proposing thematic options to advance climate ambition in India and globally as well. It focuses on the pertinent themes of equity, green finance, nature-based solutions, adaptation and resilience, energy, clean transport, and business actions. The Charter was released at COP26 by Shri Rameshwar Prasad Gupta, Secretary, MoEFCC.

COP26
CHARTER OF
ACTIONS
RALLYING THE GLOBAL COMMUNITY
FOR AN EQUITABLE CLIMATE AGENDA



And finally, food for thought



Climate change is commonly discussed as though it is just a uniquely atmospheric phenomena. But the crisis is deeply entwined with the ocean (and seas, rivers and other water bodies). This has largely been neglected in all international climate talks till date or has always been not streamlined or focused in the right way.

COP26 negotiations made some progress by, that too for the first time, anchoring oceans permanently into the multilateral climate change regime. However the Glasgow Climate Pact inadequately reflects the importance of oceans in our climate system.

Most countries have targets for land-based emissions – but there are no such targets for oceans. Yet the ocean plays a vital role in helping balance the conditions humans and most other species need to survive, while also offering a substantial part of the solution to stop the planet warming over the crucial limit of 1.5°C this century.

The solutions to the 21st century challenges of climate change and biodiversity loss become clearer if we view them through the ocean's blue lens. And on the road to the UN Ocean Conference in Lisbon next year, when we look through the same blue lens, we see there is no more important restorative moment than that of COP26 in Glasgow.



We welcome your feedback and comments on this newsletter. Please write to us at communications@shaktifoundation.in

Disclaimer: EnergyMatters is owned and published by Shakti Sustainable Energy Foundation. No person, organization or party can copy or re-produce the content on this site and/or magazine or any part of this publication without a written consent from the editors' panel and the author of the content, as applicable

Shakti Sustainable Energy Foundation

The Capital Court, 104 B, 4th Floor
Munirka Phase - III
New Delhi 110067