

ICC SUSTAINABILITY CONCLAVE 2021

Sustainability Makes Economic Sense

Taking forward the sustainability initiatives among chemical industry, Indian Chemical Council (ICC) organized the 2nd editions of Sustainability Conclave 2021: Sustainability makes Economic Sense from 20-21st January 2021. Due to ongoing pandemic situation, the conclave was held virtually. The conclave was organized in association with United Nations Environment Programme (UNEP), International Council of Chemical Associations (ICCA), American Chemistry Council (ACC), European Chemical Council (Cefic) and in close coordination with Department of Chemicals & Petrochemicals, Ministry of Chemical & Fertilizers, Ministry of Environment, Forest & Climate Change (MoEFCC), Government of India.

In his opening remarks, **Mr. Ravi Kapoor**, Chairman & Managing Director, Heubach India & Chairman, Sustainability Committee-ICC highlighted the importance of chemical industry as a building block for all other industries.

He shared the message of encouragement received from the Hon'ble PM of India on the 2nd edition of ICC Sustainability Conclave. The message in fact presented the synopsis of the two days conclave in a nutshell. He elaborated on the implication and challenges of the chemical industry along with minimizing the footprint on the environment while still being economic viable. He posed some of the most relevant questions on sustainability to the leaders of chemical industry. Sustainability and sustainable practices are the key solutions for most of the problems.

Mr. Ravi Goenka, President-ICC (Managing Director) Laxmi Organic Limited and shared his vision for sustainability. He gave a small brief about the ICC. For India to become a 5 trillion dollars economic, the chemical industry must grow from 150 billion dollars to 300 billion dollar and therefore will need capital investment of about 100-150 billion dollars in the next five

years. Economics and sustainability are the focal point for Governments and regulators. In spite of all the challenges faced chemical industry, there is a bright future ahead for chemical industry. At ICC our vision is to motivate, push, educate and be the bridge for chemical industry and embrace the philosophy of growth build on sustainable practices. We have to draw a balance between economy and ecology. He thanked all the associations and departments such as ICCA, ACC, UNEP, DCPC & MoEFCC for supporting this event.

Ms. Ligia Noronha, Director, Economic Division of UNEP gave the special address during the inaugural session of the sustainability conclave. Chemicals are indeed a vital part of our life and improving the quality of life. Indian chemical industry ranks at 6th position in the world and 4th in the Asian region. UNEP congratulates India for finalizing the ratification of several new POPs. Certain hazardous chemicals need scientific sound



(L-R): **Mr. Ravi Kapoor**, Chairman, Sustainability Committee, ICC & MD, Heubach Colour India; **Mr. Ravi Goenka**, President, ICC & CMD, Laxmi Organic Industries Ltd; **Ms. Ligia Noronha**, Director-Economy Division, United Nations Environment Programme (UNEP); **Prof. K. VijayRaghavan**, Principal Scientific Advisor to the Govt. of India and **Mr. Bimal Goculdas**, Vice President, ICC and MD & CEO, Dharamsi Morarji Chemical Company Ltd *addressing the gathering during inaugural session of the conclave*



सत्यमेव जयते

प्रधान मंत्री
Prime Minister

MESSAGE

It is heartening to learn that Indian Chemical Council (ICC) is organising the second edition of 'ICC Sustainability Conclave – Sustainability makes economic sense'. The assembly of various stakeholders at the Conclave reflects the importance attached to promote sustainability in every sphere of activity.

A harmonious co-existence with nature has always been an integral part of our way of life. India's value systems accord topmost priority towards caring for our surroundings.

Our traditional practices have always laid emphasis on optimum and responsible use of resources with a sense of sustainability. Our Government has constantly furthered this spirit with various initiatives aimed at strengthening our resolve towards cleaner environment and thriving biodiversity.

From transformative use of technology to emphasis on zero effect on nature, we remain steadfast in our efforts to build a new and self-reliant India, while adopting an inclusive and participatory approach towards development. Efforts such as leveraging renewable sources of energy, eliminating single use plastics and converting waste to wealth and waste to energy reflect our sincerity for an even better planet for the coming generations.

