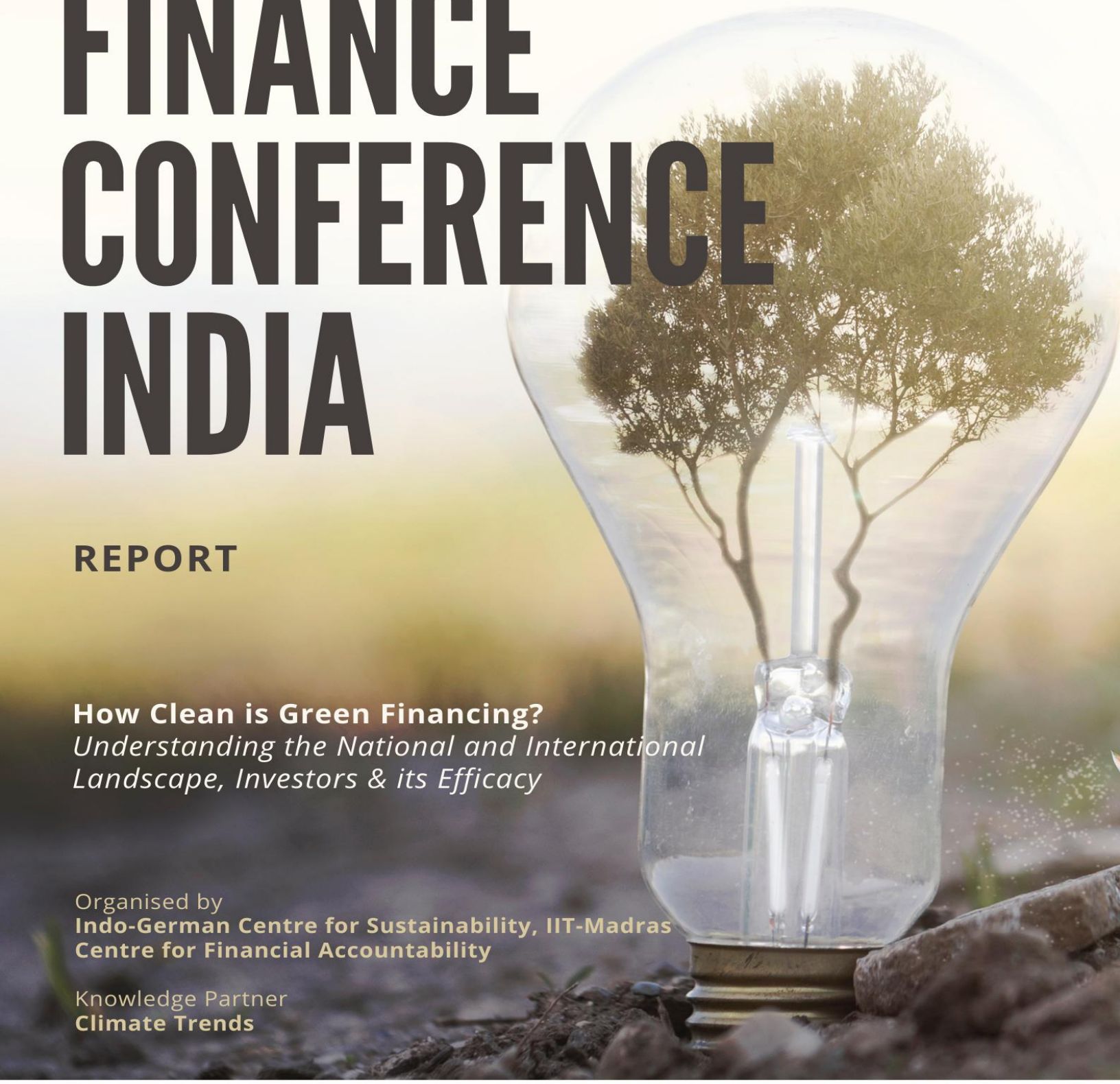
3RD ENERGY FINANCE CONFERENCE INDIA

REPORT



How Clean is Green Financing?
Understanding the National and International Landscape, Investors & its Efficacy

Organised by
Indo-German Centre for Sustainability, IIT-Madras
Centre for Financial Accountability

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IGCS INDO-GERMAN Centre for SUSTAINABILITY
CFA Centre for Financial Accountability
CLIMATE TRENDS

Energy Finance Conference India 2021

How Clean is Green Financing?
Understanding the National and International Landscape, Investors & its Efficacy

Dates: **December 14-17, 2021**
On Zoom Platform

Conference Report

Organized by:
Indo German Centre for Sustainability, IIT-Madras
Centre for Financial Accountability
Knowledge Partner: Climate Trends

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PREFACE

The Energy Finance Conference-India (EFCI), in both its 2019 and 2020 editions, have been an explorative exercise to understand and deliberate on some of the key outstanding energy debates with far reaching implications for people, market and environment. At a time when terms such as “green finance” have become central to the idea of sustainable world, the question then becomes how well do we understand what green finance is, and are these projects into which this money is flowing really green? Who and what defines the parameters of what passes for green finance and what doesn’t? Where is the regulation that monitors compliance?

At the CoP26 Summit in Glasgow, long-term climate finance along with technology transfers from the developed world to the developing world were in focus, so as to enable a just transition. Talks around Adaptation, Loss and Damage also took a center stage which were of importance to the global north, however, some pertinent questions surrounding the nature of green finance, our failure at COP26, the role of global lending institutions etc., were being raised. With these questions in mind the Indo-German Centre for Sustainability at Indian Institute of Technology, Madras and Centre for Financial Accountability along with Climate Trends as Knowledge partner felt the need to critically look at the dynamics of green finance with respect to climate finance and climate justice at COP26 Glasgow Summit. EFCI 2021 was an online event in the midst of a looming pandemic that nevertheless witnessed the participation of various stakeholders from the industry, banking, think tanks, civil society, executive, academia and trade unions along with researchers, climate justice activists and local community members. The conference brought out compelling narratives around COP26 Glasgow Summit, climate finance and the requirements to tackle climate change, the role of gender in the larger schema of climate justice, nuances of greenwashing and false solutions etc.

We would like to express our heartfelt gratitude to Prayas Energy Group, in particular, Ashok Srinivas, Ann Josey and Sreekumar N for helping us with the conceptualization, thematic formalization of the sessions and support during the entire process of planning and holding of the conference. We also take this opportunity to express our sincere gratitude to the Centre for Financial Accountability technical team that most efficiently handled the online paraphernalia. The sessions were made available in Hindi language, and we thank our translators for helping us reach a wider audience by breaking the language barrier. The documentation was done by Ms. Manya Dikshit, editing by Sonal Raghuvanshi and Swathi Seshadri who deserve a special mention for their prompt and precise summation of the sessions.

