

Keynote Speech at the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

Dear Sisters and Brothers,

Namaskar!

Happy Morning, Happy Afternoon & Happy Evening to all participants of the
Globe!

It is my honour and pleasure to share my thoughts today on deep decarbonisation of the industry which is very dear to my heart. I would like to congratulate the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and other partner organisations such as GCCA, CTCN and ILO for organizing the roundtable.

ESCAP can play very important role in decarbonisation path by bringing together all Government and Non-Government actors to implement the philosophy of “Clean and Green is Profitable and Sustainable”.

Decarbonisation is an important tool for circular economy and to fight the climate crisis and an important theme of the discussions would be – how CO₂ which is major greenhouse gas, can be transformed into a value added green product.

Strategies on reducing CO₂ emissions have taken core of business decision and board room strategies. Forward looking companies having long term planning and perspective are taking big actions as well as commitments on deployment of renewable electricity, switching to sustainable biomass fuels, advancing on circular economy practices by way of utilizing waste materials, energy efficiency, electric mobility, and last but not the least – Carbon Capture and Utilisation.

Everyone would acknowledge that strategies on reducing and utilizing CO₂ for Cost-Effective Business is a critical discussion topic for the industry. I come from cement sector and where 55% of the GHG emissions which can only be avoided by Carbon Capture and Utilisation, you may imagine my interest in this subject area.

I will start my message with a few lines written poetically on CCU. The attempt is to develop powerful yet simple messaging on complex solutions such as CCU. Hopefully, it would set the tone for further discussions in the roundtable.

Technologies, Policies, Finance and Innovation are TOOLS in our range,

Let's better use them for CCU to REVERSE the climate change,

Say goodbye to those lessons stating CCU is a FICITION,

Because it brings circularity and an emerging BIG SOLUTION,

CO2 is an essential compound made of Carbon and Oxygen,

Let's CCU RECLAIM what climate change has taken,

But never forget the renewable electricity and hydrogen,

Both are critical for the commercials to broaden,

A range of CCU products is evolving everywhere,

Soon people would realize they WASTED CO2 IN THIN AIR,

Consumers will start demanding green products as waking up king,

LET'S meet the upcoming wishes of the sovereign,

Urea, Green Concrete, dying textiles, Carbon Rods, minerals, synthetic fuels and proteins are part of CCU PRODUCTS VARIETY,

Let us create a CCU MALL to offers VALUE ADDED GREEN PRODUCTS TO THE SOCIETY,

Availability of Green finance, tax policies and green grants are crucial,

Let's purpose them to make CCU DEMONSTRATIONS PROJECTS VIABLE,

Industry has a great record of providing products and employment,

Making it carbon-free to serve the world, would be a NOBLE ENJOYMENT,

UN, Government, Institutions, investors, philanthropist, COME ALONG,

Kick start CCU upscaling and put Carbon to where it RIGHTLY BELONG,

Carbon Capture and Utilisation is abbreviated as CCU,

We need it as climate crisis may otherwise take planet towards ICU,

CCU is VACCINE TO CLIMATE CRISIS and key to Net Zero essence,

Join me to create the MOMENTUM and make the right difference.

I hope this rhythmic message was simple and may motivate to lead further discussions in the roundtable. It is also important to create simple messaging on complex topics.

Let me say that global expectations from industry are clear to become a zero-carbon industrial sector by the mid-century. We are aware that many nations who have taken the pledge to make their economy net-zero by 2050 or before.

Now the long-term goal today is to create a CO₂-free global economy where industry has to play important role by decarbonisation. The established levers to achieve decarbonisation are Energy Efficiency, Renewable electricity, Carbon-free

fuels use in Transport, Building and Industry and Nature-Based Solutions such as afforestation.

However, despite doing all this, meeting a 1.5-degree scenario is only possible when process-related emissions, which are independent of existing as well established levers, are taken care of new advanced levers in the economic system that sustainably reduces and compensates the emissions of carbon dioxide (CO₂).

In this regard, Carbon Capture and Utilisation is the key subject area. Globally one-third of the CO₂ emissions come from industries that are essential to function for human requirements and providing products for better-improved lifestyle and infrastructure.

The CCU is the decisive technological breakthrough that would enable the deepest decarbonisation of the heavy-industry industry. The complete neutralization of the emissions is only possible when a scalable and economically viable option is provided in terms of CCU technology. It is surely a long term goal.

At the same time, our efforts should continue to build the know-how and large scale demonstration projects. In some geographies, where the possibility of

Enhanced Oil Recovery (EOR) is available, the CCUS may be a financially viable option even today.

