

WORLD SUSTAINABLE DEVELOPMENT SUMMIT 2020

TOWARDS 2030 GOALS MAKING THE DECADE COUNT

January 29-31, 2020 India Habitat Centre, Lodhi Road, New Delhi, India

SUMMIT OVERVIEW



The year 2020 is significant because it marks the completion of 20 years of the Summit series. In its journey since 2001, the platform has become a focal point for global thought leaders and practitioners to congregate and address climatic issues of universal importance. The Summit series has emerged as the premier international event on sustainability which focuses on the global future, but with an eye on the actions in the present which could bend our common future.

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Background Note

Sustainable development is a widely and an equally valued concept across countries, governments, and industries.

The year 2015 went down in the annals of sustainability for inking two remarkable global agreements promoting green growth. The adoption of the 17 Sustainable Development Goals (SDGs) by the United Nations General Assembly (UNGA) and the Paris Agreement through the Nationally Determined Contributions (NDCs), embodies efforts of the parties to reduce national carbon emissions and promulgate the realization of the 'goals of sustainability'.

A total of 193 member-states undertook a mission to improve the quality of land, air, and water through sustainable measures while not hindering the economic growth and progression of an inclusive society.

Within the context of sustainability, the year 2020 marks two milestones. First, it commences the final decade towards the realization of the 2030 Agenda, and second – it aims to work towards the climate ambition mechanism by encouraging the international communities to enhance their respective NDCs. It is also an important crossroad as 2021 marks the beginning of the 'UN Decade on Ecosystem Restoration', as declared by the UNGA. Restoring our ecosystems is fundamental to achieving the SDGs. Much of the coming decade also happens to coincide with the ongoing 'International Decade for Action on Water for Sustainable Development, 2018–2028'. Clearly, the coming decade will draw global attention and resources towards realizing the initiatives already in motion.

The 2020 edition of The Energy and Resources Institute's (TERI) annual flagship event – the World Sustainable Development Summit (WSDS) – focused on the need to assess the global contributions made towards the realization of the goals of sustainability, and analysed further steps that ought to be undertaken by the world communities to meet the targets of the 17 SDGs. Under the broad theme of 'Towards 2030 Goals: Making the Decade Count', the Summit series established the terms of the discourse for making the most of the remaining decade. This was done by weaving together the many strands of climate action through myriad, high-level discussions.

The WSDS is an essential meeting point for stakeholders representing various sections of our society to deliberate, strategize, and execute a unified agenda underlined by indicators of universal sustainable growth and development, which would serve the overall long-term interest of the world community. With leading policymakers and senior government officials in attendance, the Summit series does not stop at deliberations alone but it also commits to the translation of these dialogues into responsible action. It will only be through the combined efforts of state policies and industrial support that the transition to a largely renewable power system will become a thriving reality in India.

In the words of the Hon'ble Secretary General of the United Nations Mr António Guterres, "Sustainable development is more than a goal. It is our responsibility to our planet and future generations."

From the Director General's Desk



Dr Ajay Mathur Director General, TERI It gave me immense pleasure to welcome you all to The Energy and Resources Institute (TERI's) flagship event – the World Sustainable Development Summit (WSDS) 2020. This marked the 20th year since the Summit's inception, and I am proud to note that WSDS has established itself as a responsible platform for mobilizing opinionmakers to identify and advance pioneering actions to address the most relevant issues concerning sustainable development.

Countries today, not just represent different ideas of inclusivity but also demonstrate distinct levels of development and social inclusion. The year 2020 is a crucial one, as it marks the last decade for action towards achieving the Sustainable Development Goals (SDGs). This edition of WSDS 2020, titled – 'Towards 2030 Goals: Making the Decade Count', was devoted to facilitate solution-driven talks and guide us towards fulfilling our earlier promises.

Topics that dominated the discussions over the course of the Summit include some of the biggest challenges we face today. Arguably, these are: Air Pollution, Green Finance, Water, Industry and Energy Transition, Blue Economy and Mobility. The Summit strived to understand these broad areas across twenty thematic tracks and focused plenaries. At WSDS 2020, we were delighted to launch the Delhi chapter of IFAT, the leading trade show of Messe München India (MMI). In its inaugural year, IFAT Delhi showcased a global exhibit of upcoming clean technologies, which included – Water, Sewage, Solid Waste and Recycling.

The Summit witnessed a host of distinguished speakers comprising senior government officials, representatives of major global corporations, leading thinkers and researchers, who deliberated on matters of urgent concern. I thank you all for your involvement in the three days of the Summit. I do hope that through these discussions, we are all collectively led to arrive at a consensus that guides us to make the decade count.

Acknowledgements



Dr Annapurna Vancheswaran

Senior Director, Communication Outreach & Advocacy Unit, TERI In 2001, The Energy and Resources Institute (TERI) launched its annual flagship event – The World Sustainable Development Summit (WSDS) – which was inaugurated by the then Hon'ble Prime Minister of India, (Late) Mr Atal Bihari Vajpayee. Over the past years, the platform has emerged as one of the foremost fora bringing together various heads of state and government, thought leaders, policymakers, and champions of industry and academia to deliberate on myriad issues of sustainability. The Summit provides an enabling atmosphere that encourages people-to-people dialogue, fosters understanding, cooperation, and collective action to achieve goals of sustainable development. Three chief priorities of the Summit have been the exchange of knowledge, ideas and best practices, building partnerships across sectors and encouraging initiatives and efforts which are continuous and collective.

Over the years, the Summit series has provided not only the Indian national and subnational governments but the global community as a whole – comprising international governments, institutions, industries, and individuals – an opportunity to share with a high-level and diverse audience, their future plans, policies, and priorities on sustainable development and climate change.

It is heartening to note that the Summit series, to date, has hosted 49 heads of state and government, ministers from over 77 countries, 13 Nobel laureates, over 2500 corporate delegates, and participants from across continents, in addition to many subnational leaders from across the world.

This journey of two decades, which I have had the privilege of being part of each and every single year, though arduous and challenging, has surprisingly been exceedingly rewarding and gratifying. This would have been impossible without the support of our inspiring partners, distinguished speakers, and imposing delegates. I express my heartfelt gratitude and sincere thanks to each one of you.

TERI and the Summit secretariat look forward to working with you in the years to come, to accelerate the pace of climate action and to achieve a world of prosperity and security for our future generations. Let's #Act4Earth together.

Summit Timeline 2001–2020



2001

Poverty: The Global Challenge for Governments, Industry, Scientists and the Civil Society

• Mr Atal Bihari Vajpayee, Hon'ble Prime Minister of India

2003

Beyond Johannesburg: Translating Resolve into Action for a Sustainable Future

• Dr A P J Abdul Kalam, Hon'ble President of India

2005 •

Beyond Universal Goals: Steering Development Towards Global Sustainability Sustainable Development Leadership Award (SDLA) instituted

• Mr Ólafur Ragnar Grímsson, Hon'ble President of Republic of Iceland

2007

Meeting the MDGs: Exploring the Natural Resources Dimensions

- Ms Sheila Dikshit, Hon'ble Chief Minister of Delhi, India
- Mr A Raja, Hon'ble Minister for Environment and Forests, Ministry of Environment and Forests, Government of India

2002

Ensuring Sustainable Livelihoods: Challenges for Governments, Corporates and the Civil Society

• Mr Atal Bihari Vajpayee, Hon'ble Prime Minister of India

~ 2004

Partnerships for Sustainable Development: Addressing the WEHAB Agenda

 Mr Yashwant Sinha, Hon'ble Minister for External Affairs, Government of India

2006

Linking across MDGs: Towards Innovative Partnerships and Governance

 Mr A Raja, Hon'ble Minister for Environment and Forests, Ministry of Environment and Forests, Government of India

2008

Sustainable Development and Climate Change

• Dr Manmohan Singh, Hon'ble Prime Minister of India

2010

Beyond Copenhagen: New Pathways to Sustainable Development

• Dr Manmohan Singh, Hon'ble Prime Minister of India

2012 ·----

Protecting the Global Commons: 20 Years Post Rio

 Dr Manmohan Singh, Hon'ble Prime Minister of India

2014 ------

Attaining Energy, Water and Food Security for All

- Dr Farooq Abdullah, Hon'ble Minister of New and Renewable Energy, Government of India
- HE Mr Danny Faure, Hon'ble Vice President, Seychelles
- Mr Kofi Annan, Chairman, Kofi Annan Foundation and Former Secretary General, United Nations
- Mr Salman Khurshid, Hon'ble Minister of External Affairs, Government of India