Last but not the least, we express our heartfelt gratitude to all the participants who, through their enthusiasm and prompt participation, helped bring out a robust discussion during the conference. We look forward to a continued engagement on critical energy deliberations through the platform of EFCI. We hope to receive your continued solidarity and encouragement in the coming years.

Thank you.

Sudhir Chella Rajan, IIT Madras
Aarti Khosla, Climate Trends
Joe Athialy, Centre for Financial Accountability

GLOSSARY

1.	CCUS	-	Carbon Capture, Usage and Storage
2.	CFR rights	-	Community Forest Resource
3.	COP26	-	Conference of Parties
4.	DISCOM	-	Distribution Companies
5.	EIB	-	European Investment Bank
6.	EV	-	Electric vehicles
7.	FRA	-	Forest Rights Act
8.	GCF	-	Green Climate Fund
9.	GDP	-	Gross Domestic Product
10.	GHG	-	Greenhouse gases
11.	MSME	-	Micro, Small and Medium Enterprises
12.	NBFCs	-	Non-Banking Financial Company
13.	NDC	-	Nationally Determined Contribution
14.	PSF	-	People's Survival Fund
15.	SDG	-	Sustainable Development Goals
16.	UNFCCC	-	United Nations Framework Convention on Climate Change
17.	WTE	-	Waste-to-Energy

3RD ENERGY FINANCE CONFERENCE INDIA

December 14, 2021
Time: 3-5 PM IST

Day 1:

Adaptation, Loss and Damage - COP26 and the Money Trail

What have been the commitments on green and climate finance at previous editions of CoP and why did they fail? Is it going to be any different now?

Themes & Speakers:

- **A run-down of what happened at the COP26 in the climate finance arena?**
  By Meena Raman, Third World Network

- **India's path ahead in terms of commitment and obligations**
  By Gagan Sidhu, Centre for Energy Finance, CEEW

- **Critique of India's commitment at COP26: A reality check**
  By Nitin Sethi, The Reporters' Collective

Chair:
Sudhir Chella Rajan, ***Indo German Centre for Sustainability – IIT-Madras***

DECEMBER 14-17, 2021
ON ZOOM PLATFORM

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Introduction

The 3rd Energy Finance Conference India 2021 commenced with a note of introduction from CFA, outlining their goals of providing critical analysis and constant monitoring of the role of financial institutions and their impact on India's development and environment. The purpose of organizing the Conference is to understand and deliberate in the key energy debates of our time. The theme of this year's conference was 'How Clean is Green Financing? Understanding the National and International Landscape, Investors, & its Efficacy.'

Moderator: Dr Sudhir Chella Rajan

The first EFCI conference was held in August 2019, covering a wide range of topics ranging from the energy economy to commercial viability of projects and a host of global experiences in energy transition. The lens was focused on India, discussing renewables, active challenges and business roadblocks, as well as the role of energy planning.
The second conference took place virtually in December 2020, specifically focusing on green energy transition. The topics covered included the political economy surrounding energy transition, global instances and the lessons they held for India. Key elements like socio-ecological and cultural aspects, governance, financing the Indian energy transition, and certain sectoral features related to transport, agriculture, industry and the like were discussed in great detail.

The first day's session focused on Adaptation, Loss and Damage - COP26 and the Money Trail. It started with a wide canvas to set the stage for further discussions during the course of the conference. A Coal vs Renewable Financial Analysis report prepared by CFA was released, containing a detailed assessment of the financing of these sectors in the Indian market.

Speaker 1, Meenakshi Raman

" A rundown of what happened at the COP26 in the climate finance arena."

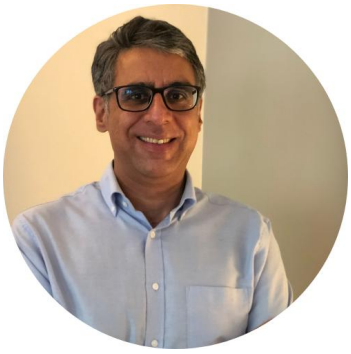
The Glasgow summit was a setback for equity, the planet, and the poor. Glasgow legitimized the goal of net zero by 2050, which she believes is misdirected and problematic at its core, and pointed out the duplicity of G7's stance on coal and fossil fuels. The scale of the problem is global and often understated, and will require up to 2% of global GDP to be combated assuredly, rather than arbitrary numbers which have hitherto been publicly committed by other entities and shifted around at convenience. She stressed the importance of an agreed operational definition for climate finance and the inadequacy of UNFCCC funds to address the problem. The participating countries committed to meeting the goal of USD 100 billion contribution and setting up a committee to monitor its delivery by COP 27, to be held in Egypt.

Adaptation was recognized as an important objective, and developed countries urged to double their collective provision of climate finance for adaptation to developing countries by 2025.

Loss and damage were a major recurring issue in this saga, fueled by the realization that certain occurrences are underway that are beyond the scope of adaptation, like the erosion and salinization of coastal areas or rising sea levels. The expectation was additional finances and an acknowledgement of its criticality to the mission. The Glasgow Dialogue was established to encourage discourse, but no additional financial aid was to be obtained. The governance of the Warsaw International Mechanism remains to be unclear.

Glasgow was an important episode in an ongoing international process to tackle the issue. The financing will eventually come, but it is essential to consistently engage in discourse around these issues.

Speaker 2, Gagan Sidhu
"India's path ahead in terms of commitment and obligations."

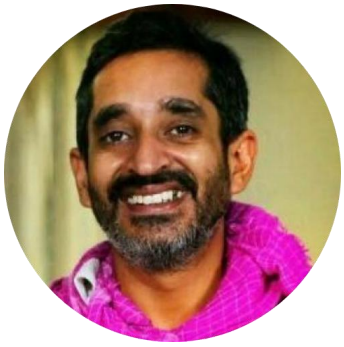


Everything clean and green has come into much sharper focus in recent times, inadvertently as a consequence of the pandemic. India made three types of announcements at COP26: an upsizing of past commitments, an introduction of new commitments, and the net zero pledge. Additionally, India also exhibited thought leadership by contributing to developing climate proof infrastructure.

India committed to generate 500 GW from renewable sources of energy, to cut down its dependence on fossils and conventional power sector entities. The power sector is responsible for 40% of India's emissions, and it requires a number of issues to be resolved. DISCOM system issues need to be addressed and the thermal sector needs to vacate space for alternatives to emerge. A national strategy to phase it down would need to ascertain how to retire coal usage, the mechanism for the transition, and funding to make it happen. The domestic bond market also needs to open up as a source of funding for renewable ventures. Banks and NBFCs provide 170 billion USD funding to the entire power sector, but to meet the goals set for 2030 alone would require an additional 200 billion USD of funding.

