CSR TODAY

RNI NO. MAHENG/2013/48866 ■ VOLUME 11 ■ ISSUE 10 ■ MAY 2024 ■ PRICE ₹100 ■ TOTAL PAGES: 52

WHY SOME COUNTRIES ARE AIMING FOR 'NET-NEGATIVE' EMISSIONS

Last month, Germany became the first major economy to announce that it intends to introduce a target to reach "net-negative" emissions later this century

CSR INTERVIEW

Ten-fold solar growth needed in climate fight, says photovoltaics 'godfather'

CSR ANALYSIS

Q&A: Why deals at COP28 to 'triple renewables' and 'double efficiency' are crucial for 1.5°C

CSR INITIATIVE

Sabhyata Foundation Takes Charge of India's Four Historic Monuments under 'Adopt a Heritage 2.0' Initiative

CSR TODAY

RATE CARD

ADVERTISEMENT SIZE	DIMENSIONS		1X RATE
	Non-Bleed	Bleed	
Inside Front Cover	185 mm (w) x 250 mm (h)	225 mm (w) x 290 mm (h)	₹1,00,000
Inside Back Cover	185 mm (w) x 250 mm (h)	225 mm (w) x 290 mm (h)	₹1,50,000
Outside Back Cover	185 mm (w) x 250 mm (h)	225 mm (w) x 290 mm (h)	₹2,00,000
Full Page (Colour)	185 mm (w) x 250 mm (h)	225 mm (w) x 290 mm (h)	₹75,000
Half Page - Vertical (Colour)	85 mm (w) x 250 mm(h)	-	₹30,000
Half Page - Horizontol (Colour)	180 mm (w) x 120 mm(h)	-	₹30,000
Quarter Page (Colour)	85 mm(w) x 120 mm(h)	-	₹25,000
Full Page (B/W)	185 mm (w) x 250 mm (h)	225 mm (w) x 290 mm (h)	₹40,000
Half Page - Vertical (B/W)	85 mm (w) x 250 mm(h)	-	
Half Page - Horizontal (B/W)	180 mm (w) x 120 mm(h)	-	₹25,000
Quarter Page (B/w)	85 mm(w) x 120 mm(h)	-	₹20,000

Bleed Advertisement charges: *20% extra for all sizes.*

INDIAN CENTRE FOR CSR

For More Information:
INDIAN CENTRE FOR CSR
106, Nirman Kendra, Dr. E Moses Road,
Mahalaxmi Estate, Mumbai-400 011
Ph: 9930139352

IAEA Helping Doctors Provide Online Cancer Expertise Across Borders

Rajesh Tiwari
Publisher
rt@iccsr.org

The uniqueness of each specific cancer case – caused by factors such as the precise location and extent of a cancer, a patient's existing medical conditions or social circumstances can complicate treatment decisions.

An International Atomic Energy Agency (IAEA) programme to provide virtual oncology expertise to cancer patients in developing countries has shown to be a wide success – engaging over 500 radiotherapy professionals from 19 countries and helping hospitals improve care for many patients, according to a comprehensive review.

In November last year, more than 30 cancer experts from across the Asia and the Pacific region gathered in Bali, Indonesia to conduct a comprehensive review of the three year implementation of virtual 'tumour boards'. Such boards offer a means of pooling oncological expertise and resources from around the region to improve clinical decision making and better address cancer care challenges.

Virtual tumour boards (VTBs) are online versions of traditional tumour boards – meetings that in high- income countries are mostly held within the same oncology facility, where experts from across the medical spectrum meet on a regular basis to review cancer cases and treatment plans.

"The uniqueness of each specific cancer case – caused by factors such as the precise location and extent of a cancer, a patient's existing medical conditions or social circumstances can complicate treatment decisions," said Sandra Ndarukwa, Associate Education Officer in the Division of Human Health, IAEA Department of Nuclear Sciences and Applications.

Leveraging insights from across medical disciplines, tumour boards allow new and complex cases to be peer reviewed by a range of experts, resulting in better treatment planning. "Ultimately, they contribute to an enhanced quality of individual patient care," she added.

Holding tumour boards in low- and middle-income countries (LMICs) where oncology centres often lack the required levels of staffing and resources can be challenging. In response, the Asia-Pacific Radiation Oncology Network (ASPRONET) has been experimenting with VTBs as a means of supporting cancer care decisions in the region.

Over the course of three years, these virtual sessions actively engaged over 500 radiotherapy professionals from 19 countries, supporting clinical decision-making for over 140 cases. Their launch coincided with the beginning of the COVID-19 pandemic, amplifying the benefit of digital platforms in enhancing patient care and professional development. By bringing together health professionals from so many different countries, they are a testament to the power of South-South and South-North collaboration in addressing regional challenges.

"Despite obstacles caused by different time zones and languages, ASPRONET has emerged as a crucial resource in enhancing cancer decision making and treatment planning in the region," said Dr Iain Ward, Radiation Oncologist at Christchurch Hospital, New Zealand and Project Lead Country Coordinator for the IAEA. "For this reason, we have asked the IAEA to continue supporting the initiative through the means of its technical cooperation programme," he added.

Cancer is a leading cause of death worldwide, accounting for nearly 10 million deaths in 2022, which is close to one out of every six deaths. Predictions indicate a staggering surge to 17 million cancer related deaths by 2045 (Globocan 2022), of which a majority are expected to take place in low- and middle-income countries (LMICs). Despite this inequity, cancer research is currently conducted overwhelmingly in high income countries, but there is a limited transferability of knowledge gained in high income countries to health systems and populations in LMICs.

Contents

CSR TODAY

MAY 2024 | VOL. 11 | ISSUE 10

PRINTER AND PUBLISHER: Rajesh Tiwari

EDITORIAL

Chief Consulting Editor: Kingshuk Nag
Consulting Editor: M Bose
Executive Editor: Devasia P. Devasia

PRODUCTION, CIRCULATION AND LOGISTICS

Harish Rathod

HEAD OFFICE

CSR Today
106, Nirman Kendra, Dr. E Moses Road,
Mahalaxmi Estate, Mumbai - 400 011
E mail: support @ iccsr.org,
Website: www.iccsr.org

REGIONAL OFFICES

NEW DELHI
Regional Directors: V. Chopra, Pratap Bhanu Singh

MUMBAI
Executive Vice President: Sangita Jha

Printed, Published and Edited by Rajesh Tiwari on behalf of Indian Centre For Corporate Social Responsibility.
106, Nirman Kendra, Dr. E Moses Road, Mahalaxmi Estate, Mumai-400 001

Editor: Rajesh Tiwari

CSR NEWS

DreamFolks Empowers Digital Future for Government School Students via Project Akshar

DreamFolks, a tech enabled global travel and lifestyle services provider, today inaugurated a state-of-the-art computer lab for students at Government Model Sanskriti Primary School in Tigra village, Sector 57, Gurugram. The computer lab has been set up under the company's corporate social responsibility (CSR) initiative - Project Akshar, which aims to uplift education for girls by partnering with local schools for their comprehensive development.