· 2009

Towards Copenhagen: An Equitable and Ethical Approach

• Mr Pranab Mukherjee, Hon'ble President of India

• 2011

Tapping Local Initiatives and Tackling Global Inertia

• Dr Manmohan Singh, Hon'ble Prime Minister of India

- 2013

The Global Challenge of Resource-Efficient Growth and Development

• Dr Manmohan Singh, Hon'ble Prime Minister of India

2015

Sustainable Development Goals and Dealing with Climate Change

- HE Mr Laurent Fabius, Hon'ble Minister of Foreign Affairs and International Development, France and Former Prime Minister, France and President, COP21
- Mr Arnold Schwarzenegger, Former Governor, California and Founding Chair, R20: Regions of Climate Action
- Mr Suresh Prabhu, Hon'ble Minister of Railways, Government of India
- Mr Prakash Javadekar, Hon'ble Minister of State (IC) for Environment, Forest and Climate Change, Government of India

· 2016

Beyond 2015: People, Planet, and Progress

• Mr Pranab Mukherjee, Hon'ble President of India

2018

Creating Partnerships for a Resilient Planet

• Mr Narendra Modi, Hon'ble Prime Minister of India

2020

Towards 2030 Goals: Making the Decade Count

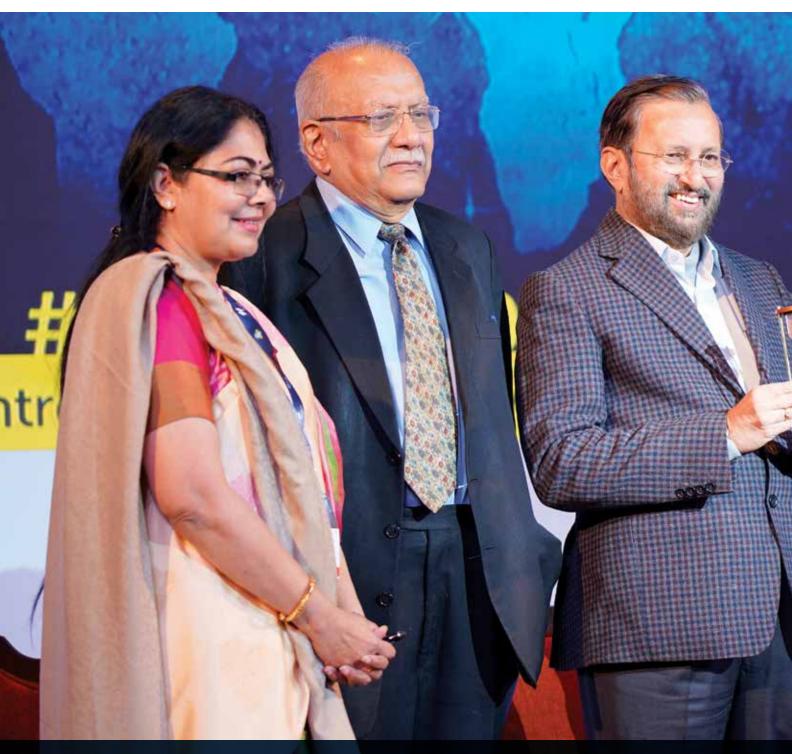
 Mr Prakash Javadekar, Hon'ble Minister of Environment, Forest and Climate Change, Government of India

2019

Attaining the 2030 Agenda: Delivering on Our Promise

Mr M. Venkaiah Naidu, Hon'ble Vice
 President

Inaugural Ceremony



» L–R: Dr Annapurna Vancheswaran, Senior Director, TERI; Mr Nitin Desai, Chairman, TERI; Mr Prakash Javadekar, Honourable Minister of Environment, Forest and University; Dr Ajay Mathur, Director General, TERI



Climate Change, Government of India; Prof. Jeffrey Sachs, University Professor and Director, Center for Sustainable Development, Columbia

Inaugural Address



"Professor (Jeffrey) Sachs, whom we have rewarded for his selfless service in the sector, Mr Nitin Desai, Dr Ajay Mathur, Dr Annapurna Vancheswaran, and friends, I am delighted to be here as WSDS marks its 20th year. What I recall is that when TERI started, it soon became a global name of repute. I must congratulate TERI for addressing both national and global environment-related issues with zeal and for spreading the message of environment sustainability by bringing core environmental and climatic issues to the fore very effectively for the knowledge and benefit of all stakeholders. It is important to ask: How does one look at the climate change scenario? Ten years ago, there were many who believed that by 2012, the world would end. Interestingly, there was a movie made, based on this precise theme, titled – 2012. The world surely did not end but the film did a roaring business! The reason I say this is because I am not a pessimist. I recognize myself as an optimist.

I saw the IFAT Delhi 2020 Exhibition, which is being held alongside WSDS, and I would recommend that everyone present should visit it. Seeing it would make us realize that if human actions have caused climate change, the same human acts driven instead by intelligence and intent could provide us with necessary solutions that will allow us to overcome our existing problems. This is really a fight for the betterment of the world.

Sustainable consumption and sustainable production are closely interlinked, though I believe that sustainable consumption is a precursor to sustainable production since consumption begins with us. When I reviewed India's annual per head consumption of electricity, I noted that it stood at just 1200 kilowatt (kW) per annum. In America, it is 12,000 kW per annum. We have just 25 cars per 1000. Many countries range between 600, 400, and 800 per 1000. This brings us to the idea that one needs to think about sustainable consumption before anything else – a prevailing dictum often quoted by the Honourable Indian Prime Minister, who emphasizes on the role our lifestyles play in maintaining environmental balance.

The question is, are we ready to change our lifestyles by even a little bit? Perhaps, for symbolic reasons or perhaps, as mere commitments to ourselves? The reality though stands that people do not wish to change their lifestyles even minutely. They wish science and technology to offer solutions without them compromising on their unsustainable consumption levels. With our population threatening to reach figures of 8 and 9 billion, the pressure on a planet like ours is going to be huge. It is imperative that we take necessary efforts to care for our planet. It was for this reason that a 'sustainable' consumption lifestyle was included in the preamble of the Paris Agreement. And I think that was essential because unless we achieve sustainability in our consumption, we will not be able to achieve the Sustainable Development Goals (SDGs).

The SDGs are not merely mathematics. What happened after 30 years of the Rio Conference? Today, the world has reduced its annual emissions by only half per cent. It is shocking but also true, which makes us realize that we have much to do and achieve. And this responsibility rests with the developed world first. However, I do not see great action being taken on the part of the developed world. Countries simply do not wish to change their old habits. It is a common but differentiated responsibility which is important. In 2009, in Copenhagen, a financial aid of 100 billion dollars was announced, and voluntarily, nobody compelled. Jump to 10 years ahead, and the figure stands at one trillion dollars. Unless we address the main issues of finance and technology, we cannot have a world order where everybody practises sustainability because every climate action has a related cost. And unless somebody foots the bill, the poor will continue to bear the impositions of heavier taxes despite their least contribution to the problem. Those who became rich on the basis of more emissions and those who reaped the benefits out of it are sadly not the ones who foot the taxes. This cannot continue to happen. And therefore, the other aspect of technology transfer is also important. Technology with innovation is a useful solution. But unless it becomes affordable, the developing countries of the world will be unable to utilize it to their benefit. This demands more joint research and collaborations, and an accessible source of all climate change innovations. We need this kind of approach so that if we are tackling the disaster, we should also be able to make profits from this disaster. I appreciate that there is a cost to innovation but that cost-based price is a real price for such innovations. And therefore, technology is an important aspect of how the world can move towards the Sustainable Development Goals and make them achievable.