India pledged to meet net zero emissions by 2050 at COP26, by introducing carbon sinks to negate harmful emissions into the environment. It has permeated into the sphere of corporate goals. This goal rests on 3 key pillars: a deep renewables-based electrification, a large-scale shift towards green hydrogen, and a complete shift for automobiles from EVs to electric or fuel cell-based technologies. It would take 10.1 trillion USD of investment into transition to renewable sources at a large scale.
India has made significant strides in setting goals and targets from a wider perspective, and identified investment requirements to achieve these goals. International capital is obliged to bridge the gap between available and required funds.

Speaker 3, Nitin Sethi
"Critique of India's commitment at COP26: a reality check"



Leaders of the developed global North have often committed too little in closed rooms and yet portray themselves as heroes outside by way of exaggeration and publicity. Leaders of developing nations, on the other hand, commit little and undersell their contributions. COP26 was an aberration from that norm, especially for India.

It is important to assess the state of the Indian economy with regards to our commitments in COP26 and gauge the challenges we must face when we eventually deliver upon them. Our two commitments, of producing 500 GW of non-fossil fuel energy capacity and sourcing 50% of our energy requirements from renewables by 2030, are not backed up by a publicly available NDC endorsed by the Government. For the former, we must note that energy is not equitable to power, and the claim does not seem to account for the wide use of biomass in rural India. Commitments of reducing carbon emissions by 1 billion tons and phasing down carbon intensity to less than 45% of GDP by 2030, and the net zero target of 2070, fail to reconcile with each other, and lack a publicly available explanation for the source of these numbers.

The Indian economy was not doing well going into the pandemic, which only exacerbated the situation. While GDP is where it was 2 years ago, the MSME sector is at a low it hasn't seen in decades, there is high unemployment, and fewer people are actively seeking job opportunities. In the long run, we might recover from this rut, and right now we can see the incipient stages of what changes a recovered economy would reflect. Inequity in our economy has been rising alarmingly in the past couple of years, and instead of a fiscal boost we see a boost in credit.

Past governments have often made tall claims and commitments, failed to deliver upon them, and resorted to accounting tricks to allow the same failed companies fresh starts repeatedly. Going by this playbook, they refuse to talk about past commitments and stifle the discourse in a way that it becomes difficult to acknowledge a harsh reality: that large swathes of Indian citizens are living in energy poverty, and can't pay for basic energy needs. Previously, India had submitted an NDC to the UN Climate Change Conference 2015, where they pledged to mitigate intensity of emissions, increase share of non-fossil fuel-based electricity, and enhance forest cover. The last of these was built atop repeatedly fudged data to the extent that there has been no admission from the government on that claim in any public arena henceforth. India is still trying to balance the scales of investing in sizable ventures and avoiding bankruptcy.

The commitments at COP26 serve to make a political statement but, if followed upon, would jeopardize the Indian economy further. The funding required to make this a success must be sourced from equity, since any public financing options would be inadequate. Delivering upon the commitments from COP26 will require India to continually work towards them or risk shame.

Around 14 million people in India are dependent on coal for their daily energy needs. The costs of phasing down coal would be borne unevenly by different segments of society. The aspirations of green employment are not directly applicable in large low-income economies like India, where very few would

gain from it, and it would isolate millions of people belonging to marginalized communities from the climate change initiative. Given India's current predicament providing basic health, sanitation, and energy needs for its population, upholding its commitments from COP26 would require a careful and measured approach.

3RD ENERGY FINANCE CONFERENCE INDIA

December 15, 2021
Time: 3-5 PM IST

Day 2:

Multinational Institutions and finance for the Developing World

Which global lending institutions play the biggest role in green finance? What is the quantum of funds available? What lessons can be learnt from the experience of the Philippines?

DECEMBER 14-17, 2021
ON ZOOM PLATFORM

Themes & Speakers:

- **Mapping the climate finance requirement to tackle climate change**
  By Mariel Vilella, Zero Waste- Europe

- **What is the canvas of multinational institutions investing in climate funding and what is the nature of this funding?**
  By Rathin Roy, Overseas Development Institute; Senior Advisor, Climate Bonds Advisory Panel

- **Climate Finance: A case Study from Philippines**
  By Lidy Nacpil, Asia Energy Network & APMDD

More details: **www.cenfa.org/efci**

Chair:
Aarti Khosla, *Climate Trends*

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Moderator, Arti Khosla

Having discussed the drawbacks and takeaways from the COP26 summit in the previous session, the next logical discussion revolves around capital requirements to achieve those targets. India must analyze where it stands and what lessons can be learnt from the rest of the world. There is a need for clarity on the status quo of climate finance and alternative ways of looking into finance. National media rarely reports on climate change beyond major events and commitments, but significant preparation and foresight must go into making the proposed transitions happen.

Speaker 1, Mariel Vilella

"Mapping the climate finance requirement to tackle climate change."

Climate change financing encompasses more than emission reductions; it is about climate justice: there are entities that owe a historical debt to developing countries that are now bearing the brunt of climate change. In the waste sector, there is a global trend of double standards, where the EU ensures that climate finance is allocated to the right solutions, whereas individual countries still finance very polluting technologies in developing countries. Climate financing in the global north is moving away from pollution by exporting it to the global south. The correct solution considers not just the amount of finance, but its intended goal and allocation.

The overall materials economy is responsible for 62% of global greenhouse gas (GHG) emissions. A circular economy that minimizes wastage would decrease not only materials, but even food waste that contributes to GHG significantly in the form of methane emissions. Waste management has seen traditional methods that are centralized, capital intensive, and dispose of created waste; a better alternative is the concept of zero waste, that is decentralized, creates jobs, reduces waste creation at source, and rejects incineration as a method of disposal.

Rich European countries have overinvested in incineration and now intend to uphold their climate commitments. Thus, polluting industries are expanding their markets to developing countries, which are forced to accept these as methods to address climate change. The EU had, in 2011, committed to push residual waste close to zero and maximize recycling, so that material for incineration is minimized. Later, in 2017, they recommended making incineration more expensive, phasing out public support schemes, and suspending new facilities.

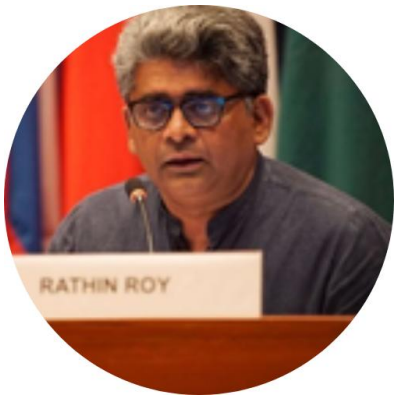
The EU Sustainable Finance Taxonomy, 2019, introduced a classification system that would establish whether an activity could be considered environmentally sustainable, in accordance with six predefined objectives. This system claimed that incineration undermines the transition to a circular economy and environmental objectives, leading to the EIB withdrawing funding from a controversial incinerator site in Serbia. Various funds, like the Just Transition Fund, the EU Cohesion Fund and the Recovery &

Resilience Fund, have embraced the prerogative of not supporting investments that focus on residual waste treatment, and rather focus on the transition to an efficient circular economy. Thus, waste incineration is excluded from climate finance support in the EU. However, EU countries still support the technology in the Global South.

