

The CII Business Delegation hosted and participated in a number of key sessions in Week 2 of COP 27, Sharm-El-Sheikh, Egypt.

CII hosted 2 sessions on "Aligning Clean Air & Climate Actions" and "Driving Climate Adaptation & Resilience through Nature Conservation". Members also participated in several events, where they put forth the expectations, goals and pathways for Indian Industry towards climate action, as well as placed Indian achievements in just climate transition on a global platform, through Mission LiFE, as proposed by the Hon. Prime Minister and the Indian Government.

Here's sharing with you the highlights from the events of week 2, from COP 27, Sharm-El-Sheikh, Egypt.

15th Nov, 2022



L to R - Mr. Arvind Bodhankar, Executive Director- ESG & Chief Risk Officer, Dalmia Bharat Limited, Mr. Jyotin Kutty Sastabhavan, Chief Sustainability Officer Tata Motors, Ms. Seema Arora, Deputy Director General at Confederation of Indian Industry, Shri. Bhupender Yadav, Union Minister of Environment, Forest and Climate Change, Government of India, Mr. Ajit Gupte Ambassador, Embassy of India, Egypt, Ms. Pooja Patwari, Senior Manager, Avadaa Group.

14th Nov, 2022

India Submits its Long-Term Low Emission **Development Strategy to UNFCCC**



India submitted its Long-Term Low Emission Development Strategy (LT-LEDS) to the UNFCCC, at COP27 on the 14th of Nov, 2022. The LT-LEDS was launched by the Union Minister for Environment, Forest and Climate Change, Hon. Shri Bhupender Yadav, and focuses on the three pillars of mitigation, adaptation and means of implementation.

As Technical Advisory Unit for the task force on developing a low-emissions industrial system, CII under DPIIT as taskforce Chair, provided key inputs along with various line ministries and stakeholders towards the preparation of the document, which showcases India's efforts and commitment to enhance its mitigation ambitions while ensuring development with equity.

The strategy sets out India's vision for a sustainable future and outlines the steps that the country will take to achieve its targets. It also recognises that climate change is a global challenge and that all countries must work together to find solutions. The LT-LEDS also lays emphasis on LiFE, Lifestyle for the Environment, which calls for a worldwide paradigm shift from mindless and destructive consumption to mindful and deliberate utilization, as one of the drivers of mitigative action.

The salient features of the strategy are:

- 1. Low Carbon Development of Electricity Systems Consistent with Enhanced **Development Benefits**
- 2. Develop an Integrated, Efficient, Inclusive Low-Carbon Transport System
- 3. Promoting Adaptation in Urban Design, Energy and Material-Efficiency in Buildings, and Sustainable Urbanisation
- 4. Promote Economy-Wide Decoupling of Growth from Emissions and Development of an Efficient, Innovative Low-Emission Industrial System
- 5.CO2 Removal and Related Engineering Solutions
- 6. Enhancement of Forest and Vegetative Cover Consistent with Socio-Economic and Ecological Considerations.
- 7. Economic and Financial Aspects of Low-Carbon Development





Business Perspective on the Climate Change-Human Rights Nexus



CII Business Delegation member Ms. Seema Arora, Deputy Director General at

Confederation of Indian Industry participated in the session 'Getting Ready: Business Perspective on the Climate Change-Human Rights Nexus', a side event at COP 27 held by the IOE.

This session highlighted the importance of taking the social and employment dimension of climate action policies into consideration, as part of the resilience and adaptation agenda.

Here's what Ms. Seema Arora has to say about just transitions:

- In areas such as human rights, there is a need to now clearly define what is expected from businesses, because voluntary action is happening but it's too few and far between.

- 'Self enlightened businesses' understand and go beyond, even if there is no regulation, because they know it is important

- The climate transition is a complete economic transition. Without putting people at the centre of it, we can not have a just transition. This is why the Prime Minister and Government of India have called for LiFE, Lifestyle for Environment. This mission is so important because here, an individual is being put at the centre. They are being told how they can contribute to this transition and if they realise that, I think at every level we will be able to make a just transition.

- Businesses are key to these transitions. It is their responsibility to put the people's agenda at the centre and the government has to provide the policy to make it happen.

- The role of CII has always been to facilitate just transition and advocate with businesses about its importance by creating a business case for them.

16th Nov, 2022 **Energy Storage** : Charging the energy transition for



CII Business Delegation members participated in the session "Energy Storage - Charging the energy transition for businesses in India", organized by WBCSD and CII at COP 27, Egypt.

Energy storage is critical for India's changing power mix and it is central to solving power procurement challenges for commercial and industrial companies who still rely on diesel as a power back-up source but are keen to purchase stable renewable power. Energy storage will be essential for them to achieve net-zero emissions targets as well as renewable procurement targets.