The inauguration ceremony was graced by the presence of Ms. Liberatha Kallat, CMD, DreamFolks; Mr. Dinesh Nagpal, Promoter and Non-Executive Director, DreamFolks; Ms. Giya Diwaan, CFO Dreamfolks; and Mr. Rakesh Yadav, Chief Guest for the inauguration ceremony.

Speaking on the occasion, Liberatha Kallat, Chairperson & MD, DreamFolks said, "We firmly believe that education is the cornerstone of a progressive society, and access to technology is crucial in today's digital age. This computer lab was setup with an aim towards advancing girls' education through collaboration with local schools for holistic enhancement. The objective is to empower the young minds of the school with the necessary skills and knowledge to navigate the modern world. We hope this will ignite the spark of curiosity and learning in these young students, enabling them to unlock their full potential."

DreamFolks' Project Akshar is a long-term initiative aimed to enhance school infrastructure and cater to students' requirements, thereby facilitating access to quality education. The company plans to extend this program to other schools in Gurgaon vicinity, reaffirming its commitment to creating a more inclusive and equitable society.

Ambuja Foundation's Shimla Event Puts Spotlight on Climate Resilience through 'Watershed' Initiative

Representatives from the Government, universities, corporates, NGOs and the community provided meaningful insights

Ambuja Foundation, a leading non-profit organization committed to rural prosperity by advancing the efficient utilization of water in agriculture and fostering the holistic development of rural communities, convened a pivotal event titled 'Sustainable Watershed Management for Climate Resilience' in Shimla, Himachal Pradesh. This one-day gathering served as a significant platform to illuminate the prevailing water dynamics in the region, the challenges faced, and underscores the critical nexus between water management and climate change impact.

An esteemed panel of speakers representing the Government, universities, corporates, NGOs and community members were present - offering meaningful insights to the participants. The panelists offered invaluable perspectives on the prevailing situation in the region, shedding light on the myriad factors contributing to the complex water dynamics. Excessive soil erosion, dwindling rainfall patterns, recurring droughts, diminished pollination levels resulting in subpar flowering quality, escalating pollution levels, and the adverse repercussions on agricultural productivity and soil moisture were among the pressing concerns deliberated during the session.

The availability of rainwater in Himachal Pradesh is increasingly under threat due to erratic rainfall patterns, compounded by inadequate water management practices. Recognizing the severity of these issues, the National Bank for Agriculture and Rural Development (NABARD) has been at the forefront, providing crucial funding for a myriad of watershed development projects across the hilly state. Working in close collaboration with NABARD, Ambuja Foundation has been instrumental in facilitating the implementation of these projects, aiming to mitigate the adverse effects of water scarcity and bolster sustainable water resource management.

During the session, Government officials presented an array of schemes tailored to address the pressing need for efficient water utilization in agriculture. Participants were briefed on schemes encompassing solar pumping, irrigation initiatives, and farm water efficiency measures, designed to harness renewable energy sources and optimize water usage. Additionally, emphasis was placed on promoting sustainable water conservation practices to foster resilience in the face of evolving climatic conditions.

By engaging academia in this discourse, the event showcased the importance of collaborative efforts in nurturing informed and proactive citizens who are capable of driving sustainable change in the realm of water resource management and climate resilience. Ambuja Foundation has been working in almost 200 villages across 3 districts of Himachal Pradesh with a major focus on implementing watershed projects to increase groundwater levels improve soil moisture conservation and reduce soil erosion. Water resource management is a major focus for the foundation in the region, who has done extensive work reviving ancient khuls, increasing storage capacity in tanks, promoting micro irrigation, ensuring the availability of drinking water through taps for every household and driving widespread watershed initiatives.

Adani Foundation's water initiatives at ACC Bargarh site showcase a story of sustainable community development

ACC, the cement and building material company of the diversified Adani Portfolio, in yet another step towards reshaping the lives of communities, along with Adani Foundation has collaborated with the Gram Panchayat in Katapali (Bargarh District). The company has undertaken two significant water conservation projects in the financial year 2023-24, right before the excessive summer and subsequent monsoon sets in, to address water challenges faced by Katapali Gram Panchayat, home to an estimated population of around 10,000 residents.

The first initiative comprised excavating a 12-acre section of the Katapali pond, resulting in a notable increase in water availability and encouraging sustainable water practices. Furthermore, a check dam was constructed in February 2024 for sustaining water levels during extreme weather conditions and preventing water loss during periods of excessive flow into the connected canal, significantly reducing wastage and ensuring water retention for use by villagers. These initiatives directly benefit around 3,000 individuals in Katapali, addressing persistent water challenges and improving overall quality of life. In a resultant move, the excavated soil from the pond was ingeniously utilised to construct a new 400-metre road, improving connectivity between essential facilities like the hospital and the village.

Adani Foundation’s water projects at ACC Bargarh site in Katapali Gram Panchayat have directly benefited around 3,000 individuals, addressing water challenges and improving livelihoods.

This collaboration highlights a sustainable approach, utilising resources innovatively for positive impacts like improved water access, economic growth, and better connectivity in Katapali village.

The collaborative efforts between Adani Foundation and the Gram Panchayat that resulted in the construction of the dam has also enabled the Gram Panchayat to lease the pond for pisciculture, generating additional income and employment opportunities. The Tulashi Self Help Group (SHG), comprising 12 women members, has leased the pond for a period of five years and invested here in pisciculture, leading to financial stability and growth for the community members. This activity has already begun bearing fruit in the form of a new income source for the SHG members.

These water initiatives by Adani Foundation at the ACC Bargarh site underscore their commitment to social responsibility and sustainable development, creating positive impacts and fostering inclusive growth in Katapali village.

Infosys Foundation Commits over INR 33 Crore Towards Strengthening Karnataka Police's Cybercrime Investigation Capabilities

Renewal of 2018 grant for the setting up of the Centre for Cyber Crime Investigation Training & Research

Infosys Foundation, the philanthropic and CSR arm of Infosys, today announced that it has signed a Memorandum of Understanding (MoU) with the Criminal Investigation Department (C.I.D) of Karnataka and Data Security Council of India (DSCI), to renew the collaboration for the Centre for Cyber Crime Investigation Training & Research (CCITR) at C.I.D Headquarters, Bengaluru.

Infosys Foundation has committed a grant of over INR 33 crore to strengthen the cybercrime investigation capabilities of the Karnataka police, by extending its association with CCITR for four more years. Building on the collaboration established in 2018, the new MoU will bolster the state police force's cybercrime prosecution capabilities through training and research in digital forensics and cybercrime investigation.

In addition, the joint initiative will bring together innovators, large enterprises, user enterprises, academia, and the government to fulfil the following objectives:

- Capacity building of the police, prosecution, and judiciary in handling investigations, and development of SOPs in cybercrime investigations.
- Performing research in digital forensics and cybercrime investigation that would improve the prosecution of cybercrime cases investigated by Karnataka Police.
- Fostering entrepreneurship for development of indigenous cyber forensics products and solutions.
- Training and certification for police staff in their core areas like cybercrimes and digital forensics.
- Collaboration with national and international organizations working in digital forensics domains.