We, in India, have done tremendously well. In the film screened right before my address, there were shots of the savage Australian bushfires, which destroyed 22 million hectares of land. In Canada too, the destruction was huge. California witnessed a similar destruction. Despite the best technologies at hand, none could stop or curtail the fires. Do you identify this as climate change or the natural occurrence of extreme events? Whatever it may be, this does evidently have close linkages with the changing weather patterns across the world. My thoughts move to Australia, which has decided to cull 300 or 30,000 camels. In my country, farmers were troubled by red bull because they were eating their crops. So we decided to have population control over which there was much hue and cry. Culling however, does not evoke that kind of response from animal lovers. We must have one yardstick to judge everybody. And therefore, we have taken many things in our stride and have progressed well. We have taken the ambitious target of creating an additional 2.5 billion tonnes of carbon equivalent by growing India's forest cover. In the last four years, India is probably the only country which has grown its tree cover within forest and outside forest by 13,000 square kilometres. This is huge and we will continue to make such efforts. Since then, the Centre has released nearly 7 billion dollars to all the states for aggressive afforestation, whilst making it a public-driven movement. Publicprivate partnerships work well in such movements. Grow forests, use forests, and grow more forests.

Moreover, India has a thriving ecology. The world's largest tiger population at 2967 along with 3000 rhinos, 30,000 elephants, more than 500 lions, and with tremendous amount of other wildlife, India now has nearly 780 protected areas in the country. This is all credited to massive conservation efforts across governance levels. India has achieved this despite having only about 2.5% of landmass; only 4% of natural rainfall; and that too with 17% of human population and 18% of cattle population. Both require land, water, and food. In India, we worship our forests and our animals. Oneness with nature is the basic ethos of the Indian lifestyle. This is perhaps one of the reasons for the success in our forest cover growth, and we will ensure that this continues in the next few years.

As far as emissions are concerned, we have promised 30% to 35% reduction in emission intensity and India remains on track to achieve this target. We aim to achieve more. Reducing emission intensity is not a cheap solution because one requires new technologies to be used in industrial production and therefore, India needs to revise its emissions norms. I offer a simple solution to this. We call all stakeholders, cement industries. Today, we are at 50. The best of the world is at 100. How much you are ready to move ahead is the question. If they say 60, we fix it at 70. Now that becomes viable in two tranches and we could achieve the best-case scenario with these figures. India continues to reduce its energy and emission intensity very swiftly. We are using energy-efficient technology for all kinds of activities, industrial or otherwise. We are also pushing the usage of electric mobility. Probably, I am the first minister to use an electric vehicle since its launch and I enjoy using it every day. Efforts like these show our commitment.

The clean air programme and city-specific clean air programmes are also part of the effort. We have revised the waste management solutions, whilst coming out with construction demolition waste management manuals for the first time in India after independence. Our solar target – which when declared by the Prime Minister was an impossible target – is set at 175 GW of renewable sources. However, against odds, we have already achieved (the target of) 35 GW and an additional 35 GW is under completion while the target is set at achieving 100 GW before 2022. That's a huge contribution from India where, now, our Prime Minister has upscaled the target to 450 GW.

We have not exploited more onshore wind energy and that is a direction India aims to look at deploying. India is marching ahead on its SDGs, our biodiversity is rich, which we continue to extensively map, and will ensure that our biodiversity is not lost. As far as reversing land degradation is concerned, the Honourable Prime Minister has revised our target to have an additional 26 million hectares restored by next year (2021). And therefore, we are working towards restoring our land, using our water (resources) efficiently, using all our scarce natural resources efficiently, along with efforts towards sustainable consumption, through a sustainable production path, treading which India will present itself as a new example of how a multilateral treaty needs to be followed and met.

Another concern for me is the usage of all kinds of gases for cooling purposes such as refrigerators, air conditioners, and others. Fearing the depletion of the ozone, there was a sudden adoption of hydrochlorofluorocarbons (HCFCs). However, HCFCs were shortly replaced by hydrofluorocarbons (HFCs). Now people are saying that HFCs are very bad, hydrofluoroolefins (HFO) is the way forward. And I recollect our own industrialist – Mr Godrej, about 20 years back, earmarked HFO as the way forward but he had no takers for his research-backed alternative then. Converting to HFO now, without any foreign aid, is going to impose a heavy challenge to the developing countries of the world.

However, India's Energy Ministry has already issued a circular that cites minimum default temperatures in new air conditioners to be set at 24 degrees. This is important as it would save energy tremendously. In many parts of India, we get 17 degrees temperature from ACs across all kinds of venues. I have often enquired why the temperature does not go below 17, which is why setting the default temperature at

24 is going to have a huge impact when it comes to energy reduction. India, thus, is following a sustainable trajectory of progression to achieve its Sustainable Development Goals.

I hope that today's seminar, and the Summit in its entirety with the participation of 21 countries, will definitely brainstorm on ideas of how countries can be tactfully driven to make sustainable choices and ensure a sustainable lifestyle for all their citizens. If we can do this, this Summit will guarantee for itself tremendous success and to that end, I wish TERI all the best for the Summit, and I thank you all for being present today."

Sustainable Development Leadership Award



TERI felicitates Prof. Sachs with the Sustainable Development Leadership Award

A significant feature of the Summit is the Sustainable Development Leadership Award (SDLA) which was instituted by TERI in 2005.



This award felicitates global leaders for their contributions in the field of sustainable development and environment protection.



Acceptance Speech by Professor Jeffrey Sachs, Director, Center for Sustainable Development, Columbia University

"Honourable Minister, Ajay Mathur, Nitin Desai – dear colleague and a great leader,-ladies and gentlemen, it's been a profound honour for me to be part of this wonderful and unique Summit for 20 years. Time flies! And it seems really like a blink of an eye that this Summit began and that we have been debating, learning, and discussing this challenge each year in Delhi. I am afraid we have not solved the problems yet. Indeed, I am sorry to say we haven't even turned the curve in 20 years. We are all over the world and in every way still coming closer to dire environmental crisis. Now we have a new emerging disease that is terrifying the world – mega forest fires in many parts of the world that are devastating, air pollution beyond belief in this country even with the struggles to control it but absolutely dramatic - but you have in this Summit the perseverance, the knowledge, the intelligence, the leadership of TERI, which is a world renowned and great institution that is keeping up the fight, the challenge and most importantly, the knowledge that we are going to need. So I am going to have the pleasure to offer some thoughts about geopolitics of this challenge tomorrow. I would say, unfortunately, we are stuck in politics rather than solutions, politics of the struggle-to-power kind rather than politics of problem-solving kind. Until we move to politics of problem solving, we are going to face ever-growing dangers in the world. It's a profound honour, but also a challenge for me and for all of us here today to rededicate on the 20th anniversary of this Summit for the fight ahead. We are going to be here for years to come, I look forward to attending, I think I had been here probably 19 of the 20 Summits and I am committed to being here every year until we get the jobs done. So thank you so much for this great honour."

Making Words Count



Mr Prakash Javadekar

Hon'ble Minister of Environment, Forest and Climate Change , Government of India

If human actions have caused climate change, the same human acts, intelligence and intent can provide solutions.



Prof. Kazuhiko Takeuchi, President, Institute for Global Environmental Strategies

I had the privilege of representing the Institute for Global Environmental Strategies (IGES) at the WSDS, where renowned global leaders gather every year to deliberate on shaping a sustainable future for the planet. Innovation and transformation being the key pillars of sustainability, WSDS has made a tremendous contribution in sharing and strengthening the knowledge in this direction. I wish WSDS continued success in contributing to humanity the objective of achieving a sustainable world.





Mr Nicholas Stern, Professor of Economics and Government, Chair, Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science

The next decade is vital in shaping the future well-being of the inhabitants of the planet. If we go on in the next decade investing, consuming, and producing in the same manner as in the past, the consequences for the future climate will be profoundly damaging to lives and livelihoods across the world. On the other hand, the transition to the low-carbon economy can be the driver of strong, inclusive, and sustainable growth. Indeed, it can be the growth story of the 21st century.





Mr Manjeev Puri, Former Ambassador, Embassy of India, Nepal

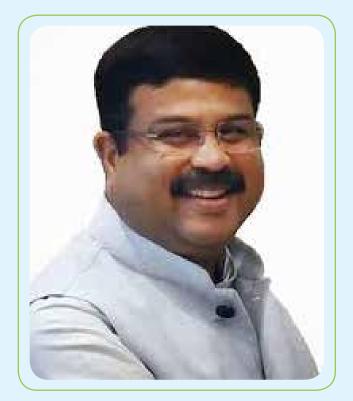
WSDS is an excellent platform for taking forward the interests of developing countries in sustainable development.