The Panelists included Mr. Derek M.Shah Senior Vice President, Head Green Manufacturing & Development, L&T Energy, Ms. Seema Arora, Deputy Director General, Confederation of Indian Industry, Ms. Ritu Lal, Senior Vice President and Head of External & Institutional Relations, Marketing and Communications, Amplus Solar, Mr. Dominic Waughray, Senior Advisor to the CEO President & SMT offices, WBCSD (Moderator)

The Key Outcomes from the Session:

1. Energy storage is one of the critical solutions needed to ensure a resilient and stable grid, while integrating renewable power, as there is limited availability of solar and wind power.

2. It makes commercial sense to install renewable power coupled with energy storage to meet peak load requirements for distribution utilities and making renewable power more dispatchable for both, distribution utilities and C&I consumers. Additionally, for commercial and industrial companies, facing power cuts of more than an average of 45 mins a day, diesel abatement is also a commercially viable use case for storage adoption.

3. Companies and the government should focus on multiple solutions for energy storage like pump hydro, battery, hydrogen storage, which will support in addressing the fluctuation in renewable power availability.

4. Green hydrogen storage and transport will be a good option as this will reduce dependencies on small backup power requirements based on fossil fuel, fuel for heavy transport sector.

5. Indian businesses are leading by providing innovative solutions for bundling renewable power with energy storage to provide more firm source of low carbon power. They are also investing in developing a supply chain of green hydrogen.

16th Nov, 2022 Aligning Clean Air & Climate Actions



CII Business Delegation members Dr. Pawan Singh, Founding Member, India CEO Forum for Clean Air; MD & CEO, PTC India Financial Services, Mr. Jyotin Kutty Sastabhavan, Chief Sustainability Officer, Tata Motors and Ms. Seema Arora, Deputy Director General, Confederation of Indian Industry spoke at the CII event on "Aligning Clean Air & Climate Actions". They were also joined by Ms Jane Burston, Executive Director, Clean Air Fund.

The Key Outcomes from the Session:

"What has happened so far is that because the scale of the issue is very big, this cannot be done in bits and pieces. There are actions which are taken by many corporates, but what they don't know is that in-fact, they must change their entire business model to make a greater impact. To really scale green solutions, the present business model should be aligned with the sustainability model.

Businesses support green solutions through their Corporate Social Responsibility (CSR) fund. This support shall nurture solutions until they reach a certain level of operation. Then the businesses should take over. As an example for biomass solutions, there are two approaches - the social or charitable route (i.e. CSR) to support farmers' shift to sustainable practices, and the other to provide business solutions to biomass products. The social approach is the responsibility of businesses but that will not take care of the whole problem. However, if we have an economic model which is working, like where we keep having biomass plants so that there will be something on the table for the farmers as well, it is green economics which is going to drive climate action for the future."

- Dr. Pawan Singh

"The issue of clean air or not having access to clean air is a major issue across many geographies. Around 99% of the Global population doesn't have access to clean air. We can see that the climate crisis puts billions at risk. It has major economic costs, major health causes, productivity costs etc. A lot of research has been done and it has been found that there is a huge impact on economic burden and company business. The cost to Indian businesses every fiscal year is 3% of India's total GDP because of the poor air quality. This actually equals 50% of all taxes collected annually and 150% of India's Healthcare budget.

Unfortunately, in peak pollution season in Northwestern India, the economic activities and people are suffering. Bans are happening on all kinds of economic activity and that is really not the solution. In the NCR region, a response action plan comes into force that puts a ban on construction, a ban on the movement of carriers and a ban on the operation of diesel generators etc. Electricity in some parts of India is still not predictable and depends on a backup power supply, this is also an issue that needs to really be looked at. The government of India has a National Clean Air Action Plan and is trying to take care of this issue by enacting the Solar Policy.

Access to clean air is also a human rights issue and as humans need to make sure that we are taking adequate action to ensure the right to clean air. The key question is to explore why businesses are getting interested, and how we can align this climate and clean air action."

-Ms. Seema Arora

"The automobile industry is important from the perspective of both climate change and air pollutant emissions. Take an example of passenger cars which, on average, generate approximately 140 grams CO2 per kilometer, and a typical electric vehicle, with a range of 140 km, have no vehicular emissions but is dependent on the power grid, which significantly depends on non-renewables. Today in India, the grid emission factor is approximately 750g of CO2/KW incorporating the mix of coal, solar and mix of other renewables. If we add back from cradle to grave, electric vehicles are 40%-50% efficient, even though the grid is not green. Thus, shifting to an electric vehicle is beneficial for the current situation as well.