I am sure the Conclave will present the participants from the chemical industry and allied sectors a platform to deliberate upon various issues and chart out a roadmap towards adopting innovative and effective measures furthering sustainability.

I wish the deliberations at the Conclave all success.

(Narendra Modi)

New Delhi

पौष 29, शक संवत् 1942

January 19, 2021

Shri Ravi Kapoor

Conclave Chairman

Sir Vithaldas Chambers, 6th Floor

16, Mumbai Samachar Marg, Mumbai

Maharashtra- 400001



(L-R): Chair: Mr. Ravi Kapoor, Chairman, Sustainability Committee, ICC & MD, Heubach Colour India; **PANELISTS: Mr. Krishanmohan Narayan**, MD, BASF India Ltd; **Mr Adnan Ahmad**, Regional Head -India, Clariant Chemicals (India) Ltd during **PANEL DISCUSSION titled CEO Speaks – Global Perspective**

management of chemicals. She stressed on the need to achieve the various targets under SDGs which are having a connect with the chemical industry. Global chemical outlook has highlighted the gaps which needs to be fulfilled. UNEP works with NEERI to work on the POPs and other emerging issues. Environmentally sound management of chemicals indeed can be met with multilateral agreements. Indian chemical industry is clearly moving towards sustainable chemical management through the promotions of initiative such as 'Responsible Care'. She also highlighted India's leadership role in the management of single use plastics. She emphasises that chemical industry needs more practical models on circularity to minimize the impact on the people and environment.

The Chief Guest address during the Inaugural session was given by **Professor K. Vijay Raghavan**, Principal Scientific Advisor to Government of India. He appreciated that Chemical Industry has played an enormous role in fighting the pandemic during COVID-19. Professor VijayRaghavan focussed on two important points on pandemic i.e. how we have reached to this pandemic stage and how to get out of it. He very eloquently explained about the spill over mechanism and zoonosis and how it has led to the present pandemic situation. He intricately

elaborated how the climate change, pandemic, and economic needs are interconnected and how various available sustainable solution can help create a balance between our economic needs and environment. He stressed that countries should have policies by way of which we can measure environment cost to products we import and not just look that they are inexpensive and try to make them locally which have minimum environment footprint and allow local industry to grow. Professor K. VijayRaghavan also released the knowledge paper of the Sustainability Conclav-2021 prepared by ERM.

The vote of thanks was proposed by **Mr. Bimal Goculdas**, Vice President, ICC and MD & CEO, Dharamasi Morarji Chemical Company Limited. He thanked the Hon'ble PM for sending his message of encouragement for the conclave; Professor K. VijayRaghavan for delivering his excellent chief guest address; Ms Ligia Noronha for providing a useful insight on the various efforts of UNEP for sound management of chemicals. He appreciated the sustainability and Responsible Care efforts pushed hard by Mr. Ravi Kapoor and also thanked the entire ICC team its leadership, all the supporting organizations and departments for organizing this conclave virtually in spite of the challenges posed by pandemic situation.

KEY TAKEAWAY POINTS

- Sustainability & Sustainable practices are key to solutions for most of the challenges
- Draw balance between environment and ecology
- More practical models on circularity to reduce impact on people and environment
- Need to have policies that measures environment cost of products

After the Inaugural Session, a presentation on the theme of the conclave was made by **Ms. Neena Singh**, Managing Partner, ERM India. Ms. Singh presented on the Sustainability makes Economic Sense in a changing landscape for the Indian chemical sector and highlighted on key issues of the sector and how to drive opportunities from these challenges using innovations, technological solutions etc.