Mr Ashvin Dayal, Senior Vice President, Power Initiative, The Rockefeller Foundation

The WSDS forum provides a critical opportunity for the global community to reflect and act with greater urgency, especially with only 10 years to go to achieve the SDGs.

Making Words Count



Mr Dharmendra Pradhan

Hon'ble Minister of Steel, Petroleum and Natural Gas, Government of India

In our pursuit to end energy poverty in the country, we will remain cognizant of the need to route economic development firmly to achieve the 2030 UN Sustainable Development Goals (SDGs) and commitments made at COP21.



Prof. Jeffrey D. Sachs, Director at Center for Sustainable Development, Columbia University

We have not turned the curve in 20 years. The world is stuck in politics of power rather than in solutions. Until we move to the politics of problem solving, we will continue to face challenges.



Ms Brigitte Collet, French Ambassador for Climate Change Negotiations, Renewable Energy and Prevention of Climate Risk, Ministry of Europe and Foreign Affairs of France

Success at COP26 is vital and possible if we join forces to face the common threat that climate change is and cooperate in the spirit of urgency and solidarity which made the Paris Agreement possible.



Mr Jairam Ramesh, Hon'ble Member of Parliament, Government of India

Commitments can never be top-down; they are necessarily dictated by domestic political economy, which means it has to be bottom-up. If we can achieve technological disruption to the scale of mobile telephony, only then we can expect the zero carbon goals to be achieved in this decade.



Mr Parameswaran Iyer, Secretary, Ministry of Jal Shakti, Department of Drinking Water and Sanitation, Government of India

Despite adequate water availability, only about 18% of rural households in India have pipe-water supply today. By 2024 (in the next five years), the National Jal Jeevan Mission has an ambitious goal to provide Functional Household Tap Connection (FHTC) to every household in the country.

Making Words Count



Mr C K Mishra, Secretary, Ministry of Environment, Forest and Climate Change, Government of India

The National Clean Air Programme (NCAP) approach to air pollution action in 122 intervention cities is not generic. It takes into consideration unique city-specific pollution factors. I am confident that city-specific planning will enable India to achieve cleaner air.



Mr Yvo de Boer, Advisor and Consultant on International Environmental Policy and former Executive Secretary of the United Nations Framework Convention on Climate Change

The saying, 'Where there's a will, there's a way' was mis-drafted at UNFCCC. A more accurate way to frame it in the climate change context would be: 'Where there's a way, there's a will'. There's recognition of urgency but there's no understanding on how to deliver.



Lord Adair Turner, Chair, Energy Transitions Commission

We can't deny the US pulling out of the Paris Agreement is a tragedy, but it just creates a bigger role for India and China.



Mr Gaurav Gogoi, Hon'ble Member of Parliament, Government of India

India's Air Act must seek to link air pollution with health, and make health a priority focus. India also needs an immediate 10-yearroadmap to address air pollution.



Mr Amitabh Kant, CEO, NITI Aayog

Indian industry must be the biggest driver of change to make us the centre of manufacturing electric vehicles (EVs). There are two challenges to address – to ensure new form of urbanization which is based on public transportation, and to ensure India doesn't lose out among global manufacturers of tomorrow.



Dr Rajiv Kumar, Vice Chairman, NITI Aayog

Cooperative and competitive federalism, where Indian states learn best practices from each and also compete with each other, will fast-track the 2030 Agenda. If India does not achieve the SDGs by 2030, the world will not too.

Making Words Count



Dr Adonai Herrera-Martinez, Director, Environmental Funds, European Bank for Reconstruction and Development

This will be a critical decade to steer the global economies towards low-carbon pathways compliant with the 1.5°C objectives. The challenge is titanic, and so is the determination of millions of people that see climate change as the challenge of our generation. The World Sustainable Development Summit brings together experts from multiple sectors across the world to share their ideas and find synergies to achieve such a collective goal.



Mr Swayandipta Pal Chaudhuri, Managing Director and CEO, Imagine Panaji Smart City Development Limited

The world shall look towards the World Sustainable Development Summit (WSDS) 2020 for causing a profound and meaningful impact on the collective future and direction of development of the world with India playing a key leadership role in fostering dialogues and deliberations towards concrete, constructive, and collaborative actions for sustainable development.



Mr Sadhan Ghosh, Dean, Faculty of Engineering and Technology and Professor, Mechanical Engineering, Jadavpur University

The World Sustainable Development Summit, a most vibrant event, helps to bring together the policymakers, researchers, implementers including industries, NGOs, and other stakeholders to think about sustainable development.



Mr Ashwin Shroff, Executive Chairman, Excel Industries Limited

Waste isn't waste until we waste it. We at Excel Industries Ltd also believe in a similar philosophy, and from the very beginning, we have focused on innovations to create sustainable value. Excel is a pioneer in municipal solid waste management. Over the years, the company has designed and developed several path-breaking innovations in composting as a technology for solid waste treatment.



Mr Atul Bagai, Head of Country Office (India), United Nations Environment Programme

Unless they are considered Indian goals, and not UN Goals, we will not succeed in achieving the SDGs.



Mr Nitin Desai, Chairman, TERI

Having participated in practically all the WSDS editions for 20 years now, I have come to appreciate the role that it (the Summit) has played in raising consciousness about the challenges of sustainable development among decision-makers in the government, industry, research bodies, and media.

Making Words Count



Ms Shoko Noda, Resident Representative, United Nations Development Programme

Platforms like the World Sustainable Development Summit offer an incredible opportunity for communities, leaders, policymakers to come together to take stock of our commitments to build a cleaner, greener, and more resilient future for our planet. Initiatives like this will be crucial as we enter the #DecadeForAction to accelerate progress on the Sustainable Development Goals (SDGs).



Mr Hans Jacob Frydenlund, Ambassador, Royal Norwegian Embassy

We at 'Norway in India' are proud to be the country partner at WSDS 2020 organized by TERI. I do look forward to attending the plenary session on blue economy in particular. Norway is an ocean nation and the topic, Blue Economy, is of high priority. The world would need more resources and services from the ocean in the coming future. We must, therefore, join hands and take measures for oceans that are healthy and productive. I wish the event great success!



Dr Surendra Babu, Deputy General Manager, National Bank for Agriculture and Rural Development

Avoidance of the depletion of natural resources in order to maintain an ecological balance is the pursuit of global environmental sustainability. I look forward to the World Sustainable Development Summit to finalize an effective action plan to address the agenda of mobilizing the financial resources for implementing measures towards gender equality and agro waste management in India.





Dr Haraprasad Vaddiparthi, Advisor (Projects), South East Constructions Company Private Limited

In the light of the CAG's concerns regarding India's preparedness to achieve the SDGs, I hope WSDS 2020 will throw light on the way forward to achieve the SDGs by 2030.



Mr Vincenzo de Luca, Ambassador of Italy to India, Embassy of Italy

I am looking forward to the Youth Conclave for the COP event in Milan. Environmental education at school and an inclusive process giving voice to the younger generations are top priority for Italy ahead of COP26.



Mr Vikram Gulati, Country Head and Senior Vice President, Toyota Kirloskar Motor Private Limited

WSDS is an enriching experience through participation during various sessions. There was an interesting and thought-provoking panel discussion on e-mobility, which I enjoyed thoroughly.



Mr Jayant Sinha, Hon'ble Member of Parliament, Government of India

Modern companies with sustainable footprints are our economic green frontier. Our youth want formal jobs in these companies that form the green frontier. We need to unleash market forces that result in jobs and sustained economic development.

Making Words Count



Mr Vijay Gavarraju, Programme Manager, US India Clean Energy Finance, Climate Policy Initiative

I am eager to understand the technical and financial barriers for the upcoming climate sectors, especially e-mobility and industrial decarbonization.



Mr Vikash Mishra, Head, External Relations, Lithium Urban Technology

The World Sustainable Development Summit 2020 is a great collaborative platform for sustainability champions to learn and share from each other.



Mr Anand Kumar, Secretary, Ministry of New and Renewable Energy, India

Every rupee is important, every way to raise finance is important and every way to save the expenditure made is important.



Mr Rajeev Chaba, Managing Director, MG

For E-Mobility the 5% GST is the cake. The Faster Adoption and Manufacturing of (Hybrid) & Electric Vehicles (FAME) incentive is the cherry on top.