Dr. M A Saleem IPS, Director General of Police, CID, Economic Offences & Special Units, Karnataka, said, "The strategic initiatives for capacity enhancement undertaken by the Criminal Investigation Department of Karnataka have been substantially bolstered by the collaborative efforts with the Infosys Foundation and the Data Security Council of India. In addition to training police officers, CCITR has also extended its activities to other stakeholders in the criminal justice delivery system, viz., the prosecution and judiciary. With the renewal of the collaboration, we expect more thought leadership in digital forensics that would improve the investigation and prosecution of cybercrime cases. At this juncture, I take this opportunity to thank the Infosys Foundation and Data Security Council of India for partnering with us in our efforts to combat the growing menace of cybercrimes."

With the digital landscape evolving every day, this renewed engagement will bring in newer dimensions to Karnataka Police's cybercrime handling capabilities through innovative solutions.

Vinayak Godse, Chief Executive Officer, Data Security Council of India, said, "On this special occasion of renewing our commitment, I would like to acknowledge and express our profound gratitude towards the Infosys Foundation and the Criminal Investigation Department of Karnataka for their pivotal partnership through CCITR. This collaboration has set an excellent example of how public-private partnerships can effectively contribute to handling cybercrime threats. Looking ahead, this renewed collaboration will enable us to develop even more advanced training programs, workshops, and knowledge-sharing initiatives."

Sunil Kumar Dhareshwar, Trustee, Infosys Foundation, said, "We are very happy with the work DSCI and CCITR have collaboratively achieved. With the digital landscape evolving every day, this renewed engagement will bring in newer dimensions to Karnataka Police's cybercrime handling capabilities through innovative solutions. This initiative signals a pivotal step towards safeguarding our digital future."

NTPC launches new edition of Girl Empowerment Mission, uplifting 10,000 girl children

NTPC Limited, India's largest integrated power company, is gearing up to launch the latest edition of its flagship CSR initiative, the Girl Empowerment Mission (GEM), starting from April 2024.

The new edition will add nearly 3000 meritorious children from underprivileged sections of the society at 42 identified locations of the power major, thereby taking the total number of beneficiaries above 10,000 mark.

This program aligns with the Government of India's "Beti Bachao, Beti Padhao' initiative and is designed to tackle gender inequality by nurturing girls' imaginations and

fostering their ability to explore boundless opportunities. The goal is to empower them to become catalysts of change, influencing not only themselves but also their families, communities, and the nation as a whole.

Till date, the GEM has benefited a total of 7,424 girls, with the number of participants steadily increasing each year. In 2023 alone, 2,707 girls participated in the workshop across 40 locations of NTPC, spanning 16 states of India.

The GEM Mission, initiated as a pilot project in 2018 with just three locations and 392 participants, has since flourished into a nationwide movement. Despite challenges posed by the pandemic in 2020 and 2021, the program has continued to expand its reach and impact.

The GEM Workshop has garnered widespread acclaim for its holistic approach to skill development, confidence-building, and mentorship. By equipping girls with essential tools and unwavering support, NTPC aims to pave the way for a brighter future for upcoming generations.

Vedanta's Priya Agarwal Hebbar Named Among WEF's 2024 Class of Young Global Leaders

Priya Agarwal Hebbar, Chairperson, Hindustan Zinc Limited & Non-Executive Director, Vedanta Limited, has been selected as one of the five Indians to join the prestigious Young Global Leaders Class of 2024 by the World Economic Forum - a group of nearly 90 changemakers who are shaping the future and accelerating positive change through their ground-breaking work.

Established by the World Economic Forum in 2004, the Young Global Leaders Forum represents leaders under 40 from various fields, including politics, business, civil society, the arts, and academia, all dedicated to creating a lasting impact on their communities and beyond. Priya's inclusion in the esteemed cohort underscores her exceptional leadership, vision, and dedication to making a meaningful difference in society.

Ms. Priya Agarwal Hebbar, Chairperson, Hindustan Zinc Limited & Non-Executive Director, Vedanta Limited, expressed in her tweet, "I am honoured and delighted to be recognised as part of the prestigious WEF's Young Global Leaders 2024 cohort. I look forward to learning and collaborating with young changemakers from across the globe who are shaping the future through positive social impact."

In the recent years, Priya has carved a niche for herself and for women in the male-dominated mining and natural resources sector. At Vedanta, she is championing the company's ESG (environmental, social, governance) transformation and spearheads initiatives promoting environmental stewardship and social responsibility. Priya was also recently appointed as Chairperson of Hindustan Zinc, and under her leadership, the integrated producer achieved its best-ever mined metal production, crossing the 1 million tonne mark. She is passionate about transforming the natural resources sector into a sustainable and inclusive sector with her leading many pioneering initiatives such as introduction of the first Battery Electric Vehicle in underground mining.

Hyundai Motor India Launches 'Grameen Mahotsav'

A Vibrant Initiative Bringing Joy and Connectivity to Rural India

Hyundai Motor India Ltd. (HMIL), embarks on a mission to deepen its roots in rural India. Recognizing the diverse needs of consumers across every corner of the country, Hyundai Motor India proudly introduces "Grameen Mahotsav" - a vibrant initiative celebrating the essence of rural India. With rural sales accounting for over 19% of its total sales, HMIL is committed to fostering strong bonds with rural communities.

Under Grameen Mahotsav, Hyundai is orchestrating an array of engaging activities, including captivating product displays, interactive demonstrations and attractive customer experiences like nukkad natak, live music, folk dance and regional talent shows. The 2 day Grameen Mahotsav carnival will be hosted at 16 locations across India, exhibiting a vibrant market place featuring artisanal crafts, carnival rides, gaming zones and delicious food stalls. Beyond celebration, Grameen Mahotsav serves as a platform for Hyundai to delve into the vast potential of rural markets. By closely engaging with communities and discerning market trends, HMIL aims to not only cater to evolving aspirations but also identify and welcome new customers into the Hyundai family.

Expressing his enthusiasm for the initiative, Mr. Tarun Garg, COO, Hyundai Motor India Ltd., said, "Our sustained efforts towards bolstering rural connect are bearing great fruits and Hyundai Motor India has witnessed a remarkable growth in rural markets in financial year 2023-2024. We sold 1.15 lakh vehicles in rural India last year, a growth of 11% over 2022-23. We are confident that with good monsoon, increasing income levels and improved infrastructure, the contribution from rural markets will further increase. The growth will be fueled by our belief in the potential of upcountry markets and the dedication to cater to evolving aspirations of Indian consumers across all geographies."

He further added, "At Hyundai Motor India, we firmly believe that for the nation to prosper, both Bharat and India must progress in tandem. With initiatives like Grameen Mahotsav, we hope to nurture our customers in every part of the country and also understand the market trends to fulfill their expectations. As we continue to innovate and engage with rural consumers, we are confident in our ability to contribute to the inclusive development of the country."