To best mitigate climate change and establish justice, climate finance needs to develop and sustain zero waste solutions. Many successful solutions are now in practice in Asia, ranging from banning single-use plastics, phasing out incinerators, and empowering waste workers in the process. Developed countries now must honor their climate debt and ensure that their climate finance commitments deliver on their objectives effectively and sustainably.

Speaker 2, Rathin Roy

"What is the canvas of multinational institutions investing in climate funding and what is the nature of this funding?"



Climate finance being the major constraint in achieving a just energy transition is only derivatively true. World savings have actually increased from before the pandemic, and there is no shortage of funding to go around. Emerging economies order rates of return on financial capital 3-4 times higher than developed economies, and thus by conventional logic, finance should be flowing from developed to developing countries, which is not the case. This quandary was resolved by the Brundtland report that highlighted the inequality of resource distribution among large sections of the world. Common resources are being eroded by overproduction and shortfalls in consumption do not satisfy their minimum needs. We must change the patterns of production and consumption, which is one of the SDGs.

The COPs have focused discourse on net zero, which is an outcome with multiple possible methods. We could achieve it by decreasing consumption overall, but the discussions do not explore or compare various methods to get there. Energy is considered the unit of accounting for decarbonization, which is problematic as energy is an intermediate good. The same unit of energy could fuel extravagantly consumption lifestyles or meet the basic survival needs of economically weaker classes. However, the climate change discussions have focused solely on the circumstances of energy production and not consumption, they focus on creating technologies that make money and support the current opulent consumption lifestyles exactly as they are. Incinerators are one such solution. The divide between extravagant consumption and energy poverty is not geographical but economical; rich people in poor countries are as complicit as their counterparts in what we call the global north.

The climate finance landscape is geared towards sustaining the harmful consumption behavior that people do not want to give up. The impending energy transition will have plenty of finance for new technological innovations like green hydrogen, electric cars, etc. However, there will be little funding for systems that enable people to move to low-consumption footprints by changing their way of life, like waste management or green agriculture. These systems promote a more decentralized and sustainable

movement towards net zero, and yet they are missing from the debates in COP26. The discourse is effectively about how money could be made out of this transition.

The most popular methods today aim to make inherently inequitable concepts like personal automobiles, i.e., cars, greener. The efforts and investments into it would hold more utility if directed towards more decentralized ways of creating large-scale positive change, like waste management and greener agriculture. The most appropriate financial product for this are bonds, since they are independent of banks, do not require collateral, and can be relied upon for funding given a tenable business plan. The trouble, however, is that these green bonds would not outperform people's other vanilla investments, thus removing a major incentive. If green bonds are sovereign bonds, which goes against the decentralized nature of their purported aim, and hence is at odds with support from the sovereign states.

There is also a lack of systematic effort in energy by public or private sectors in ideating new plans to achieve these goals, since we do not lack finance professionals to come up with viable methods. This target is not insurmountable: it has happened before in wartime, with the crowdsourcing of the Suez Canal, or the French universalization of education in the 19th Century, and even for solid waste management across the US. The COP lacks the emotional energy to make progress, and the financial world lacks a product and channels to support.

The final constraint is geographical in its divide: it requires the global North to understand that the long-term benefits of collective action are in everyone's goodwill. It is difficult to expect countries that hoard the Covid vaccine to comprehend the big picture that in terms of climate change, as in the pandemic, collective welfare is paramount.

Speaker 3, Lidy Nacpil

"Climate Finance: A case study from Philippines"

Climate finance specifically refers to funding to be delivered by the developed countries to developing countries, since they are the biggest contributors of greenhouse gas emissions and owe a bulk of the responsibility to combat climate change. It calls for a transfer of resources from the rich global North to the developing global South, and does so on moral as well as legal grounds. Their countries and corporations are supposed to cover their fair share of obligations and compensate proportionately for their impact on climate change. At COP26, many developed countries refused the notion that Loss and Damages be covered under climate finance. Earlier, in 2015, the US had taken a hard stance on the matter and removed the topic from further discussion, highlighting the power dynamics at play in such summits. Securing finances for loss and damage has been, and remains, a major point of contention for the global south.

The convention also offered a more generic definition of climate finance that now includes all financing irrespective of source or channel, since the fight is about deliverables. Climate finance will now encompass any institutions not accountable to or within the framework of climate conventions, and any

instruments like grants, investments, equity, loans etc. This was important to remove any restrictions on the flow or source of climate finance.

It is also important that developed countries not be allowed to count any investments that flow outside the convention's framework as part of their obligations. The intended purpose of these finances should be in accordance with the needs of the South and not the preferred partners or allied governments of the developed countries. This is why, when climate finance flows through institutions primarily controlled by the developed countries, like the World Bank, the developing countries from the South have little say in their management and disbursement.

The South has failed in delivering upon their $100 billion pledge from 2009 as well, which in itself is a mere fraction of what is needed. There is also ambiguity surrounding the delivery of $1 trillion, since the number comes with no clarifications on whether it's for any one country or any specific time period. The UNFCCC secretariat estimates several trillions of dollars as the requirement for climate finance which is still pending delivery. Funds allotted to green finance remain at a low average of around $10 billion over three years, allocating $3 billion for all developing countries each year which itself isn't disbursed fully. Additionally, climate finance is usually given out in the form of loans, which contradicts the principle of obligations and owed commitments, and exacerbates the staggering debt burden of developing countries. OECD reported that 74% of all climate finance mobilized in developing countries in 2018 was in the form of loans. There is also concern over using bonds as an instrument too since they must be paid back, which gets troublesome in debt-ridden countries.

There is also a marked disparity in between the funds spent on fossil fuels and mobilized climate finance by the G7 countries. The former stands at $200 million between January 2020 and March 2021, whereas the latter is a mere $23.7 million since 2001. In the 14 years since 2007, the Philippines has received $35.95 million, which is around 20% of the amount approved during this period. Of the $177 million approved, a whopping 71% was in the form of loans, and the majority flows outside of the UNFCCC financial facility. Approved projects for mitigation are 91.9% of the total funds, but adaptation stands at 7.8% for the Philippines, which is indicative of a global trend: mitigation receives the overwhelming amount of climate finance. The GCF proposes to set up a financing facility that will take charge of approved projects thereon, and the Philippines is a part of the countries included in that plan. There is no clarity on the distribution of these funds among beneficiary countries. To augment these efforts, in 2012, the Philippines mobilized domestic resources for climate programmes via the People's Survival Fund (PSF), receiving $25 million through a budgetary allocation from the government.