Youth Climate Conclave

The 'Youth Climate Conclave' was envisaged as a competitive and an educative mode of action, where youngsters from across the country were invited to join hands to address the issues of climate change. As part of the EU-funded Strategic Partnership for Implementation of the Paris Agreement (SPIPA) project, the programme concluded on 31 January 2020. The Conclave involved a series of activities such as photography and blogging competitions for youth. The winners were awarded during the presentation of the *Youth Declaration on Climate Action* as part of the Summit valedictory.

The two-day deliberations encompassed capacity building sessions on the science of climate change, international response to climate change, and India's position on climate policy. The inaugural session was attended by Dr J. R. Bhatt, Advisor, Climate Change, MoEFCC, GOI, Ms Henriette Faergemann, First Counsellor, Environment, Climate and Energy Counsellor, EU Delegation to India, Dr Arunabha Ghosh, CEO, CEEW, Dr Ashish Chaturvedi, Director, Climate Change, GIZ, and Dr Livleen K Kahlon, Associate Director, TERI. The Italian Deputy Head of Mission in India, Mr Pietro Sferra Carini presented the Italian initiative related to the upcoming COP26.

Moreover, all the students participated in a simulation exercise and shared their viewpoints on mitigation and adaptation strategies within their respective negotiation groups. The outcome of the deliberations was the *Youth Declaration on Climate Action*, which was presented by the students at the 'Special Session for Youth' on 31 January 2020 as part of the World Sustainable Development Summit in the presence of Mr Nitin Desai, Chairman, TERI, Dr J. R. Bhatt, Advisor, Climate Change, MoEFCC, GOI, Mr Atul Bagai, Head of Country Office (India), UNEP, Mr Raimund Magis, Deputy Head, Delegation of EU to India, and Dr Ajay Mathur, Director General, TERI.

The Conclave engaged with 85 students from across the country. These students were selected after a rigorous application process and the winners of photography and blogging contests were rewarded at the Summit. The winning photograph featured in the 2020 annual calendar and the winning blog entries were included in a monograph titled *Young Voices of the Planet*.



Thematic Tracks

The thematic tracks held as part of the Summit are designed as parallel break-away sessions which allow for discussions of considerable depth on niche topics. The tracks are held simultaneously on themes in sync with the overall Summit theme and sub-themes. The thematic tracks serve as a curtain-raiser to the Summit, setting the tone for the succeeding days. These thematic tracks are populated by experts and key practitioners from respective fields.

This year, WSDS hosted 20 distinct thematic tracks, deliberating on an array of sustainable development issues and solutions.

	TAITINLIIU	
GROUP-A		
Educate, Inspire and Empower: Teachers for a Greener Tomorrow	TATA STEEL # WeAlsoMakeTomorrow	
Energy Management Solutions For SMEs	IGES Institute for Glappia Environmental Strategies	
Mainstreaming Development and Enhancing Climate Resilience: New Opportunities for States in India	Creating Innovative Solutions for a Sustainable Future	
Entrepreneurial Solutions for the Challenges of Climate Change	SEED promoting entrepreneurship for sustainable development adelphi	
De-risking Investments in Decentralised Solar Solutions	GERMANWATCH	
Forest: A Tool for Adaptation and Mitigation of Climate Change	NCICS Horn Cardina Mathate for Canada Situates	
Managing Intermittency of Demand and Supply at Electricity Distribution-level	McKinsey & Company () () () C/PDCL BSES BSES () (CESC	
Multi-level Actions to Strengthen NCAP	Bloomberg Philanthropies	
Tracking India's NDCs: Methodologies and Tools for Tracking Progress on Mitigation and Adaptation Policies/Actions in India		

PARTNERS

GROUP-B		
Implementation of NAMA: Improving Waste Management in India	Giz Destache Gesellschaft Tor bitarrationale Zesammenurbeit (0/2) (mbH	
Clean Air Project: A SDC Initiative	Sthwarzensche Edgenosserschaft Sonfederation sultzen Enefederation Sitzens Edefederation suitzen Swihs Agency for Development and Cooperation SIC	
Transparency and Accountability in Global Climate Governance: Needs, Challenges and Opportunities for India	Climate MacArthur Transparency Foundation	
Inclusive and Integrated Mobility Systems for Cities	Uber	
Finance Mechanisms for Accelerating Industry Decarbonization	Federal Miniary For the Conversion, Natura Consensation with Natural Consensation Instant on a decision of the Commun Standarding	
SMART Policy Levers for Achieving Sustainable Cooling	MacArthur Foundation	
Pilot Implementation of India's Forestry NAMA in Assam	Giz Index to Experison of the Experison of the Control Michael Micha	
Alternativism: Give Paris a Chance	Mahindra Rise.	
Battery Energy Storage at Distribution Downstream - Investment Opportunities and the Way Forward	MacArthur Foundation () () () () () () () () () () () () ()	
The Green Business Opportunity – EU Excellence in India	European Union	
Achieving SDG 6 Goals: The Need for Circular Economy Approaches	the International water association	

Tracing the Summit Days DAY-1

The 2020 edition of TERI's annual flagship event, the World Sustainable Development Summit (WSDS) was inaugurated on 29 January 2020 by Mr Prakash Javadekar, Honourable Minister, Ministry of Environment, Forest and Climate Change (MoEFCC). In his inaugural address, Mr Prakash Javadekar expressed his satisfaction on India's role in sustainable consumption and emphasized on the urgent need to change lifestyles as stated in the preamble of the Paris Agreement. He highlighted that India realizes that climate action has a cost and thus, there is an emerging need for open-source technology for climate change innovations. He enumerated India's accomplishments in the field of sustainable development including an increase in the green cover and implementation of aggressive afforestation. Mr Javadekar also inaugurated the first edition of IFAT Delhi – North India's trade fair for water, sewage, solid waste and recycling. Additionally, WSDS '20 years' logo was also unveiled at the inaugural ceremony.

In his welcome address, Mr Nitin Desai, Chairman, TERI emphasized on the need for practical expression of the term 'sustainable development' in order







» L-R: Lord Adair Turner, Chair, Energy Transitions Commission, Dr Ajay Mathur, Director General, TERI, and Mr Jairam Ramesh, Honourable Member of Parliament, Government of India

to integrate the agendas of development and environmental protection.

TERI was honoured to felicitate Professor Jeffrey D. Sachs with the Sustainable Development Leadership Award (SDLA) 2020 for his contribution in the field of sustainable development. In his acceptance address, Professor Sachs stated the importance of shifting the geopolitics of tomorrow from the current politics of power and crime to politics of problem solving.

In his welcome address, Dr Ajay Mathur, Director General, TERI stressed on the need to assess the present situation and take necessary steps to restore our ecosystems to achieve the 17 SDGs and honour the Paris Agreement. He also highlighted the importance of fostering new partnerships and strengthening the existing ones. Dr Mathur welcomed the Summit delegates to the first edition of a joint venture with IFAT Delhi, focusing on technological innovations in the sector of water and waste management solutions.

Enumerating the Summit sessions that will set a path for action and 'make the decade count' for a brighter future for the next generation, Dr Annapurna Vancheswaran, Senior Director, TERI in her concluding remarks thanked the Summit partners and delegates across sectors for their presence and participation in the deliberations.

Over 20 thematic tracks covered a variety of topics through in-depth discussions with experts from various fields. This was followed by plenary sessions, a key one being with Dr Ajay Mathur, Lord Adair Turner, Chair, Energy Transitions Commission, and Mr Jairam Ramesh, Honourable Member of Parliament, on the overarching theme – 'Towards 2030 Goals: Making the Decade Count'. Lord Turner asserted that while United States of America leaving the Paris Agreement was a tragedy, it also meant that China and India would need to play a bigger role. Mr Ramesh foregrounded how a ground-up framework was the need of the hour for a zero-carbon economy, which would include domestic, economic, and political policies.

The finale session was titled 'Fireside Chat: Status Check on Renewable Energy Financing for C&I Clients in India: The Year That Was: Key Challenges, Desired Regulatory Framework and Sectoral Outlook'. This thought-provoking discussion presented many takeaways on efficient use and management of sources of renewable energy.

DAY-2

The second day set the ball rolling for the plenary discussions and special sessions. These discussions revolved around the major themes of the Summit that included – Mobility, Water, Industry and Energy Transition, Air Pollution, Green Finance, and Blue Economy.