By engaging Dealers, rural influencers, financiers, customers and their families, Hyundai Motor India is building a strong network to not only enhance brand recall but also drive sales in the rural markets. The inaugural Grameen Mahotsav event was held successfully in Mahemdavad, Gujarat in April 2024. Now Hyundai Motor India looks forward to extending its reach and

- **The initiative aims to further strengthen HMIL's connect to rural India with specially curated events planned at 16 locations PAN India**
- **HMIL registered an impressive 11% growth in its rural sales in FY23-24**
- **Rural sales contribute to more than 19% of HMIL total sales**
- **Nearly 40% of HMIL sales & service network is located in rural areas; HMIL aims to further enhance its presence in rural areas**

impact across rural landscapes. With initiatives like Grameen Mahotsav, Hyundai remains steadfast towards its mission to nurture relationships, understand market dynamics and contribute to the holistic development of the country.

About Hyundai Motor India Ltd. (HMIL)

Hyundai Motor India Ltd. (HMIL), a wholly owned subsidiary of Hyundai Motor Company (HMC), is India's smart mobility solutions provider and forerunner in car exports since inception. Hyundai's global brand vision of 'Progress for Humanity' creates a sustainable outlook for future generations by offering mobility solutions with industry leading technology.

HMIL presently operates with a robust network of 1 363 sales points and 1 549 service points across India. The strong model line-up consists of 13 car models across segments, Grand i10 NIOS, i20, i20 N Line, AURA, EXTER, VENUE, VENUE N Line, VERNA, CRETA, CRETA N Line, ALCAZAR, TUCSON, and all-electric SUV IONIQ 5. HMIL's fully integrated state-of-the art manufacturing plant near Chennai boasts advanced production, quality, and testing capabilities. Hyundai Motor India Ltd. also forms a critical part of HMC's global export hub with exports spanning 88 countries across Africa, the Middle East, Latin America, Australia, and Asia Pacific.

Log on to www.hyundai.co.in for more information.

TFCI Partners with SHB Social Foundation to Promote Mental Health Awareness

Tourism Finance Corporation of India (TFCI), India's leading NBFC and lending institution providing financial assistance to tourism & hospitality sector, real-estate, healthcare, education, MSE and NBFC/HFC sectors has announced its partnership with SHB Social Foundation as part of its corporate social responsibility initiative to lead a nationwide campaign to raise awareness about mental health through various platforms, including radio campaigns and social media outreach.

Mental health awareness has become an increasingly pressing issue that is affecting individuals across all genders and age groups. Recognizing the need for accessible support services, this initiative seeks to make the 'Listening Post' free helpline number available to communities in multiple cities. Through this campaign sponsored by TFCI, SHB Social Foundation aims to provide counseling services and encourage individuals to seek help when facing mental health challenges like anxiety, stress, depression etc.

This initiative is timed especially during periods of high stress among students, notably during 10th & 12th class board exams and entrance exams for professional courses such as IIT and NEET. The campaign aims to offer support and guidance during this critical time by reaching out to cities with a high number of exam candidates. This initiative is also targeted across age group seeking motivation support.

SHB Social Foundation is a registered non-profit organization based in Pune and has been at the forefront of promoting mental wellness. Their flagship program, Listening Post, initially launched as a community initiative in 2014, has evolved into a nationwide telephonic helpline available daily between 4 pm to 8 pm. Trained volunteers offer a safe space for callers, providing guidance and support through active listening.

Commenting on the partnership, Anoop Bali, Whole Time Director and Chief Financial Officer of TFCI said, "We are proud to collaborate with SHB Social Foundation to address the pressing issue of mental health awareness. Through this partnership, we aim to provide essential support to individuals in need and promote a culture of openness and understanding surrounding mental health challenges. Together, we can make a meaningful difference in the lives of many."

Janaki Visvanath, Director SHB Social Foundation said, "Mental health issues like anxiety, stress and loneliness are common yet often overlooked in today's society. Individuals, who are suffering due to this, do not get the attention they deserve. Prolonged isolation or depression can harm both mental and physical health. We must combat the stigma surrounding mental health and encourage seeking help when needed. We thank the Tourism Financial Corporation of India for their crucial support to us for this noble cause".

HCLFoundation and Chennaiyin Football Club join hands to promote football at grassroot level

HCLFoundation, which drives the corporate social responsibility agenda of global technology company HCLTech in India, has announced its collaboration with Chennaiyin Football Club (FC) as the Social Cause Partner for its 10th season in Indian Super League (ISL).

HCLFoundation and Chennaiyin FC, a two-time ISL winner, will work together to nurture football at the grassroot-level and will use this sport to empower youth and community engagement.

"Through this partnership with Chennaiyin FC, we aim to harness the unparalleled power of sports in fostering inclusion, empowering youth and driving positive social change. Together, we aspire to create a legacy of sportsmanship and community engagement that inspires generations to come, " said Dr. Nidhi Pundhir, Vice President, Global CSR, HCLTech and Director, HCLFoundation.

"This partnership represents a significant milestone in our journey to leverage the platform of football for broader social impact. By empowering youth, nurturing talent, and fostering a culture of sportsmanship and inclusivity, we are committed to creating a vibrant ecosystem where dreams flourish and communities thrive," said Ekansh Gupta, General Manager, Chennaiyin FC.

Chennaiyin FC offered 500 match tickets to students and youth of HCLFoundation's Sports For Change (SFC) initiative to attend the ISL game on April 9 at the Jawaharlal Nehru Stadium, Chennai. Additionally, 20 children from HCLFoundation's SFC program escorted the Chennaiyin FC ISL players into the stadium ahead of the match. Select matches will also be live streamed for students of Police Boys and Girls Clubs of Arumbakkam and Kannaginagar, Chennai.

Chennaiyin FC players and staff members will join hands with HCLFoundation for a plantation activity at a Harit afforestation site, underscoring their commitment to environmental sustainability. They will also visit Kannaginagar Police Boys and Girls Club and interact with the Sports for Change students from Kannaginagar to motivate the students to pursue sports professionally.

Dr. Payal Kanodia honored with "Leader of Hope Award" at The Indian Brand and Leadership Conclave 2024, Goa

Gurugram-based organization M3M Foundation has been honored with the prestigious "Social Impact Award" at the Indian Brand and Leadership Conclave 2024 held at Hyatt Centric Goa, while Dr. Payal Kanodia, Trustee and Chairperson of M3M Foundation, has been honored with the prestigious "Leader of Hope Award". This honor has been given for her exemplary contribution towards social reform and leadership in India. Dr. Aishwarya Mahajan, President of M3M Foundation, received the award on behalf of Dr. Payal Kanodia from Shibani Kashyap, Bollywood pop singer and composer.

On this occasion, Suresh Prabhu, former Union Minister, Senior BJP leader, Madhur Bhandarkar, Padmashree Awardee, Indian filmmaker and scriptwriter, Digambar Kamat, Former Chief Minister, Goa and Shibani Kashyap, Bollywood pop singer and composer were present as chief guests.

The selection process for these prestigious awards was carefully conducted by the Brand Media Team through three stages. This comprehensive approach included rigorous parameters encompassing secondary and primary research methods, ensured by a thorough assessment of the influence and leadership qualities of the nominees.