A major challenge is not solely about large-scale delivery of climate finance, but discussion around how it will be used and empowerment of the people involved. To deliver more climate finance, the governments need to be engaged to ensure funds are properly used and the country's specific situation is considered in prioritizing urgent programmes that benefit the people.

3RD ENERGY FINANCE CONFERENCE INDIA

December 16, 2021
Time: 3-5 PM IST

Day 3:

Patching over emissions - Paying for Net-Zero

What are the numbers at stake for India? What is the government's role in encouraging finance - what are they getting right, what are they doing wrong? Does gender have a role to play in the green finance framework?

DECEMBER 14-17, 2021
ON ZOOM PLATFORM

More details: **www.cenfa.org/efci**

Themes & Speakers:

- **The real story of net-zero: A climate justice perspective**
  By Soumya Datta, Friends of the Earth India, MAUSAM

- **India's decarbonization pathway: A gendered perspective**
  By Kalyani Menon-Sen, Gender at Work

- **Charting out a plan to meet India's net-zero targets**
  By Chandra Bhushan, iFOREST

- **The Economic cost of climate transition**
  By Ajay Shah, Jindal Global Business School

Chair:
Bhargavi Rao, *Centre for Financial Accountability*

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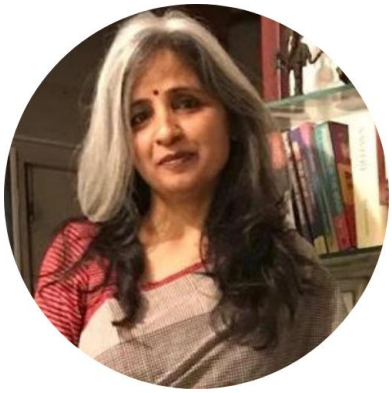
Moderator, Bhargavi Rao



The theme for the third day's session is "Patching over emissions - Paying for Net-Zero", which is particularly troubling considering that the pandemic has pushed some critical environmental development targets beyond reach. India has committed to achieving net zero by 2070 as well as declared significant near-term goals that point in that direction. However, while India ranks 4th in the world in renewable energy contributions, nearly 13% of the country lives in darkness with no connectivity to the grid. Waste to energy plants promoted under the guise of green energy are largely defunct and pose a major public health problem, while the ever-present climate change has caused significant loss of lives and livelihood. It calls to question what net zero means for India, how inclusive and equitable the proposed solutions to achieve it are, and the economic cost of a just transition for India as a country.

Speaker 1, Kalyani Menon
"India's decarbonization pathway: a gendered perspective"

In matters of policy at the level of international fora, there exists a across various countries, which helps these scammers manipulate policies as they see fit. It starts by painting a visionary picture, in pink hues, of ideas such as the COP26 itself, and is characteristically vague on details yet fancy in language and commitments, in order to please and appease the public at large. This is followed by some big names, like the Hon' PM Modi or Bill Gates, to sponsor the bandwagon and latch its credibility to that of the renowned patron. The details and data associated with the commitments are conveniently fudged and hinges on the inability of the general public to apply basic mathematics. The blame for untoward circumstances is passed on and offset by publicly practicing saintly activities elsewhere, all based on the assumption that time will stand still and the damage to the environment will freeze.

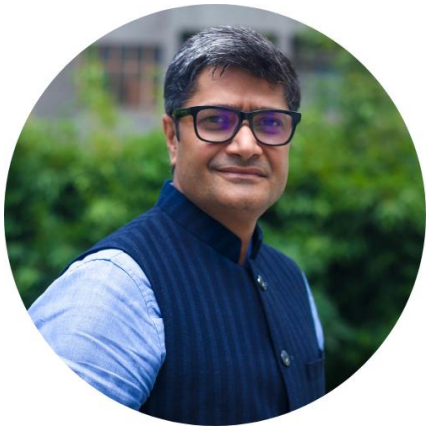
The gender approaches of development strategies are part of the problem, since the discourse has posited women in a victim-savior binary. On one hand, women are victims bearing the brunt of climate change, and on the other they are positioned to take up the charge for climate justice, empowered to advance climate adaptation, and to save the livelihoods of their communities. This binary is directly linked to the power hierarchy inherent in the patriarchy, and it effectively shifts the focus of climate action from the global and systemic levels to the local level, putting the onus of taking action on women and peasants, thereby turning indigenous communities into testing grounds for new tech-based solutions.

A feminist lens to view the climate crisis through reveals an extractive oligarchy formed by a confluence of hierarchies of power and privilege along axes of caste, class, race, and ethnicity by looking beyond the mirage of sustainable pro-nature growth and the rhetoric of development. It also highlights a link between food production, women's labor, and climate justice. Systemic inequalities lead to the exploitation of

women in marginalized and indigenous communities, and their labor goes unpaid and unaccounted for. Even violence against these women by armed and military forces is legitimized and viewed as an expedient tool of governance.

Feminist and peasant movements have repeatedly made calls to include a legitimate place at the table for women from peasant communities and their organizations as actors for climate justice. They further advocate to leave fossil fuels in the ground and stop the corporatization of agricultural communities, and instead to support them through agroecological approaches. It is also important to put a stop to resource extraction and land grabbing, and to transition away from a corporate food system linked with economic indicators towards a more democratic, equitable, and right-based food system as a strategy to achieve climate justice.

Speaker 2, Chandra Bhushan
"Charting out a plan to meet India's net zero target"



Net Zero, as it stands, is merely a promise that will require an institutional structure around itself to become a reality. This will establish a perspective of designing tools that fulfil our commitments at COP26 in a just and equitable manner, and that relevant countries are held accountable to what they promise. It is not a new imposition from the West, but a scientific concept established 30 years ago and enshrined in the convention; however, countries are now being asked to meet that scientific requirement. India should take a lead in designing the meeting rather than leaving it to the West to dictate the stakes of participants.

Even so, we are as unprepared to meet net zero now as we were back then, and a consolidated effort at national and international levels is required. Net zero must be enshrined in domestic law across countries and linked to international finance. Our conception of it must also be flexible enough to accommodate increasing ambitions, and it must be self-differentiated enough to facilitate assessment.

There is considerable disconnect between India's ambition regarding net zero at the global level and the actual ground requirement of climate finance, and this disconnect is continuously widening. The funds required to achieve our goals cannot be obtained through G20, and thus a call to reality is needed where we ascertain what climate finance means for India. India has procured a meagre 6-7% of global climate finance over the last few years, which is inadequate to fulfil our commitments. India's financial system is weak and incapable of handling further disaster at the moment. Thus, rigorous effort and serious leadership is needed to focus on obtaining investments required to reach our targets.