Special Session: Geopolitics of the SDGs and India's Leadership in the World

The day began with a keynote address by Professor Jeffrey D. Sachs, Director, Center for Sustainable Development, Columbia University, on 'Geopolitics of the SDGs and India's Leadership in the World'. In his address, Professor Sachs discussed the global dynamics of climate change and the role of India in sustainable development. He also emphasized that India is one of the most vulnerable countries with huge stakes in the success of the global venture of sustainability. The session was chaired by former Ambassador Mr Manjeev Puri, Member, Advisory Board, TERI. Within the paradigm of the Sustainable Development Goals (SDGs), Mr Puri pointed out the importance of sustainability in the United Nations agenda, which introduced the idea to the 'global minds'.



» Geo-politics of the SDGs and India's Leadership in the World

Special Session: Energy Future Map

During the Special Session, a keynote address was delivered by Mr Dharmendra Pradhan, Honourable Minister of Petroleum & Natural Gas and Steel, Government of India; and, the ensuing session was chaired by Dr Ajay Mathur, Director General, TERI.

The Honourable Minister discussed the urgent need to understand and act on the issues that are creating obstacles on the path of achieving the 2030 Goals and commitments made at COP. He was pleased to note that the Summit focused on energy and global attempts in moving towards green and clean energy systems. He also asserted that the objectives set for 2050 have unleashed a new paradigm in the energy sector. "The trajectory to end energy poverty in India in comparison to the rest of the world is based on special national circumstances," he said. Additionally, a report by TERI titled – Towards a Low Carbon Steel Sector: An Overview of the Changing Market, Technology and Policy Context for Indian Steel was also launched during the session. Sponsored by Shakti Sustainable Energy Foundation, this report is one of the first steps in the Indian steel industry towards developing a road map for a long-term decarbonization pathway.





Corporate Conclave I: Mobility Talks

Setting the context of the opening session, Dr Ajay Mathur, Director General, TERI threw light on electric mobility as the 'future of mobility'. He further stated that there have been many initiatives taken up by the government, particularly related to introducing the concept of electric mobility in the country and the subsidies that are provided as part of Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicle (FAME) India I and II schemes. He suggested that we need to look into decarbonization in key sectors such as road economy and in the process, push a transition to 100% green electricity-based mobility. Mr Amitabh Kant, CEO, NITI Aayog, emphasized that 70% of the diesel and 99.6% of the petrol in India are consumed by the transportation sector, which is why the shift to clean fuels is absolutely imperative to our country. He added that in three years' time, electric vehicles (EVs) will be much cheaper than combustion vehicles, and hence, the initial cost of buying these vehicles will be considerably affordable. This would ultimately mean that we would be able to move from 200 packs in combustion vehicles to 20 packs in EVs. Significantly, for boosting the sale of EVs, the government of India levies a minimal GST of 5% on EVs as opposed to a GST

of 28% on combustion vehicles. Additionally, there is also a provision of a subsidy of up to 1.5 lakh rupees. In his opinion, the biggest transformation in the coming decade could be the rapid fall in the cost of battery storage. Once that is achieved, much of the power across the world would not be based on or derived from fossil fuels, but rather rely on renewable energy. Such a development could lead to a decentralized, digitized, and decarbonized world.

Session 1: Need for Clean Mobility: Exploring the Options Available Towards Cleaner Future

As the transport sector is one of the key emissiongenerating sectors, the discussion focused on the need for transition towards clean mobility solutions. The

In order to move towards a shared, connected, and zeroemission world, it is important that the battery is charged with clean power and not fossil power.

> - Mr Amitabh Kant, CEO, NITI Aayog



deliberations focused on facilitating such a transition in a holistic manner. The transition to cleaner and sustainable mobility future should ideally encompass multiple objectives of improving liveability, reducing air pollution at the city level, and enhancing national trade security, and energy security.

Session 2: Inroads into E-Mobility – Enabling Environment to Encourage EV Penetration

The session began with a discussion on the key challenges in the adoption of e-mobility in India. The future adoption of EVs is dependent on the consumers' trust in them. This trust could be strengthened through awareness based on experience and exposure to EVs. Dignitaries shared their insights on how the cases of EV adoption differed drastically between multiple countries. The panel further discussed the aspects of EV industry and the infrastructural charging requirements that would vary for both rural and urban sectors. As a consequence, it is important that India develops specific solutions that could rely on and be compatible with the models of 'Make in India', 'Design in India', and 'Develop Skills in India'.



Corporate Conclave II: Addressing Climate Change through Waste Management Initiatives

This session broadly focused on various elements of climate change and plausible ways to reverse the effects of climate change. Mr Sanjay Mitra, Professor of Practice, IIT Delhi stated that waste management is a matter of serious concern for India, where urbanization has led to an excessive generation of municipal waste that must be categorized into solid waste and waste water. Dr S. K. Ghosh, Professor and Former Head Mechanical Engineering Department, Jadavpur University said that climate change and resource consumption are correlated, and the risks can only be addressed by using a multipronged approach.



Plenary Session: Beyond Connections – Sustaining Universal Energy Access in India

The framework of energy access set the theme of the discussion on achieving the targets of the Sustainable Development Goals (SDGs). Unlocking the transformative potential of an electricity connection is crucial for both India and the international community. The panelists deliberated on the success of energy provisioning till date, along with the



significant challenges that such a developmental goal must overcome. The experts were in agreement that while the reach of energy connections in India has expanded exponentially, the reliability of this energy input and the productivity of the output are pertinent aspects for improving developmental outcomes.

Plenary Session: Success at COP26?

In his opening remarks, Ambassador Ajai Malhotra, Distinguished Fellow and Senior Advisor (Climate Change), TERI said that the developing world should look towards securing sustainable development and tackling climate change. Mr Yvo de Boer, Advisor and Consultant on International Environmental Policy and former Executive Secretary, UNFCCC expressed hope that all countries would strike a mutual agreement on an increased ambition at COP26 since the climate change challenge has reached a level of massive global action. Ms Brigitte Collet, French Ambassador for Climate, mentioned that in order to achieve success at COP26, there is an urgent need to consolidate the four pillars of the Paris Agreement architecture and integrate the youth into the process. HE Mr Vincenzo de Luca, Ambassador of Italy to India, Embassy of Italy, mentioned that the UK and Italy are doing their best for COP26 and acknowledged that the inclusion of every stakeholder to tackle the challenges of climate change is extremely crucial. In his address, Professor Nicholas Stern, Member-COP26 Advisory Board, highlighted five essential strands that feed into the Nationally Determined Contributions (NDCs) and the long-term strategy that fundamentally underlines the narrative of aiming for a zero carbon economy through a sustainable and an inclusive growth.



Plenary Session: Strengthening National Clean Air Programme for Breathable Air

The day's final session witnessed a discussion on air pollution with a **keynote address by Mr C. K. Mishra, Secretary, Ministry of Environment, Forest and Climate Change,** who spoke about the National Clean Air Programme's (NCAP) approach to air pollution, "It takes into consideration unique cityspecific pollution factors," he said. Mr Gaurav Gogoi, Member of Parliament, highlighted the need to link India's Air Act with health and make it a priority. Ms Priya Shankar, Director, India Environment Programme, Bloomberg Philanthropies, spoke of Bloomberg Philanthropies' initiatives in partnership with TERI and Shakti Sustainable Energy Development on technical assistance on NCAP as part of which, work is being carried out in Surat, Patna, and Bengaluru. Dr Ajay Mathur, Director General, TERI, shed light on the current air pollution scenario in the Indo-Gangetic Plains and explained how metrology could play a major role in tackling air pollutant emissions. Mr Jake Schmidt, MD, International Programme, NRDC defined the air pollution context of the 'American Air Quality' scenario. He explained how air pollution in America has severely impacted the population, especially children.







Special Address and Launch: McKinsey Global Institute Report

The final day of the Summit kicked off with the launch of a report by McKinsey & Company on 'Climate Risk and Response: Physical Hazards and Socioeconomic Impacts'. The session was chaired by Dr Ajay Mathur, Director General, TERI, who was in conversation with Mr Rajat Gupta, Senior Partner, McKinsey & Company. In his keynote address, Mr Gupta began by emphasizing on the need for such a report by drawing attention towards the global climate crisis. He said, climate change has already started showing severe impacts on multiple spatial levels and that will only intensify if not addressed soon. The report tries to link climatic models with economic projections by taking into consideration specific cases that foreground the effects of climate change risks.