On the utilisation front, many value added green products are being made at lab or pilot scale with CCU such as synthetic fuels, proteins, carbon rods, inorganic compounds, etc. and the list is only growing.

Cross-sector Collaborations are very important towards developing commercially successful models and finding better utilisation of CO₂. In this regard, cement and textile, fertilizer, refinery, petrochemical and chemical industry can come along and together they can demonstrate cross-sector collaborations. Dalmia Cement would be happy to offer its plants and infrastructure for such collaborative demonstration projects.

The example of textile sector is such a good motivation for all. Using CO₂ instead of water for dyeing application while saving costs and water consumption are kind of solutions the world is looking for. Simultaneously, cement sector can provide bulk CO₂ for the utilisation in the textile sector as a commercial green product for the textile and fashion industry. This collaboration can prove that CCU has deep potential to connect multiple sectors and industries either as a source or as a sink.

It is also to be noted that availability and cost of renewable electricity have a large bearing on the scalability and economic viability of CCU. As renewable energy is expected to become more economical, CCU options will automatically become more attractive in the coming years.

Friends, as I mentioned earlier, the path to zero carbon is another opportunity to show that we care for society and the planet. In my view, we should unequivocally support the decarbonisation pathway because it makes business sense for all of us and as leaders of today, we need to give the right vision to the leaders of tomorrow. The costs of inaction are far greater than cost of actions.

About Dalmia Cement

In this context, I would like to highlight that Dalmia Cement in its decarbonisation efforts has already created a carbon-negative roadmap 2040 following our business philosophy of “Clean and Green is Profitable and Sustainable”. Some of the key levers identified in our roadmap, which we call Dalmia Determined Contributions (DDCs) are:

Usage of 100% renewable electricity (RE 100), doubling of energy productivity by 2030 (EP 100) and switching to electric mobility by 2030 (EV 100)

Replacement of 100% fossil fuels by the use of sustainable biomass, bamboo plants, municipal waste and plastic waste by 2035

Promoting green blended cements by use of alternate waste materials to conserve mineral resources and energy

And most importantly, deploy advanced technological innovations such as CO₂ Capture and Utilisation by 2040 and technologies such as Green Hydrogen use, Heat electrification, solar calcination, etc.

Our secondary cementitious material utilisation rate is nearly 30%, which is one of the highest in the cement industry. We are the largest producers of Portland Slag Cement (PSC) in India which is considered the lowest carbon footprint commercially available cement. All these efforts have made Dalmia Cement one of the lowest carbon footprint cement producer globally.

As per the remarks by UN Secretary General Mr. António Guterres in Aug. 2020

“Companies such as Dalmia Cement and Mahindra are driving innovation. But we need many more to join them”.

The COP 26 President Mr Alok Sharma also highlighted Dalmia Cement in his concluding remarks during Climate Ambition Summit on 12th December. He said **“Global companies such as Apple, Dalmia Cement and Movidia have made net zero commitments. I am enormously grateful to all those who have come forward with announcements today”**.

Dalmia is also recognised by BBC World as one of the five climate defenders and we are ranked globally no. 1 on business readiness for a low carbon economy transition by the leading international organisation, CDP.

We have started working on 0.5-million-ton Carbon Capture and Utilisation project in our cement plant in Southern India and its feasibility assessment process is at the final stages of completion.

Conclusion

Friends, finally I would like to say that in a post-pandemic world, many things are already changing. The way we do business has changed for each one of us to some extent. It is deeply understood that a healthy society is the first requirement of a long term sustainable business operation.

As availability of the finance at the right price is critical for deep decarbonisation in the cement industry and CCU, financial institutions also need to come out of 3-5 year return period investment.

MDBs need to take a leadership role in the financial sector. With the financial sector's support, CCU can be quickly scaled up and a range of new green products can be developed.

It is also equally important to bring decarbonisation actions and policies in such a way that it brings just transition. Projects like sustainable biomass use can be very good examples of deep decarbonisation and just transition as such projects create sizable rural jobs.

In the end, I congratulate all the participants attending this roundtable. It shows your resolve to bring CCU as the main lever to fight climate change and provide green products to society. It is our positive mindset and courage that resolves difficult and near impossible things.

I would like to conclude my speech with ancient Sanskrit text from Ramayana which is one of the oldest written book in human history on Lord Ram.

It says –

उत्साहो बलवानार्य नास्त्युत्साहात्परं बलम्। सोत्साहस्य च लोकेषु न किञ्चिदपि दुर्लभम्॥

It means,

Enthusiasm is the power of noblemen. Nothing is as powerful as enthusiasm.

Nothing is difficult in this world for an enthusiastic person.