In the subsequent session on "CEO Speaks- Indian Perspective", **Mr. Jai Hiremath**, Chairman & MD- Hikal Ltd.; **Mr. R Mukundan**, MD & CEO- Tata Chemicals Ltd.; and **Mr. Suresh Ramachandran**, Country Head & MD-Arkema India, shared their views and perspectives on sustainability, sustainable practices, Responsible Care, Climate change strategies, the challenges encountered during the sustainability journey, and how it has helped the company in long run of being sustainable and also generate shareholder value. The session was



(L-R): Chair: **Mr Ravi Goenka**, President, ICC & CMD, Laxmi Organic Industries Ltd; Co-chair: **Mr. Ravi Kapoor**, Chairman - Sustainability Committee, ICC & MD, Heubach Colour India; **PANELISTS: Mr. Jai Hiremath**, Chairman & MD, Hikal Ltd; **Mr. R. Mukundan**, MD & CEO, Tata Chemicals Ltd; **Mr. Suresh Ramachandran**, Country Head & MD, Arkema India – during **PANEL DISCUSSION** titled **CEO Speaks – Indian Perspective**

Chaired by Mr Ravi Goenka, and Co-Chaired by Mr Ravi Kapoor.

KEY TAKEAWAY POINTS

- ESG (Environment, Society & Governance) becoming parameter for measure of a company's performance
- Global Investor are looking beyond compliance
- Sustainability really brings a balance among people, planet and profits
- To embrace sustainability, make your customers a part of it.
- Adopting Responsible Care accelerates in achieving sustainability
- Chemical companies also contributing in biodiversity conservations in projects like mangrove and dolphin conservations projects
- Chemical industry needs better technologies for carbon neutrality
- Waste management & getting value from it is going to be a key for chemical companies

To bring in the global experience on sustainability, the session on "CEO Speaks- Global Perspective" had two global CEOs of American companies viz. **Mr. Jim Fillterling**, Chairman & CEO-Dow and **Mr. Mark Vergnano**, President & CEO-Chemours, who shared their invaluable experiences and learnings for the benefits of leaders of the Indian chemical Industry. The session was Chaired and moderated by **Mr. Chris Jahn**, President & CEO of American Chemistry Council (ACC). Similarly, the experiences from both Indian and European perspective were presented by **Mr. K. Narayanan**, MD-BASF India Ltd.; and **Mr. Adnan Ahmed**, Regional Head-Clariant Chemicals (India) Limited. The session provided very useful insight into the what is happening in European chemical industry which will subsequently transcend to Indian chemical industry sooner than expected.

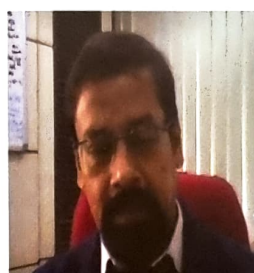
KEY TAKEAWAY POINTS

- Innovation in chemical industry contributes in improving quality of life
- Design products that are circular with least environment footprint
- Work on to match company's strategies with its sustainability targets
- Work towards becoming carbon neutral by investing in technologies & innovations
- Work on your company's water management challenges
- ESG are not a cost to companies nowadays but the opportunities

The first session on second half of day-1 focussed on "Minimizing the Environmental and Societal Impact- A Sustainable Approach". The session was Chaired by **Ms. Sandra Shroff** of UPL Limited and Co-Chaired by **Mr. Bimal Goculdas**. During this session various presentations were made by expert speakers, highlighting on various initiatives of



(L-R): Chair: **Mr. Chris Jahn**, President & CEO, American Chemistry Council (ACC); **PANELISTS: Mr. Jim** Chairman & CEO, Dow; **Mr. Mark Vergnano**, Chairman, Board of Directors, ACC and President & CEO, during **PANEL DISCUSSION** titled **CEO Speaks – Global perspective**