Plenary Session: Achieving the Common Target: Opportunities and Challenges, Universal and Equitable Access to Safe Drinking Water

The session on universal access to safe drinking water was presided by Mr Parameswaran lyer, Secretary, Ministry of Jal Shakti, Department of Drinking Water and Sanitation. In his keynote address, he talked about the role of the ministry in resource management along with the policy on lastmile delivery. Mr Dan Alluf, Counsellor, Embassy of Israel, Mr Cherian Thomas, CEO and National Director,



World Vision India, Dr Haraprasad Vaddiparthi, Chair, International Water Association Specialist Group on Design, Operation and Maintenance of Drinking Water Treatment Plants, discussed the various opportunities and challenges that India is currently grappling with in its journey towards the achievement of SDG target 6.1. This target calls for 'universal and equitable access to safe and affordable drinking water for all'. The session was chaired by Dr S. K. Sarkar, Distinguished Fellow, TERI, who highlighted that the poor and vulnerable sections of society bear the brunt of lack of good quality water and poor sanitation. Therefore, there is a need for local, national, and international efforts to achieve universal and equitable access to safe drinking water in India.

Plenary Session: Leadership Coalition on Energy and Industry Transition

The session chair Mr R. R. Rashmi, Distinguised Fellow, TERI began the discussion by referring to the interlinkages between energy and industry transition. He delved into the challenges faced by India, where the demand for key materials such as steel and cement are set to expand exponentially in order to meet the developmental needs in the future. The speakers included Mr Nitin Prasad, Chairman, Shell India, Dr Måns Nilsson, Executive Director, Stockholm Environment Institute, Mr Gurdeep Singh, Chairman and Managing Director, NTPC, Mr David Turk, Acting Deputy Executive Director, International Energy



Agency, and Mr Suvojoy Sengupta, Partner, McKinsey & Company. The esteemed panel highlighted that industries form a major part of global emissions today that are only set to rise if there is no timely intervention. New solutions were discussed that included the use of new fuels such as hydrogen, electrification of lowtemperature heat processes, and so on.

Climate change has now moved into the boardroom – it is not just about corporate social responsibility.

> - Dr Måns Nilsson, Executive Director, Stockholm Environment Institute

Plenary Session: Transformative Actions to Revive Green Finance

The keynote address was delivered by Mr Anand Kumar, Secretary, Ministry of New and Renewable Energy, who stressed on the need to put pressure on the developed economies to earmark their investment portfolios in order to allow the flow of concessional finance to the developing countries so that universal energy access can be achieved. He highlighted the innovative ways of financing that have been explored so far in India, and have been instrumental in mobilizing green finance. During the

80% of climate finance is raised in the same country it is spent so therefore, that reinforces the importance of understanding how national-level policy can mobilize finance.

- Prof. Kelly S Gallagher, Director, Climate Policy Lab and Co-director CIERP, The Fletcher School, Tufts University



In reality, this is not about climate finance. It's about making regular finance climate-smart.

- Mr John Roome, Senior Director, Climate Change, World Bank

panel discussion, Dr Surendra Babu, Deputy General Manager, Farm Sector Policy Department, NABARD highlighted the nature of financial challenges in sectors including farming, agriculture, and cultivation from the perspective of the development banks in India. Mr Deepak Bagla, MD and CEO, Invest India, discussed the role of investment promotion, startups, and innovation in mobilizing climate finance. Professor Kelly Sims Gallagher, Director, Climate Policy Lab and Co-director CIERP, The Fletcher School, Tufts University highlighted the role of national- and state-level policies in mobilizing private sector finance. Dr Adonai Herrera-Martínez, Director, Environmental Funds, EBRD, and Mr John Roome, Senior Director, Climate Change, World Bank shared different perspectives on green finance through the lens of multilateral development banks (MDBs). The session was chaired by Mr Dipak Dasgupta, Distinguished Fellow, TERI.

Plenary Session: Blue Economy for Agenda 2030 – Aligning Economic Development for Sustainability of Oceans

The session chair Ambassador Chandrashekhar Dasgupta, Distinguished Fellow Emeritus, TERI initiated the plenary with a briefing on the importance of blue economy and its linkage with the Sustainable Development Goals, specifically SDG 14 ('life below



water'). Mr Ratan P. Watal, Member Secretary, **Economic Advisory Council to the Prime Minister,** NITI Aayog, delivered the keynote address and stated that blue economy is a key driver for economic growth and acceleration, and that SDG 14 is the guiding principle for global governance in the area. Dr M. Rajeevan, Secretary, Ministry of Earth Sciences (MoES), India, highlighted that by 2030, India aims to attain significant technological development in the fields of deep sea mining, submersibles for exploration activities, tapping offshore wind energy potential, and generating potable water. Mr Hans Jacob Frydenlund, Ambassador of Norway to India, highlighted that Norwegian economy is highly dependent on blue economy and has the longest coastline that serves as a major storehouse of resources, renewable energy, and food. Thus, there is a high importance of oceans socially, economically, and environmentally, he asserted. Mr Patrick Médecin, Ambassador of Monaco to India and Japan discussed how Monaco has taken several steps to boost blue economy as it is highly dependent on oceans although it is the second smallest country in the world. The protection of marine

resources is necessary for both the environment and economy, and these resources also help maintain sustainable development in the country.

Plenary Session: Fasttracking the 2030 Agenda

The final plenary of the day brought together former and current UN minds along with Mr Nitin Desai, Chairman, TERI, Mr Atul Bagai, Head of Country Office (India) UNEP, and Ms Shoko Noda, India Resident Representative, UNDP, who highlighted the importance of inter-departmental communication and the need for a national policy in each department for the SDGs to fast-track the 2030 agenda. **The keynote address was delivered by Dr Rajiv Kumar, Vice Chairman, NITI Aayog, on policies such as 'Aspirational Districts Programme'** that are being undertaken by the government to make the SDGs monitorable while focusing on their achievement through local efforts.





» Dignitaries on stage during the valedictory session



Valedictory Session: The Future of Sustainability

The valedictory session was graced by Mr Jayant Sinha, Honourable Member of Parliament, who, in his address, introduced the 'farm-to-green frontier' development model. He compared this to the traditional 'farm-to-factory' model, which thrives on the combination of urbanization and industrialization. Mr Nicholas Stern, IG Patel Professor of Economics and Government, Co-director of the India Observatory and Chair – Grantham Research Institute, LSE, in his remarks, stressed that change is possible through rapid technological advancement, international agreements, and collective efforts from youth. Dr Ajay Mathur concluded the Summit by reminiscing about the beginning of WSDS's journey and mentioned the new partnerships that WSDS It is important that we manage the unavoidable. It is also important that we avoid the unmanageable.

> - Dr Ajay Mathur, Director General, TERI

has formed over the years, such as the Indo-Swiss Programme on Air Pollution and other technological collaborations. WSDS 2020 launched 15 reports and hosted esteemed panelists from around the world. Dr Mathur thanked the 21 key partners of WSDS 2020 for their invaluable contribution to the Summit's success. In his closing remarks, Dr Mathur expressed his gratitude to IFAT Delhi, TERI colleagues, and everyone associated with the successful completion of WSDS 2020.

IFAT Delhi 2020

IFAT DELHI 2020: North India's Trade Fair for Water, Sewage, Solid Waste, and Recycling

The first edition of IFAT Delhi was co-located with the World Sustainable Development Summit (WSDS) 2020. With the launch of the second chapter of IFAT trade fair in India, Messe München India (MMI) aimed to establish the event as a constructive platform for the environment community in the country's north.

The exhibition showcased latest technologies across 44 stalls for waste water treatment, water extraction, waste management and recycling, waste-to-energy and air pollution.

IFAT—the world's leading trade fair for water, sewage, waste and raw materials management—is active across the world offering innovations, resources, and solutions, to address specific challenges faced by various markets. In addition to the event in Munich, IFAT also hosts individual trade fairs in China, India, Turkey, and South Africa as part of a global network for decision-makers in businesses operating in the environmental technology sector.