M3M Foundation, known for its unwavering commitment towards CSR initiatives, has consistently demonstrated remarkable work in uplifting communities and driving lasting change. The "Social Impact Award" is a fitting recognition of her tireless efforts in areas such as education, healthcare and environment conservation, which have brought about a profound change in the lives of countless individuals across the country.

On the other hand, Dr. Payal Kanodia's selection for the "Leader of Hope Award" underlines her remarkable leadership and visionary approach towards tackling critical societal challenges. As a beacon of hope, Dr. Kanodia has played a vital role in inspiring positive change and fostering a culture of empowerment and inclusivity.

On this occasion, Dr. Payal Kanodia, Trustee and Chairperson of M3M Foundation, expressed her happiness and said, "We are very happy that I and M3M Foundation have been honored with the award. It is proof that whatever we do with our positive efforts have been made for the society through these initiatives, we will be inspired to contribute better in the building of the nation and will continue to contribute as a social organization.

Recently, the women's wing of FICCI, Young FICCI Ladies Organization (YFLO), Delhi has appointed Dr. Payal Kanodia as the new Chairperson for the year 2024-25. Dr. Payal Kanodia is also the Chairperson and Trustee of M3M Foundation and Promoter in M3M Group. Dr. Payal aims to reach 1 million people by focusing on improving livelihood opportunities, skilling youth, literacy, socio-economic empowerment, environment and wildlife conservation and enterprise development.

Akshaya Patra and The Breakfast Revolution in collaboration with Share Our Strength hosted a landmark event

The 'Feed the Future' initiative to impact 4,000 underprivileged students for the next academic year

Share Our Strength, working towards driving positive change in the child nutrition sector and eradicating classroom hunger, hosted an exclusive initiative called "Feed the Future" on March 17th at The Bombay Club, in aid of The Breakfast Revolution and The Akshaya Patra Foundation.

The event attended by 150 people raised funds to provide breakfasts and lunches for underprivileged school children across India. Share Our Strength, an American fundraising organisation matched all donations from the evening, doubling the amount raised. The funds will provide 4,000 students with nutritious school meals daily for the upcoming academic year.

The event chaired by Gauri Devidayal, Co-founder and Director, Food Matters Group and business leader Avani Davda, witnessed an extraordinary 10-course dining experience curated by celebrated chefs Sanjeev Kapoor, Asma Khan, Manish Mehrotra, Prateek Sandhu, and Anil Rohira, who came together for this noble mission to ' feed the future'. Pankaj Jethwani, Co-founder - The Breakfast Revolution, Shridhar Venkat, CEO - Akshaya Patra and Debbie Shore, Co-founder - Share Our Strength hosted business leaders and other notable personalities like Maniesh Paul.

During the event Debbie Shore, Co-founder - Share Our Strength spoke about how everyone had a strength to share, be it sharing expertise, providing access to key people, raising funds, volunteering and more. “I am happy to see so many wonderful people here tonight who can work together and build a community to nourish children, and that we can enable them to better serve their communities sustainably.”

Leading the team of celebrated chefs, Sanjeev Kapoor, a goodwill ambassador for Akshaya Patra for over 15 years, impressed the audience with his charm and his unwavering commitment to this cause close to his heart. He shared his insights on the importance of nutritious and tasty meals in keeping children healthy and energized and encouraged people to participate/ donate to the cause. He graciously extended his support by collaborating with The Breakfast Revolution for this event.

During the event, a live auction featured products generously donated by JBL, paintings and ceramics by artists, stay offers from Taj, Sitara Himalayas, The Johri and tableware by Indian Heirloom Company, adding to the excitement and success of the fundraiser. Vikram Kher, Vice President of Lifestyle at HARMAN India said, “With over 76 years of legacy, JBL has been amplifying music's power to make people feel good, connected and alive. JBL has associated with The Breakfast Revolution for this event to effect real authentic change in the society. While it's natural to feel consumed by our daily duties, we understand the importance of contributing towards the community to unite in tackling critical issues like child undernourishment. The auction represents our commitment to making a meaningful impact towards the cause.”

Functioning under the public-private partnership model, The Breakfast Revolution has served over 30 million breakfasts since 2014 with a vision to impact 1 million lives by 2030. Akshaya Patra provides nutritious lunches in government and government-aided schools and has served over 4 billion meals to date and plans to reach the 5 billion milestone by October this year. The funds raised through this event will aid in bolstering their programs

The event was made possible by community champions EazyDiner, The Table, and The Bombay Club, who opened their doors to unite people for this crucial cause.

Kotak Securities and NISM reach 68000 young Indians through their flagship Financial Literacy Program "Kona Kona Shiksha" during FY24

Kotak Securities Limited (KSL) announced that it has imparted financial literacy to more than 68000 young Indians through its "Kona Kona Shiksha" initiative in collaboration with the National Institute of Securities Markets (NISM) during FY24. "Kona Kona Shiksha" is a CSR initiative launched in July 2021 to promote financial literacy to young citizens of the country. Since its inception, NISM has conducted 2626 programs at over 1700 colleges across 480 cities and reached 211955 students by empanelling 303 resource persons. NISM – KSL's CSR knowledge partner and project manager - imparts "Kona Kona Shiksha" through empanelled Resource Persons who train college students from across India and through online teaching modules to young Indians. Each student undergoes a rigorous 10-hour training module, which concludes with an online assessment and certification by NISM

"Kona Kona Shiksha" empowers students with knowledge on personal finance, fundamentals of investing in securities markets, investment principles and practices, etc. KSL's CSR Project aims to create financially knowledgeable and skilled youth and to open up career opportunities in the financial services industry.

Ashwani Bhatia, Director, NISM said, "NISM is happy to be associated with Kotak Securities for this awareness programme on Financial Literacy for Young Citizens. This programme has helped many young professionals understand topics ranging from the basics of investment and Securities market, its Institutional framework and its intermediaries and financial services at large. There is a huge unmet appetite for such programmes across India and we are sure that this initiative will reach out to more cities and students in this financial year."

Narayan SA, Chairman, Kotak Securities, said, "The success of Kona Kona Shiksha is in the numbers. Each year we are reaching more young Indians and imparting financial literacy, enabling them to be finance-savvy individuals. The journey we started in collaboration with NISM has had a significant impact and continues to inspire us to expand the programme across deep Bharat."

The feedback from participants has been positive and encouraging so far. In addition to "Kona Kona Shiksha", Kotak Securities implements its CSR Project on Education & Livelihood in partnership with Kotak Education Foundation (KEF).

Hindware Unveils Aqua Pro Water Saving Solutions, with Up to 98% Water Savings for Taps

In response to India's urgent water scarcity challenges, Hindware, the country's leading bathware brand, has launched 'Aqua Pro Water Saving Solutions.' The range introduces three advanced nozzles aimed at transforming water usage habits: the Dual Mode nozzle, providing water savings of up to 98%; the Dome Mode nozzle, allowing users to conserve up to 96% of water; and the Spray Mode nozzle, designed to decrease water usage by up to 85%.