(L-R): Chair: Ms Sandra Shroff, UPL Ltd; **Co-chair: Mr. Bimal Goculdas**, Vice President, ICC and MD & CEO, Dharamsi Morarji Chemical Company Ltd; **PRESENTERS: Mr. Santanu Gupta**, Chief General Manager I/C (Alternate Energy & Sustainable Development), Indian Oil Corp. Ltd; **Ms Priyakanchani Gupta**, Manager EHS, GHCL; **Mr. Manish Panchal**, Head of Business Development, Dupont Sustainable Solutions; **Mr. Bhaskar Venkatraman**, VP Polypropylene, Vistamaxx, & Adhesions Business, ExxonMobil during **SESSION ON Minimizing Environmental & Societal Impact -A Sustainable Approach**

their companies towards minimizing the impact on the environment and society. The speakers included **Mr. Santanu Gupta**, Chief General Manager, Indian Oil Corporation, **Ms. Priyakanchini Gupta**, Manager EHS, GHCL, **Mr. Manish Panchal**, Head of Business Development, Dupont Sustainable Solutions and **Mr Bhasker Venkatraman**, VP Polypropylene, Vistamaxx & Adhesion Business, ExxonMobil.

The last session of day-1 deliberated on the "Sustainable Practices across the World". The session was chaired and moderated by **Mr. Marco Mensink**, Director General, Cefic. In his introductory remarks Mr. Marco highlighted on the European green deals and

what it means to other regions. Ms. Deidre Penfold, Executive Director, Chemical & Allied Industries' Association (CAIA) was unable to join the conclave due to some technical issues. **Dr. Mritunjay Chaubey**, Global Vice President- Environment & Sustainability, UPL Ltd., presented on how sustainability is embedded at UPL, green and new sustainable technology sourcing, piloting and deployment, sustainable wastewater treatment scheme, sustainable performance in manufacturing, priority SDGs etc. **Mr. Lasse Beny** from Currenta GmbH & Co. OHG made a presentation on how waste of chemical industries is managed sustainably at Currenta.

KEY TAKEAWAY POINTS

- EU Green deals comping into play
- Safe & Sustainable bio-design criteria to be put in legislation in EU
- In EU industry is going to get lots of support to use hydrogen
- EU set to push for electrification to be carbon neutral
- Green deal policy package
- Top chemical companies working on making carbon footprint of their each product public
- Chemical Strategy for Sustainability (CSS) of European Commission
- Science Based Target Initiative (SBTi) adopted in EU



(L-R): Chair: Mr. Marco Mensink, DG, European Chemical Industry Council (CEPIC); **PANELISTS: Dr Mritunjay Chaubey**, Global Vice President- Environment & Sustainability, UPL Ltd; **Mr. Lasse Beny**, Currenta GmbH & Co. OHG during **PANEL DISCUSSION** titled **Sustainable Practices across the World**

The first session of day-2 was devoted to the “Sustainable Chemicals Management-Evolving Regulatory Frameworks” where the expert speakers deliberated on some of the evolving regulatory mechanism pertaining to management of chemicals. The session was Chaired and moderated by **Dr. Raman Ramachandran**, MD & CEO, PI Industries. He first invited **Dr. Vishal Choudhary**, Dy. Industrial Advisor, Dept. of Chemicals & Petrochemicals, Govt. of India who made a detailed presentation on the newly framed draft Chemicals (Management & Safety) Rules, 20xx. He explained the rationale behind framing these rules and deliberated on some of the salient features of these draft rules. **Mr. N. K. Jain**, Vice President-Environment Excellence, Jubilant Life Sciences made an excellent presentation on the ground water scenario and its regulations in India with a particular focus to chemical industry, newly formulated CGWA NoC guidelines & its salient features. **Mr. Joe Phelan**, Country Director, WBCSD talked about sustainability frameworks that drives regulations for the chemical sector, about SDGs and the outcome of chemical sector roadmap and what Indian companies should be looking at.