At a global level, there is a need for larger reforms in the international financial system which will be important for developing countries. The numbers pledged by our PM at COP26 are not backed by any credible data present in the public realm. Profitable investments like mitigation and investments have been promised money, unlike adaptation or resilience. A transition towards net zero will impact the Indian geography too; as of now Eastern and Central India produce energy and Southern & Western India

are hubs of renewable energy. The journey will require forethought, for instance before shutting down coal mines in Jharkhand, India will need to provide alternate industrial and economic activities for the people, which will require sizeable investments. Net zero is an inevitability that demands swift yet careful action, and India must carefully navigate its way through the transition via investments in adaptation, infrastructure, and building a green economy.

Speaker 3, Saumya Dutta
"A real story of net zero: A climate justice perspective"

The targets from COP26 are difficult to achieve since it is known that carbon emissions can never be zero, and no country will ban them altogether. Thus, effort must be directed towards mitigating carbon emissions and developing mechanisms that will effectively sequester carbon in the air, water, or soil, thereby nullifying emissions.

Afforestation, or the process of creating plantation, is a plausible solution that can sequester significant amounts of carbon for a number of years. The common chemical/industrial agriculture is also a net carbon emitter, and thus promoting organic or natural farming, which is less carbon intensive, can guarantee some carbon sequestration into the soil. Carbon may also be sequestered in sea soil. However, 20-23% of the Indian population is formed of communities largely dependent upon forests and natural resources, and their livelihoods will be severely affected by solutions that take this pathway. The practicality of these solutions is complicated and debatable for India.

Carbon dioxide from ambient air may also be sucked into a smokestack and thereafter separated and pumped underground in caverns, salt mines, or under the sea, from where it may or may not leak out. A more permanent solution would be to treat it chemically and form it into a rock, but neither of these methods can sequester carbon while ensuring lack of any adverse effects. Alternatively, certain measures can be taken as part of overall reduction of a carbon footprint, rather than to balance or offset it.

The climate crisis impacts 30-40 million people every year and the time for efforts to counter it is nigh, yet the promises made to do so are very vague when set alongside the deadlines. An IPCC report released in August 2021 clearly states that India is likely to reach the 1.5° C rise above pre-industrial average temperature target, keeping the global rise below 2°C. However, by 2019 India was already 1.2° above the limit, and keeping the decadal rate of temperature rise at 0.22°C, we can see ourselves headed towards breaching the 1.5°C cap by 2030-40.

Most net zero plans aim to reduce up to 40% of emissions from fossil carbon, which accounts for 36.7 billion tons of CO2 emissions globally in 2019. The fraction of this reduction achieved via biological pathways would require significant amounts of land. Specifically, to sequester one third of the aforementioned carbon emissions would require 60 billion hectares of forest area, whereas the present total forest area on Earth is about 4.06 billion hectares. Further, the existing forest area is being felled to

provide for various other requirements. This reveals how flawed the policies and commitments being made at COP26 are, and puts into question the feasibility of any solutions to achieve those targets. For instance, India committed to sequester 2.5-3 gigatons of carbon by 2030, whereas it emits around 2.7 gigatons every year. To sequester 1 gigaton would require, by the biological pathway, 500 million hectares, which is more than the 328 which constitutes India's total land area. Hence, the practicality for the biological route is very bleak, and the mechanical/chemical pathways would incur very high costs.

Moving forward, it is important for every constituent sector to recognize the importance of the net zero commitment and COP26 targets, which should be delineated and allotted independently to sectors. Our target has always been net zero and not real zero, and even this excludes harmful emissions other than carbon dioxide, like methane. Our sequestration efforts will need to keep up with increasing emissions, whereas no current mechanism can effectively do so for large amounts of carbon at present. We do not have reliable technology to fall back onto and will find it difficult to tailor new innovations to the geographical and geomorphological conditions of various countries. Marginalized communities will largely face the brunt of climate change owing to their social position, and net zero targets will not be met. We must recognize the net zero commitment to be the global scam it is.

Speaker 4, Ajay Shah
"The economic cost of climate transition"

We in India are equally responsible for the climate crisis as any other country, since we have contributed to pollutant emissions as well. However, we will be affected more than other countries given the state capacity. The tragedy of the commons is at play: we shift the responsibility of action and hard work on others, which is particularly problematic when implementing climate justice. The changing political state of advanced countries has furthered the shifting of responsibility, whereas the masses have shifted to a more reasonable position. India needs to alter course and implement both our transitional development strategy and phasing out of fossil fuels on an incremental basis, keeping in mind the equipment stock we have in our country. Owing to recent technological innovations in renewables and storage, India's electricity development per capita is a little short, and this should be countered with a plan going forward.

Carbon taxation is a welfare maximizing strategy that can be implemented without government regulation. A single carbon tax applicable everywhere in India would be a wise strategy to initiate the demand for moving towards public welfare and climate justice. Instead of waiting for the government to figure out a solution, the users and consumers can drive this movement. A more fundamental shift would be the lens with which we view carbon dioxide emissions, and creative destruction is the way. There are ample examples, such as the blue denim manufacturers Arvind Mills, to remind us that industries become outdated, replaced, or even die out, and this fate is inevitable.

Finance for new energy requires a change in the course of thought; governments should not be seen as a pathway. Private investors across the world should be approached to shoulder the responsibility, since

there is no shortage of money to go around. Capital exists, but investors refuse to invest by coming under contract with the electricity boards here. The organization has no qualms about releasing on contract share in India, and reels from bankruptcy and malfunctioning to boot. Contractability is yet another bottleneck. The Indian electricity system must be based on a sound financial foundation, which can be achieved, firstly, by complete privatization of the system, and secondly, by constructing sound and sensible regulatory bodies that can understand and address market failures in the sector.

3RD ENERGY FINANCE CONFERENCE INDIA

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Climate Trends

December 17, 2021
Time: 3-5 PM IST

Day 4:

Session 4: Green finance and the risk of false solutions

Which dubious market mechanisms should we be careful of? Is the flow of green finance into agriculture and forestry a healthy investment? What are the greenwashing pitfalls we need to avoid?

Themes & Speakers:

- **False solutions: A global context**
  By Doun Moon, Global Alliance for Incinerator Alternatives

- **The net-zero greenwash and false solutions**
  By Ashish Kothari, Kalpavriksh

- **Canvas of investments in Agriculture and Forestry**
  By Sushmita, Independent Researcher

- **Greenwashing and false solutions: A regulatory perspective and way ahead**
  By Arpitha Kodiveri, Postdoctoral researcher,Climate Litigation Accelerator, NYU School of Law.