Hindware has partnered with the Swedish innovation company, Altered, to bring these revolutionary nozzles to market under 'Aqua Pro Water Saving Solutions'. Through this strategic partnership, Hindware gains access to Altered's patented technology and has started manufacturing of these groundbreaking water-saving nozzles at its own plant. This move aims to make these innovative solutions more affordable and accessible to a wider audience.

With an affordable introductory price of Rs. 399, these nozzles will help in democratizing water conservation across all segments of society. This launch underscores Hindware's dedication to sustainable water management, with Aqua Pro solutions serving as the initial stride towards a more water-efficient future.

Kotak Organises 'Sehat Ka Safar' - Nationwide Health Checkup Drive for Truck Drivers

Kotak Mahindra Bank ("KMBL" / "Kotak") has unveiled the 2nd edition of 'Sehat Ka Safar', a Kotak Karma initiative, dedicated to prioritizing the physical well-being of truck drivers nationwide.

Under this initiative, Kotak is hosting complimentary health check-up camps tailored specifically for this vital workforce. These camps will offer free medical consultations and a range of tests, addressing the health and wellness needs of around 3,000 truck drivers across the country through ‘Sehat Ka Safar’. Services such as eye check-ups, assessments by physiotherapists/orthopedic specialists for posture evaluation, dental checks for initial screenings of oral cancer, and an overall health check covering blood pressure, blood sugar among others, will be provided. Alongside providing medications at no cost, Kotak is conducting awareness sessions on government welfare schemes aimed at enhancing the well-being of the drivers.

Amit Mohan, President – Logistics & Infrastructure at Kotak Mahindra Bank, said, “Truck drivers, often unsung heroes form the backbone of our economy, tirelessly transporting goods across the country. Unfortunately, their demanding schedules often leave little time for prioritising their own health. Our health check-up camps aim to promote a healthy lifestyle and offer

essential guidance to these drivers. Building on the success of previous camps, we are optimistic that 'Sehat Ka Safar' will touch even more lives."

Up to 30 health camps will be organised across Transport Hubs frequented by truck drivers. Each camp will be staffed by six members comprising doctors and nursing staff from Doctors4You. This initiative is set to extend its reach up to 30 cities, including locations such as Nashik, Moradabad, Kanpur, Rohtak, Faridabad, Bikaner, Bhilwara, Jaipur, Jodhpur, Bathinda, Jalandhar, Ludhiana, Chandigarh, Vellore, Sankari, Calicut, Hyderabad - Auto Nagar, Hubli, Jorhat, Dhanbad, Bhubaneswar, Patna, Pune, Aurangabad, Nashik, Raipur, Gandhidham, Indore, Gwalior, and Surendranagar – Halvad.

'Sehat Ka Safar' began in the year 2023. In its 1st edition, Kotak had organized 30 'Sehat Ka Safar' medical camps which benefited close to 3,000 truck drivers, nationwide.

Herbalife India Partners with IIM Bangalore to Drive Sustainable Supply Chain Practices

Herbalife India, a global health and wellness company and community partnered with the prestigious Indian Institute of Management Bangalore (IIMB) to establish a cutting-edge Supply Chain Sustainability Lab. Launched in 2023, this collaborative effort aims to advance sustainable supply chain practices, dissemination, and advocacy through research and development initiatives. Herbalife India and the IIMB Supply Chain Sustainability Lab are leading the charge for sustainable supply chains, tackling plastic packaging usage, and pursuing net-zero impact.

The Supply Chain Sustainability Lab takes a comprehensive five-pronged approach to sustainability - knowledge creation (tools, research), expert consulting for businesses, and encouraging a collaborative ecosystem through supplier assessment, education, and industry partnerships.

A core focus of the Supply Chain Sustainability Lab's mission is empowering businesses through the development and implementation of practical tools. These first-of-their-kind tools include the Transportation Emission Measurement Tool (TEMT), which measures emissions across various transportation modes. Companies can leverage this data to make informed decisions that minimize their carbon footprint. Complementing TEMT is the Carbon Accounting Tool, specifically designed for the Indian market which calculates Scope 1, 2, and 3 emissions. This provides businesses, particularly MSMEs, with a comprehensive environmental assessment.

In the last year, the lab benefitted 100+ organizations with its tools, launched five case studies on sustainable supply chain management, published research articles, white papers, and thought leadership pieces.

Uday Prakash, Vice President – Operations and Finance, Herbalife India said, "Our partnership with IIMB is a cornerstone of Herbalife India's commitment to sustainability. This collaboration is consistent with our commitment to sustainability and to playing our role in driving positive change. We're developing innovative solutions, like closed-loop packaging systems, to create a more sustainable future. By leveraging successful case studies, implementing impactful tools, and collaborating with industry leaders, we're adapting best practices to suit the Indian context. Together, we're on a path to a greener future, inspiring others by encouraging a more sustainable supply chain ecosystem."

Dr. Aditya Gupta, COO, TCI-IIM B Supply Chain Sustainability Lab said -"I'm proud that our lab is making significant contribution to sustainable supply chain education and innovation. Through insightful research, industry collaboration, and practical tools, we're bridging the gap between theory and practice, empowering businesses of all sizes to build a more sustainable future. Our collaboration with Herbalife is poised to make a substantial contribution to the country's journey towards achieving net-zero emissions."

This joint initiative has played a significant role in advancing knowledge and capacity building in sustainable supply chain management. Through insightful case studies and thought leadership articles, it has highlighted innovative approaches. Additionally, strategic collaborations with like-minded organizations have facilitated knowledge sharing and collaborative research projects, contributing to a deeper understanding of sustainable supply chain practices.

Whiteland Corporation entered the CSR arena by establishing the Whiteland Foundation and planted 3000 saplings

Whiteland Corporation, a leading real estate company, entered the CSR arena with the establishment of the Whiteland Foundation. The foundation joined hands with the Say Earth NGO in a significant move towards sustainable development. Today, the company's employees demonstrated their commitment to environmental conservation by planting 3,000 saplings under the project ‘Urban Forest’ at the Clover Leaf Roundabout, strategically located at the interchange of NH48 and Dwarka Expressway in Gurugram.

Each employee actively participated in the initiative, planting up to 20 saplings, thereby making a substantial contribution to the city's green cover. This concerted effort underscores Whiteland Corporation's dedication to fostering a healthier ecosystem and ensuring a sustainable future for Gurugram. The tree planting ceremony was graced by the esteemed presence of the Whiteland Foundation team, Whiteland Corporation’s employees, Mr. Ramveer Tanwar's team, and GMDA personnel, who delivered insightful remarks on the importance of environmental conservation and community engagement in achieving sustainable development goals.