Prominent Publications

- Towards a Low Carbon Steel Sector: Overview of the Changing Market, Technology, and Policy Context for Indian Steel
- Climate Risk and Response: Physical Hazards and Socioeconomic Impacts by McKinsey Global Institute
- Floating Solar Photovoltaic (FSPV): A Third Pillar to Solar PV Sector?
- Clean Fuel for Cooking: Solutions to Achieve Better Air Quality
- Fleet Modernization: A Solution to Achieve Better Air Quality
- Crop Residue Management: Solution to Achieve Better Air Quality
- Executive Summary Towards a Low Carbon Steel Sector
- Aligning India's Sanitation Policies with the SDGs
- Accelerating the Uptake of Energy-Efficient Air Conditioners in India. Partner: MacArthur Foundation
- Carbon Finance: Solution for Mitigating Human-Wildlife Conflict in and around Critical Tiger Habitats
 of India
- Meeting the Challenges of Human-Wildlife Conflict Reconciliation in Dudhwa Tiger Reserve
- Decentralized solar PV near the rural user end so as to minimize distribution losses:
 - Reports for APSPDCL, CSPDCL, WBSEDCL, and BRPL. Partner: MacArthur Foundation
- Urban Air Quality Innovation to Action Guide. Partner: Bloomberg Philanthropies
- MRV Framework for Utility-Scale Solar Policies and Actions
- MRV Framework for Passenger Road Transport Policies and Actions
- Role of Motorcycles Taxis: Emerging Mobility Option. Partner: UBER
- Clean Air Project for India. Partner: Swiss Agency for Development and Cooperation (SDC)
- Assam Training E-Manual. Partner: GIZ
- Second Handbook on Carbon Pricing. Partner: CDP
- GWMC Documentation Report. Partner: GIZ

Summit Pre-Events

With the aim of widening the scope and outreach of the Summit, each year in the run up to the main Summit, a series of dialogues is held in various Indian cities to deliberate on and highlight the sustainability issues vital to specific regions. Since last year, these have taken both a regional and an international form. The discussions and outcomes of the pre-events were brought forward to the Summit platform. As a countdown to WSDS 2020, a series of five dialogues, out of which two were international, was held.

The Summit pre-events that were organized prior to WSDS 2020 included:

International Dialogues

Monaco International Dialogue (in collaboration with The Prince Albert II of Monaco Foundation): The dialogue in Monaco addressed two themes -'Renewable Energy – A Viable Tool for Clean Energy Transition' and 'Advancing Electric Mobility in Cities -Addressing Critical Challenges (Policies, Regulations and Challenges)'. The need to shift from viable to sustainable option in terms of people, planet, and profits was the main focus of the discussions during the first plenary. Globally, energy systems are undergoing rapid transition in how they are being used in industry, transportation, and homes. With an abundant stock of available renewable energy, the second plenary was about how the future would be driven by clean mobility – electric vehicles being one of the most commercially viable options at the moment. The panel discussed how governments and technology providers could partner effectively in achieving the common goal of clean mobility.



India (MMI) in the presence of Inaugural dignitaries



New York International Dialogue: The theme in focus was – 'Leadership Coalition on Energy and Industry Transition'. The event proceedings aimed at boosting both ambition and action to implement the Paris Agreement among the participating countries. On the sidelines of UNCAS (United Nations Climate Action Summit), TERI hosted the New York Dialogue in collaboration with The Rockefeller Foundation and the Energy Transitions Commission, India, and had the distinguished honour of hosting Mr Prakash Javadekar, Honourable Minister of Environment, Forest and Climate Change (MoEFCC), Government of India who delivered the inaugural address during the session.



Regional Dialogues

New Delhi Regional Dialogue: The theme in focus was – 'Leadership Coalition on Petrochemicals'. The round-table discussion brought together participants from leading organizations in the petrochemical sector to outline their innovative goals for the future of petrochemicals and efforts being made on a company level for a responsible growth plan.



Kolkata Regional Dialogue: In collaboration with the Bengal Chamber of Commerce & Industry (BCC&I), the central theme of the dialogue was – 'Water Secure Economies: Perspectives from the Industries'. Given that there are serious challenges presented by water scarcity, the panel deliberated on the efficient use of water resources and ways to check pollution in the industrial sector. The panel discussed issues of water scarcity and pollution, which are posing significant risks to the industry by threatening their supply chains, production capacity, and operations.



Regional Dialogue

New Delhi Regional Dialogue on Air Pollution: In collaboration with Natural Resources Defense Council (NRDC), the panel addressed the issues of air pollution premised on the themes of – 'Discussing National Measures and International Experiences in Mitigating Air Pollution' and 'Spotlight on Regional and City-Level Actions and Capacities'. The panelists discussed various ways in which national, state, and city-level mitigation actions could be strengthened to identify institutional mechanisms in order to enhance cooperation.



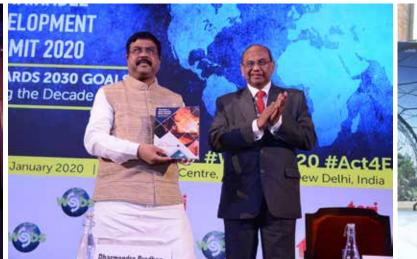






GLIMPSES FRO

















WSDS International Steering Committee



Anand Kumar Secretary, Ministry of New and Renewable Energy, Government of India



C K Mishra Secretary, Ministry of Environment, Forest and Climate Change, Government of India



Frances Beinecke President Emeritus, Natural Resources Defense Council (NRDC)



Suman Bery Non-Resident Fellow, Bruegel & Former Chief Economist Strategy and Business Environment, Shell International Limited



Preety M Bhandari Director, Sustainable Development & Climate Change Department, Asian Development Bank (ADB)



Kazuhiko Takeuchi President, Institute for Global Environmental Studies (IGES), Japan



Fatih Birol Executive Director, International Energy Agency (IEA)



Yvo de Boer Former Director General, Global Green Growth Institute, Korea and former Executive Secretary, UNFCCC

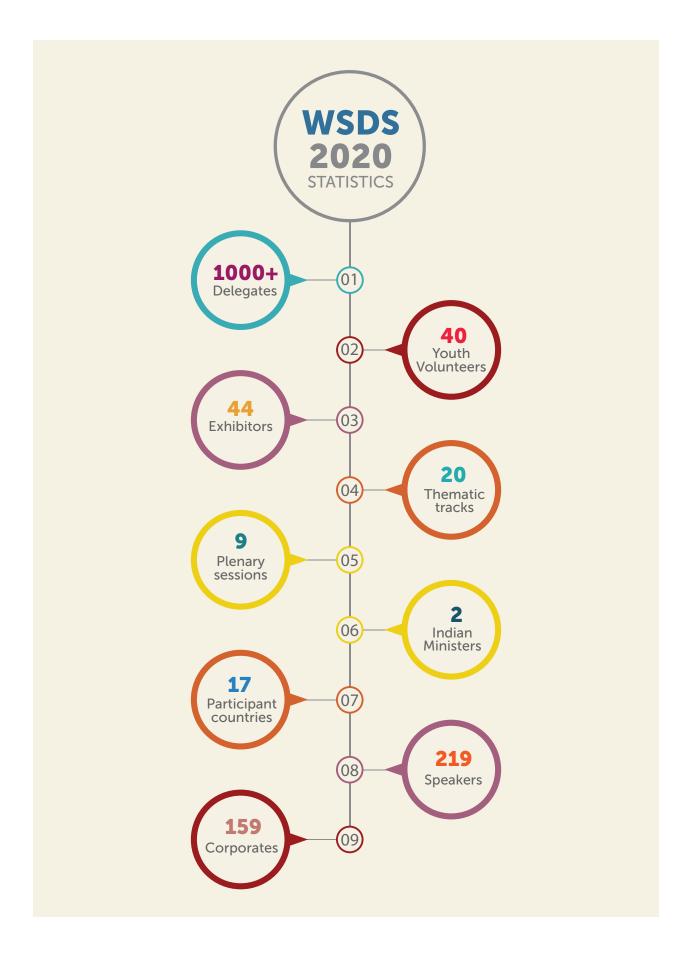


Manjeev Puri Former Ambassador, Embassy of India, Nepal



Arne Walther Former Secretary General of International Energy Forum and former Chairman, International Energy Agency (IEA)





WSDS 2020 PARTNERS