The next session on “Innovations

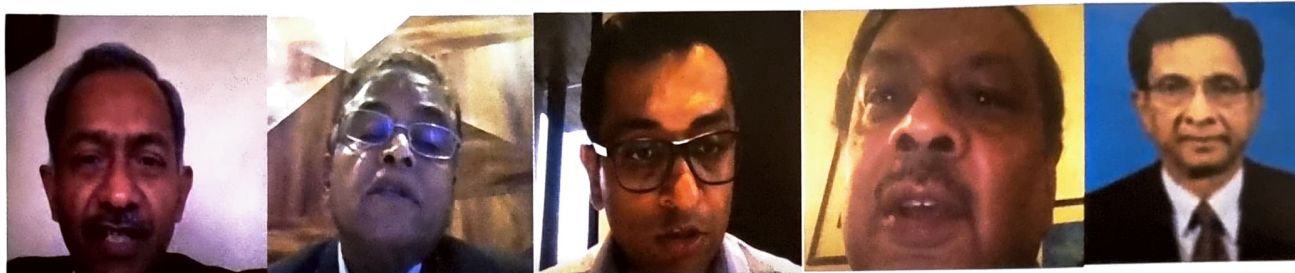
Drives Sustainability” was Chaired by **Professor Aniruddha B. Pandit**, Vice Chancellor, Institute of Chemical Technology, Mumbai and Co-Chaired by **Mr. Rupark Saraswat**, CEO, India Glycols Ltd. This session particularly focussed on some of the new and innovative technologies in the chemical sector and selected technology providers presented on their new and innovative technologies. **Mr. Lalit Handa**, CEO, Spray Engineering Devices Ltd., explained in brief about the low temperature evaporator (from waste to clean technology) with relevant case studies. **Dr. Laurel Harmon**, VP (Govt. Relation) LanzaTech & Vice-Chair RSB Board of Directors presented on how LanzaTech is working on carbon recycling and making it into useful products, recycling waste carbon, carbon smart ethanol, carbon to chemicals etc. and highlighted some of the work they are doing with Indian companies. **Mr. Kishor H Makwana**, MD, Rotofilt Engineering Limited talked on solid-liquid separation technologies with some most relevant case studies and work done across the country. **Mr. Mukesh Malhotra**, Country Manager, Solvey India talked about emerging green technologies for sustainability. He deliberated on 2030 Solvey One Planet Goals, Sustainable portfolio

management, global actions for energy transition, circular economy etc.

Another interesting session was on “Promoting Resources Efficiency and Circularity” and the session was Chaired by **Mr. Neelanjan Banerjee**, Vice Chairman & MD, LANXESS India Private Limited. Mr. Banerjee set the context of the session and then invited **Mr. K. K. Sharma**, Whole Time Director-EHS, DCM Sriram Ltd. Mr. Sharma presented on case studies of DCM Sriram on resource efficiency and circular economy on sugar and distillery manufacturing as well as on reduction in water and energy consumption. **Mr. Swapan Kumar Ray**, Hon. Secretary, Indian Centre for Plastics in Environment (ICPE) talked on Plastics and Circularity with reference to role of plastics for food security, health care and energy saving. He also deliberated on the recycling and recovery aspect of plastics. **Mr. Anirudh Deshmukh**, General Manager, Asian Paints Ltd. showcased on the journey of Asian Paints over the years on water management and presented on water footprint of Asian Paints throughout its 8 plant sites over the years and how this has been made possible. He also highlighted some of the recent initiatives in the last year including phytoremediation,



L-R): Moderator: Ms. Monika MacDevette, Chief, Chemicals and Health Branch, United Nations Environment Programme (UNEP); **PANELISTS: Dr. Rolph Payet**, Executive Secretary to the Basel, Rotterdam & Stockholm Conventions; **Mr. Ravi Agarwal**, Director, Toxics Link; **Dr. Rakesh Kumar**, Director, CSIR-NEERI, Nagpur during **PANEL DISCUSSION on Towards a Pollution free Planet: Role of multi-stakeholder Partnership**



(L-R): Chair: Mr. Suresh Ramachandran, Country Head & MD, Arkema India; **Co-chair: Mr B V Shetty**, Chairman, Viswaat Chemicals Ltd; **PANELISTS: Mr. Kartik Bharat Ram** – Chairman, ICC-NR & Dy. MD, SRF Ltd; **Mr. V. T. Moorthy** – Chairman, ICC-SR & Director, Tanfac Industries Ltd; **Mr. Chandan Sengupta** – Chairman, ICC-ER & Sr. VP- CBT Mktg., Haldia Petrochemicals Ltd.

automated robotic cleaning of solar panels etc.