Mr. Pankaj Pal, Managing Director of Whiteland Corporation, said, "On the occasion of Earth Day, we are pleased that Whiteland Corporation has entered the CSR arena with the establishment of the Whiteland Foundation. At Whiteland Foundation, we recognize the profound impact of environmental stewardship on our collective well-being. Our partnership with the Say Earth NGO in the tree planting project epitomizes our commitment to sustainability. By actively engaging in initiatives like this, we empower our employees to be agents of positive change, contributing to the enhancement of Gurugram's green cover and the preservation of our planet for future generations. We firmly believe that every individual has the power to make a difference, and through collaborative efforts such as this, we can create a more sustainable and resilient future for all. Together, we can cultivate a greener, healthier world for ourselves and for generations to come." Whiteland Foundation’s mission is to uplift environment, Education, Women Empowerment, Health, Labor Welfare & Animal Welfare.

This initiative signifies Whiteland Corporation's unwavering commitment to environmental sustainability. By planting trees, the company aims to mitigate climate change, enhance air quality, and promote biodiversity in the region. The project, slated to continue for the next three years with the support of the Say Earth Foundation, reflects a long-term approach towards nurturing the planted saplings and fostering Gurugram's ecological well-being.

The tree planting event held on April 20th, 2024, holds particular significance as it coincides with International Earth Day. This global observance serves as a poignant reminder of our collective responsibility towards protecting our planet. Whiteland Corporation's initiative epitomizes the spirit of Earth Day by

taking proactive measures to promote environmental well-being and sustainability. Mr. Ramveer Tanwar (PondMan), an Environmentalist and TEDx Speaker based in Greater Noida, has been passionate about water conservation since his student life. He started his campaign called Jal Chaupal in Gautam Budhha Nagar, Uttar Pradesh, urging people to conserve water and save natural resources like ponds, lakes, and wetlands. He received training from The Central Pollution Control Board (CPCB), MOEF, and the Government of India. Mr. Tanwar is also the founder of Say Earth NGO. Ramveer Tanwar was praised by Honorable Prime Minister Shri Narendra Modi Ji in Mann Ki Baat and by Honorable Chief Minister Shri Yogi Adityanath. He is declared as Brand Ambassador of Swachh Bharat Mission, Ghaziabad, and appointed district coordinator of the 'BhuJal-Sena, Noida (Groundwater Force)' by the Government of Uttar Pradesh.

DS Group Steps Up Sustainability with Solar-Powered EV Charging Stations for Employees

Marking a significant leap in its sustainability initiatives, Dharampal Satyapal Group (DS Group), a multi-business corporation and a leading FMCG conglomerate announced the installation of electric vehicle (EV) charging stations powered by solar energy in the open parking area at its headquarters in Noida. This progressive addition to its sustainability initiatives demonstrates DS Group's continued commitment to providing employees with tangible ways to embrace clean energy solutions.

The new EV charging stations offer a convenient and user-friendly way for employees who drive electric vehicles to recharge their cars during office hours. By promoting the use of electric vehicles, the company is actively working to reduce its carbon footprint while contributing to a cleaner future.

"The installation of these EV charging stations aligns perfectly with DS Group's commitment to environmental stewardship. We believe this initiative will benefit our employees by providing a convenient charging solution and contribute to a more sustainable future for all," said Mr Ramesh Kumar, Senior General Manager, Facility Management, DS Group.

The DS Group Headquarters (DSHQ) is a LEED Platinum-certified building, recognized for its sustainable practices across seven categories. These include reducing pollution through employee transportation, using native plants and rainwater harvesting, significant water conservation measures, energy efficiency through features like daylight access, using eco-friendly materials, maintaining good indoor air quality, and pursuing carbon neutrality through renewable energy and waste management. This commitment to sustainability reflects the DS Group's focus on environmental, social, and economic well-being.

Gaurs Foundation Hosts Women Icon Awards 2024, Celebrates Women's Excellence

Gaurs Foundation, a CSR initiative of Gaurs Group, hosted an award show to celebrate the feisty spirit of Indian women and to commemorate International Women's Day. The awards were dedicated to the current year's theme 'Invest in Women: Accelerate Progress' under the campaign theme 'Inspire Inclusion'. DCP Women's Safety, Gautam Buddh Nagar, Ms. Preeti Yadav, presented the esteemed 'Women Icon Awards 2024' on March 6th, 2024, at The Gaurs Sarovar Premiere, Gaur City, Greater Noida West. This was the first-ever event by the Foundation that served as a platform to celebrate the remarkable achievements and unwavering resilience of women across various domains. The event was held.

Gaurs Group, also known as Gaursons India, is committed to empowering women in the workforce as it firmly believes in creating a diverse and inclusive environment. It's time when the Group recognises the contributions of not just its female workforce but also of the females in the wider community that we thrive in and contribute in the evolution of the Delhi-NCR region.

Key achievers from different genres, including Kavita Devgan (Author, speaker and columnist), Khyati Gupta (Pinkishe Foundation), Dr. Mohita Sharma (Eye Surgeon), Latika Wadhwa (Mompreneur Circle), Dr. Sonam Mahajan Puri (Digital Content Creator), Dipti Tolani (Salt Attire), Minakshi Tyagi & Vanita Bhat Sopori (Nari Pragati Social Foundation) and many more were honoured with awards in different categories.

The initiative underscored the Gaurs Foundation's unwavering dedication to promoting gender parity, empowering women, and amplifying their voices across all spheres of society. The 'Women Icon Awards 2024' brought together a diverse gathering of accomplished women, inspiring leaders, and esteemed guests for an evening dedicated to recognising and honouring those who are doing exceptionally well in their respective fields. From trailblazing entrepreneurs and innovators to influential change-makers and community leaders, the event showcased the remarkable contributions of women in shaping a better tomorrow.

Sharing her thoughts, Manju Gaur, Director, Gaurs Group, said, "Behind every empowered and strong woman is another empowered woman who understands her responsibility towards uplifting her community. We hosted this event to felicitate such women who have not only achieved great heights in their respective fields but have also helped many women realise their potential and empower themselves. As women are an integral part of society, it is vital that they take care of their health, spend time with themselves, organise themselves as an idol that can be looked up to, and plan their schedules to make the most out of their time."

The event hosted awards for achievers from multiple genres, including those contributing to the education sector, healthcare, community building, image building of businesses, doctors, singers, and more. A panel discussion on breaking barriers was also organised, where experts from various industries shared their valuable insights. Gaurs Foundation also contributes to the 'Beti Bachao, Beti Padhao' initiative by offering free education to girls and participates in similar activities to uplift the community.

Love All Serve All

मेरा NGO मेरा स्वाभिमान

Live And Let Live

GOLDEN JUBILEE

(50 YEARS OF SERVICE TO HUMANITY)

VIR CA ANIL JAIN
International President

The phrase **"मेरा NGO, मेरा स्वाभिमान"** encapsulates the essence of empowerment, which signifies the transformative power of community driven initiatives, where all our members, associates, philanthropists come together to uplift, support, and inspire one another. It speaks to the inherent dignity and pride that comes from contributing to the welfare of other beings and the nation at large. It is not just a slogan; but call to action, a rallying cry for a brighter future. Let us embrace it wholeheartedly, knowing that in lifting others, we elevate ourselves. Together, let us continue to strive for a nation where every individual can live with dignity, pride, and purpose.