Chair:
Joe Athialy, *Centre for Financial Accountability*

Moderator, Joe Athialy

The conference has aimed to interrogate different facets of green finance, discussing topics ranging from India's commitments at COP26, the world of finance vis-a-vis climate financing and what it means for India through a number of lenses. The final session was to focus on popular false solutions often presented as real and genuine by investors and financial institutions, such as agro-fuels and agro-forestry. Pathways that do not threaten existing power dynamics are sought and promoted, along with strategies that do not challenge the status quo of nation-states and mega corporations controlling the global economy, in order to give them a green image. This session would discuss in greater depth these false solutions.

Speaker 1, Ashish Kothari
"The net-zero green wash and false solutions"

It has become increasingly evident, with the recent COP26 and Biodiversity Convention, that systems in power are proposing and developing solutions that sustain the status quo and not the earth, all the while seeming to appear green and clean. Private corporations and entities in power can no longer deny the climate and pollution crises, yet they strive towards opportunities for profit making. There are a number of problems in their approach.

Harmful emissions into the atmosphere are not limited to carbon dioxide, which seems to be the sole focus of popular solutions. Even if CO2 were to be entirely captured, other equally dangerous pollutants such as nitrogen oxide, Sulphur dioxide, dust etc. would continue to cause damage that must also be addressed and mitigated. Additionally, Carbon Capture Use and Storage (CCUS) technologies, which are widely discussed as a possible solution, reside in the realm of science fiction and fail to provide a feasible method to capture the carbon already emitted, let alone that which is emitting still. There is little discussion around methane, which does not outlast CO2 but is dangerous nonetheless. Our discourse, or lack thereof, around these other harmful pollutants reveals the inadequacies in our knowledge and preparation for meeting committed targets.

In the same vein, keeping India's COP26 commitments in mind, in realistic terms there is a dearth of land and other resources to meet merely the carbon absorption target. Using plantation and vegetation, we would require 700 million hectares of new forests, which is about the area of Brazil. However, there is no mention of where this new forest land will come from. There are proposals to increase the absorption capacity of oceans by pumping enormous amounts of chemicals into it. This is an outrightly dangerous proposition the consequences of which cannot be comprehended at present, and careful analysis must be done to assess how such a measure would impact aquatic and marine life.

Diverting our attention towards energy apart from the electricity sector, which needs to become more decentralized and democratic in nature, the transportation and construction sectors also need to shift to

climate friendly approaches. The increasing prevalence of organic farming and local seeds with rainwater irrigation in several communities in India prove that farming can subsist without chemical fertilizers and pesticides.

These are not merely solutions targeted towards net zero, but will also help mitigate the damage being caused by harmful practices of the past and present. Their localized and democratic nature can reduce the damage by implementation at the grassroots. The big picture of the net zero goal and biodiversity conventions reveals a need for a significant push towards more equitable and sustainable ways to achieve these targets without leaving the poor and marginalized out of the climate change transition.

Speaker 2, Doun Moon
False Solutions: a global context

Most false solutions, though highly touted, are harmful for the environment and often not financially feasible, like clean coal, plastic offsets, carbon capture, nuclear power, biomass incineration etc. They all divert attention from a more pressing problem towards an expedient solution that fails to address the core issue at hand. Burning waste, while sounding good, harms the environment and pollutes the air, water, and soil, and is expensive when compared to solar or wind energy.

A number of false solutions have garnered significant investments in recent times. A waste-to-energy incineration facility can cost up to $305 million, and the cities that invest in such ventures often end up losing millions of dollars and some declare bankruptcy. An estimated $2 billion has been squandered on failed or cancelled plastic-to-fuel projects as of 2017. Waste incineration has amassed $23 billion worth of investment projects in China and Vietnam under the banner of the so-called clean financing.

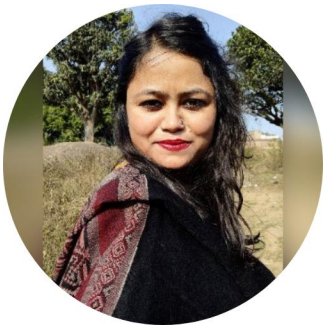
These false solutions attract financial institutions since they are viewed as established investment opportunities. They provide control over data and narrative, and the power to influence emission accounting rules, regulations, and methodology. These private ventures that require hefty funding are a far cry from an ideal decentralized solution within the public domain. Fortunately, the EU is gradually moving away from financing these false solutions by excluding waste-to-energy incineration from its portfolio of sustainable economic activities and recognizing that it undermines the transition towards a circular economy, waste prevention, and recycling. Funding such solutions is now non-compliant with EU's guidance norms and major lenders are mandated to align their lending criteria with the EU Taxonomy.

There are various alternative avenues for financing that would have more equitable impact on climate crisis mitigation. Food disbursement can be implemented to eliminate single-use plastics via bulk food stores by allowing customers to bring their own containers and providing additional services for purchases above specified limits. Zero Waste organization and planning institutions help minimize waste generation at source at various sporting or public events. There are initiatives to incentivize reusability of everyday items like coffee cups by setting up kiosks and participating cafes to establish a library like

lending system. Such zero waste solutions help achieve economic justice by generating jobs, environmental protection, while assisting in economic recovery.

Every stakeholder must act concertedly to bring about climate justice. Financial institutions should phase out their funding of projects involving WTE incineration, pyrolysis, and gasification. States and city governments must prioritize zero waste systems in plans and budgets, provide dignified livelihoods to waste workers, enact policies for source reduction, and reject new proposals for the aforementioned harmful projects in favor of zero waste solutions. The private sector, in turn, should provide low-cost loans or equity finance to zero waste businesses and build reusable infrastructure.

Speaker 3, Sushmita
Canvas of investments in Agriculture and Forestry



Many pertinent questions have been raised by India's commitments at the COP26 Glasgow summit regarding the feasibility of delivering upon them. Sectors like mining that contribute majorly to the emission of pollutants have been entirely omitted from the pledge, and focus has been shifted to capturing emissions in the land and forests instead of cutting them at the source. About 12% of the total forest land area is currently under use, but this is bound to rise in the coming years along with our dependence on these finite natural resources.

Creation of carbon sinks has been proposed by the INDCs with no scientific basis for the decision. A third of greenhouse gas mitigation necessary to avert catastrophic climate changes has been promised via natural solutions like forest restoration, blue carbon, and improved agriculture. Various agencies have shown that these targets are not actually achievable, like the previous commitment of generating 175 GW of energy through renewable resources by 2022. Of whoever is spearheading India's climate change policy, we must ask how our interests feature in the policy and strategy going forward.

India's case around climate finance has often reflected it as a subaltern nation as compared to others. This raises concerns about whether India will receive its fair share of climate finance from participating developed nations. However, a closer look at our policies reveals that there exist ample finances and investments for our programmes; the crux of the issue is how we disburse and utilize them. While working towards procuring more funds, we must also ensure we utilize what we have optimally.