The UNEP led Panel discussion on “Towards a Pollution free Planet: Role of multi-stakeholder Partnership” was Chaired and moderated by **Ms. Monika McDevettee**, Chief, Chemicals & Health Branch, UNEP. The session had experts from international organizations, academic, government and chemical industry. The session was designed with the objective of offering an overview on sound management of chemicals and waste and role of international agencies and agreements, Identification of opportunities for India to take leadership for the sound chemicals and waste management, Identification of key policy frameworks/priorities and infrastructure it requires including financial instruments, identification of roles the various stakeholders play to unveil the full potential of ESM of chemicals and waste, role of Environmental Health aspect in overall sustainability efforts, informing about the success stories from India and way forward.

The expert panelist included **Mr. Rolph Payet**, Executive Secretary to the Basel, Rotterdam & Stockholm Conventions; **Mr. Ravi Agarwal**, Director, Toxic Links; **Dr. Rakesh Kumar**, Director, CSIR-NEERI, Nagpur. The chemical industry's perspectives were shared by **Mr.**

Kumaresh Misra, Director, ICC as **Mr. S. Ganesan**, Chairman, International Treaties Committee, ICC could not join the discussion due to some technical issues.

The last session was on the “Issues in Management -Air, Soil & Water”. The session was Chaired by **Mr. Suresh Ramachandran**, Country Head & MD-Arkema India and Co-Chaired by **Mr. B. V. Shetty**, Chairman, Viswaat Chemicals Ltd. The regional Chairman of ICC from northern, southern and eastern region viz. **Mr. Kartik Bharat Ram**, Chairman, ICC-NR & Dy. MD, SRF Ltd.; **Mr. V.T. Moorthy**, Chairman, ICC-SR & Director, Tanfac Industries Ltd.; and **Mr. Chandan Sengupta**, Chairman, ICC-ER & Sr. VP-CBT Mktg., Haldia Petrochemicals Ltd. participated in the panel discussion. With particular reference to their respective region, the panel members presented on the most relevant issues of the chemical industry, focus areas for the industry, industry expectation from the government, public and regulatory authorities, and what kind of efforts industry is doing to change the perception of community about the chemical industry.

In the concluding session, the vision for looking ahead for sustainability in chemical industries was shared by **Mr. Vijay Sankar**, Immediate Past President, ICC and Dy. Chairman, The Sanmar

Group. He highlighted that Indian chemical industry is expected to reach to 300 billion dollars by 2025 but this growth has to be built on sustainability and this is the key focus area for ICC. The Indian chemical industry is fully committed to Indian Government commitment to a low carbon economy. The ICC flagship initiative of Responsible Care cover not only aspects of safe production of chemicals but also environmental sustainability and security of chemicals. Mr. Sankar expressed that the journey to the sustainability has to be taken together by all the stakeholders.

The vote of thanks was proposed by **Mr. H. S. Karangle**, Director General, ICC. He thanked all the participants who have made this conclave a huge success by committing their time in attending the conclave in a large number. Mr. Karangle expressed his deep gratitude to Hon'ble Prime Minister for his message of encouragement and Professor K Vijay Raghavan for delivering the Chief Guest address. He thanked the Ministry of Chemicals & Fertilizers, MoEFCC, ICCA, ACC, Cefic, UNEP leadership and India office, ERM, all the expert speakers and all the sponsors who have contributed and supported ICC's efforts in making this Sustainability Conclave a great success.

[REPORT COMPILED BY DR RAKESH KUMAR (OFFICER-SUSTAINABILITY, ENVIRONMENT & REGULATORY ISSUES, ICC)]