There is also a need to address the nano pollutants emerging from different sectors as well which have long term health impacts and deteriorate the air quality. The emergence of new standards including Euro 7, are now asking electric vehicles to deal with the question of three things - emissions from the brakes, emission from the tires and other unforeseen emissions including electromagnetic emission.

Going forward science should drive our understanding and collaboration among businesses, society and governments will give us some more solutions rather than individual solutions. We need to start our journey towards clean and green energy and bring about a positive change."

-Mr. Jyotin Kutty Sastabhavan

Businesses should be involved in air pollution reduction because air pollution not only impacts health but also leads to loss of production like crop production, tourism etc. It is especially concerning how air pollution affects children, who are our future. Air pollution has a vast and terrible impact on child brain development and the respiratory system. During the pandemic situation, everyone realised that air pollution can be tackled. Businesses can help to create awareness among people about air pollution and with innovation, can lead to reducing air pollution. For example, recently, Google has put a regulatory-grade monitor in street view cars, to provide air quality data in Google Maps. There is also a need for businesses to support and push for more ambitious clean air actions.

- Ms. Jane Burston





CII Business Delegation Member Mr. Jyotin Kutty Sastabhavan, Chief Sustainability Officer, Tata Motors, participated in the session on "India's Electric Mobility Revolution and Breakthroughs", organized by the World Economic Forum and Niti Aavog.

The Key Takeaways from the Session :

- The real emission intensity comes from the heavy and medium commercial vehicles, which fall in the hard to abate sectors.

- With respect to opportunity space of the green transition, battery efficiency serves well as long as the weight ratio is managed in such a way that it can go upto light commercial vehicles with battery technology. Batteries weigh a lot, so it compromises on the payload, but since these run in city applications, it can be dealt with.

- Heavy vehicles, which contribute to bulk of the emissions, cannot be decarbonized except through the non-battery route, such as hydrogen, or as interim fuels we can use CNG, LNG and so on.

- If there is a hydrogen solution which is green, quickly re-fuelable, and easily available in India, these factors can contribute to making Hydrogen the mainstay solution, especially because india is blessed with a lot of electricity that can become renewable, and the government is moving in the direction of hydrogen. Also, the cost of refining hydrogen is much more plausible than going the CNG route.

- The value chain in commercial vehicles and freight application, the changeover and learning curve is also much simpler than going to a technology which is very difficult.

- If emissions are to be brought down 100% in 25 years, a decarbonization rate of 4-6% per year is required. Thus, giving the industry time for this transition.

Glimpses from COP 27

A quick Coffee Break in between sessions



L to R - Mr. Vineet Mittal, Chairman, CII sub-committee on Hydrogen Usage and Standards and Chairman, AVAADA Group, Mr. Mahendra Singhi, Managing Director & CEO Dalmia Cement (Bharat) Ltd, Mr. Sanjiv Paul, Chairman, CII Eastern Region and Vice President Safety, Health and Sustainability, Tata Steel and

The CII Business Delegation member, Ms. Seema Arora, Deputy Director General, Confederation of Indian Industry, meets with the Keidanren Delegation, led by Mr. Hiroyuki Tezuka, Lead Keidanren Delegation & Fellow of JFE Steel Co., Japanese Steel Company



Interactions with Mr. Ajit Gupte, Ambassador, Embassy of India, Egypt.



L to R - Ms. Pooja Patwari, Senior Manager, Avadaa Group, Ms. Seema Arora, Deputy Director General, Confederation of Indian Industry, Mr. Ajit Gupte, Ambassador, Embassy of India, Egypt, Mr. Jyotin Kutty Sastabhavan, Chief Sustainability Officer, Tata Motors

Dr Pawan Singh, Founding Member, India CEO Forum for Clean Air and MD & CEO, PTC India Financial Services participates in the event "Enabling Climate Action in Brazil : A Financial Overview" held at the ICC Pavilion.



Interaction with the Confederation of British Industries.



L to R - Ms. Tania Kumar, Deputy Director Decarbonisation at CBI (Confederation of British Industry), Ms. Seema Arora, Deputy Director General, Confederation of Indian Industry, Mr. S Ganeshkumar, Managing Director, TCI Sanmar Chemicals SAE.

Mr. Jyotin Kutty Sastabhavan, Chief Sustainability Officer, Tata Motors interacts with the Japan Business Delegation



Mr Sanjiv Paul, Chairman, Cll Eastern Region and Vice President Safety, Health and Sustainability, Tata Steel Limited interacts with the Sweden Delegation.





Mr Nishant Arya, Vice Chairman, JBM Group interacts with Mr. Ashraf Kinawi, Earthna