As part of the Covid recovery package, India introduced a commercial coal option to open mines, which adds to extant land and environmental conflicts. This would severely impact the local residents who largely belong to marginalized communities, hampering their movement, lifestyles, and livelihoods. Such policies raise concerns over whether climate change policies in India would ever cater to the needs of the most vulnerable sections of society. Where people from marginalized communities are forced to work bereft of any choices, we must ask whether India can create an environment where it provides them adequate livelihoods.

There is a dire need for a Forest Rights act based climate action plan that recognizes the rights of forest dwelling communities, letting them lead the governance of forests as an integral part of any action plans and strategies. STs and OTFDs must be supported in building resilient forests and communities, and their tenures on forestlands should be secured in recognition of CFR rights. Gram Sabhas must be consulted before implementation of climate change mitigation programmes on their lands, and climate finance should be directed towards strengthening forest rights under the FRA.

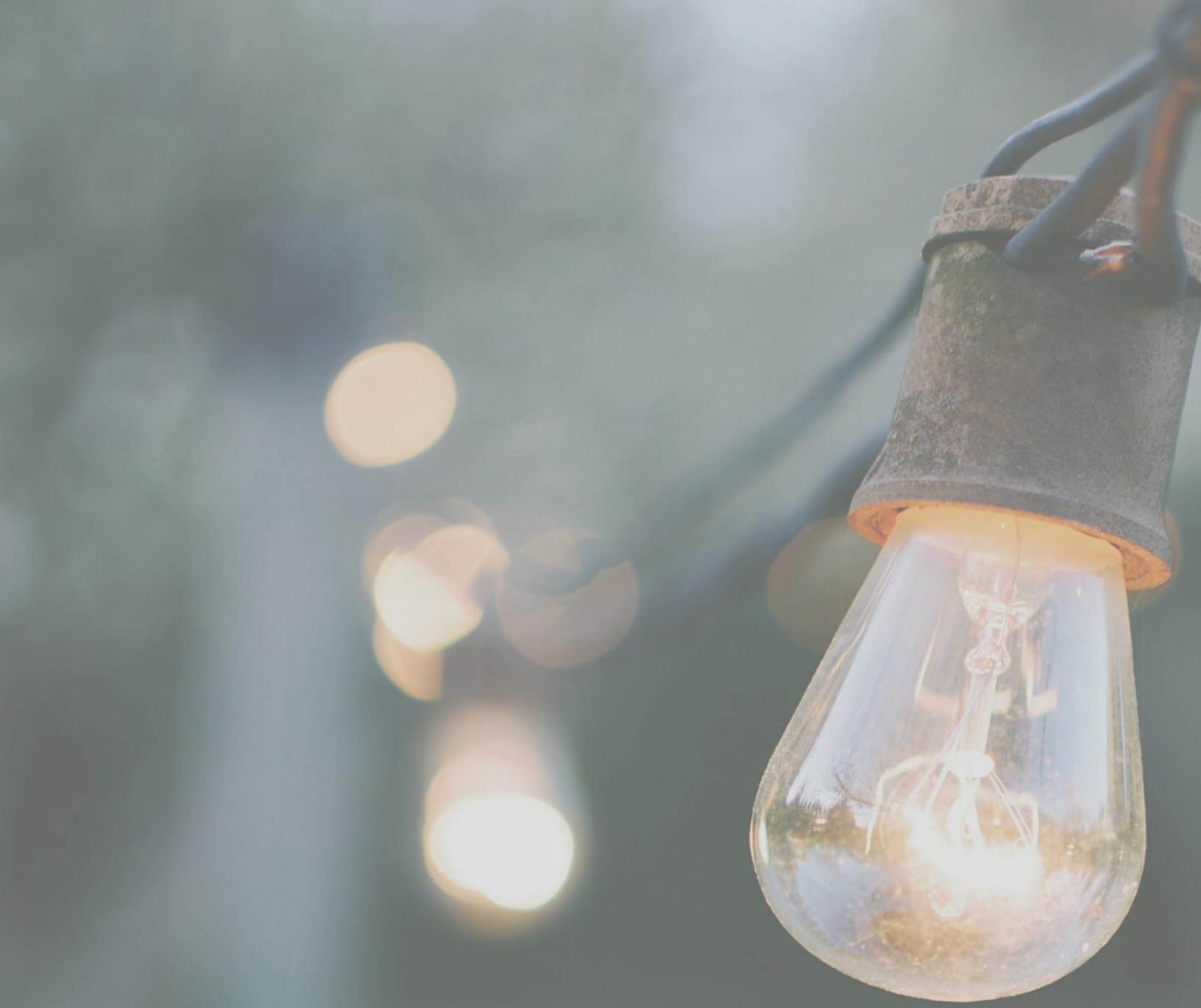
Speaker 4, Arpitha Kodiveri
Greenwashing and false solutions: A regulatory perspective and way ahead

The common discourse around climate change solutions has veered away from accountability and enforcement. Lawyers, and the laws they uphold, are complicit in this misdirection by helping create infrastructure and allowing capitalism to thrive, survive, and replicate. The legal system, notably cornerstones like the property law or international trade law, are designed to facilitate, and not regulate, capital. It secures the needs of the owners of capital and thus established industries are rarely challenged by lawyers. It has effectively transitioned environmental laws internationally and domestically to a more precautionary measure, focusing on impact mitigation rather than climate justice.

Environmental law has entered a critical stage after operating in extractive legality, generating progressive legal principles that are difficult to implement. Beyond even implementation is the importance of prioritizing the various laws. The actors responsible for implementation perform extractive legality, and the laws respond by creating compensatory mechanisms. Lawyers dealing with false solutions believe the environment is manageable and make new laws with a techno managerial mindset.

Environmental law has gained significant momentum lately, and involves a wide community of lawyers. It has brought together a number of hitherto disparate laws in a manner, and there are conditions regarding reduced ecological damage that must be met for certain contracts to be signed. The gap between domestic and international levels of environmental law has also widened. India had occupied an important position in the incipient stages of formulating these laws, thereby creating a space for Southern countries to be involved in shaping these principles.

There has been rapid deregulation of laws in the last few years that has removed existing legal infrastructure, which has made way for extractive development. The Forest Conservation Act, Environmental impact assessment, Biodiversity Act, Coal bearing areas Act etc. have all been targeted and undergone rapid changes. Moving forward, we must return to the courts to demand progressive legal action and interpretation. Procedural law has been on the rise, and environmental law should also take a leap to keep up with the times. It should encompass robust decision making and execution, with particular focus on participatory approaches. The law should be responsive in nature and prioritize the needs of the people it affects. Only when we can say all lawyers are environmental lawyers can we reach just and progressive legislation for the environment.



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