NGOs whether yours or ours, are the backbone of significant social change. They are the unsung heroes who champion causes ranging from education and healthcare to skill development to women empowerment to human rights to environmental conservation and to especially abled people. Their selfless dedication embodies the essence of collective aspirations towards a more equitable and just society.

CSR impact is now quite visible in the growth of the social sector and its sustainability will largely depend on corporatization of NGO's and bringing in professionalism in their governance. The size, structure and management of these organizations would need a holistic review in terms of competence, capacity, scale, bandwidth and so on. **The only solution during this transition phase lies in "Joining hands" by NGO's** having different core competences and move on, to match the enhanced expectations of the society and Government, consequent upon, ever increasing CSR funding in social sector by Corporate houses.

The Mahavir International is launching its **"Golden Jubilee Celebration" on 7th July, 2024, Sunday at Manekshaw Centre, New Delhi** in the presence of all dignitaries, prominent NGO's, PSU's , Corporates and Industry tycoons. On this occasion, we propose to discuss "Changing Role of NGOs in the Emerging Economic and Social environment of the country". We seek your guidance and indulgence in the discussion for shaping the social sector of future.

Credentials of our NGO

1. Mahavir International (born in 1975)
2. Motto: **"LOVE ALL - SERVE ALL"**
3. Non-religious Social Service Organization.
4. Well-structured and transparently governed constitution.
5. 350 centres, 10 Regions, 30 zones, 10000 families as members.
6. Supported by members, donors, CSR funds and so on.
7. Registered with Niti-Ayog, Govt. of India.
8. Registered under FCRA with Ministry of Home Affairs,for foreign contributions.
9. Registered with Ministry of Corporate Affairs, Govt. of India for CSR donation .
10. Approved under Income Tax Laws and all donations are exempt under section 80G.

CSR INDIA UNITED

Dabur Revives Village Pond in Dharampur, Baddi

Moving towards its mission of becoming Water Positive by 2030, Dabur India Limited today announced the reconstruction of a pond in Village Dharampur, Baddi, Himachal Pradesh. The rejuvenation of the village pond holds significant promise for the local community, with over 350 families poised to benefit from this project.

Speaking on the occasion, Dabur India Limited Chairman Mohit Burman said: “At Dabur, we recognise the importance of community level programmes for Water Conservation and Management. This project has been developed with active community participation to improve the sustainable livelihood of the poorest and excluded communities in the area by strengthening their access to water and technology as well as management capacities. By rejuvenating this village pond, we are not just restoring a natural resource, we are revitalizing an entire community. Dabur's commitment to sustainable development and community welfare shines through initiatives like these, as we strive to create a better, brighter future for all.”

This comprehensive restoration project was initiated by Dabur’s CSR arm Jivanti Welfare and Charitable Trust in collaboration with the Village Panchayat. Interventions included pond digging, desilting, stone-pitching, boundary wall construction, plantation etc alongside the installation of a sustainable water management system ensuring the pond's long-term viability and functionality. The refurbished village pond in Dharamapur was inaugurated and handed over to the village panchayat at a function organised today.

Speaking on the occasion, Dabur India Limited Chief Executive Officer Mohit Malhotra said: “This initiative aligns seamlessly with our overarching commitment to achieve water positivity by 2030, a pledge that underscores our dedication to conserving and augmenting water resources for future generations. At Dabur, we recognize the critical importance of water sustainability in mitigating environmental challenges and ensuring the resilience of communities worldwide. By revitalizing the village pond in Dharampur, Baddi, we are not only taking a proactive step towards water conservation but also demonstrating our ambition to create lasting positive impacts on local ecosystems and livelihoods. Through concerted efforts such as this, we are actively working towards fulfilling our vision of a more sustainable and water-secure future, where communities thrive in harmony with nature.”

Dabur India Limited has been actively engaged in various community-development initiatives in this region, including Education, Skill Development and Construction of Sanitation facilities. "What is that life worth which cannot bring comfort to others" These inspiring words from Dabur India Ltd Founder Dr. S. K. Burman have been the guiding light behind Dabur's social development initiatives. Dabur has been involved with community development work since 1994, endeavouring to bring about an enduring change in the lives of people and to create the right environment for driving the local economy.

Dalmia Bharat Foundation Initiates Tailoring Entrepreneurship Programme for Rural Women on International Women's Day

In honour of International Women's Day, Dalmia Bharat Foundation (DBF), the corporate social responsibility arm of Dalmia Bharat Ltd. (DBL) has introduced a sustainable livelihood programme aimed at empowering rural women through entrepreneurship, in the trade of tailoring. This transformative initiative, aligned with the United Nations' global theme, "Invest in Women—Accelerate Growth," underscores DBF's commitment to promoting gender equality and economic empowerment in the communities surrounding their operational regions. Following a comprehensive evaluation, DBF has identified 440 rural women entrepreneurs from 16 locations across India for the programme. The objective is to provide these women with effective training in garment stitching skills and financial assistance, enabling them to establish and sustain their own micro-enterprises independently. Each woman will receive support in the form of a tailoring machine, with costs shared equally between the beneficiary and DBF, ensuring financial constraints do not hinder the progress of these aspiring entrepreneurs. This initiative will provide a substantial boost in annual income for each woman, with potential earnings of up to Rs. 40,000.

Commenting on the programme, Mr. Ashok Kumar Gupta, CEO, Dalmia Bharat Foundation said, "Our mission at Dalmia Bharat is deeply rooted in our commitment to catalyzing positive change within rural communities across India. With this initiative we aim to equip rural women with the tools and skills they need to thrive in the tailoring trade, offering them more than just a source of income – we are providing a pathway to dignity and self-reliance. When women are empowered, they become agents of change within their families and communities, driving progress and prosperity. By investing in women, we are investing in the future of our nation, building a more inclusive and equitable society for generations to come."

All beneficiaries under this initiative have undergone basic tailoring training, lasting 2-3 months, either at the local skill center or centers supported by DBF. The number of beneficiaries is determined by area demand and existing tailoring units to ensure sustainable income. DBF will ensure regular follow ups on the income flow with the beneficiaries using their Monitoring and Evaluation framework. This initiative is part of DBF's flagship program, Gram Parivartan, which aims to provide economically sustainable, ecologically responsible, and socially equitable livelihoods to achieve an additional annual income of Rs. 1,00,000 through individual or group interventions, operating independently or converged with government programs.

Veteran humanitarian leader Anand Kumar Bolimera takes the helm as the National Director of Habitat for Humanity India

Habitat for Humanity India has appointed Anand Kumar Bolimera as its new National Director. With over two and a half decades of extensive experience in strategic planning, programme development, review and evaluation, and delivery of inclusive humanitarian response initiatives, Anand brings a wealth of expertise and a passion for social impact to his new role. He takes over from James Samuel who served as the interim National Director of Habitat for Humanity India.

Anand Kumar Bolimera, National Director - Habitat for Humanity India

"We are thrilled to welcome Anand as our new National Director," said Sheila Kripalani, Chairperson of the Board of Trustees, Habitat for Humanity India. "His leadership acumen, and dedication to humanitarian values make him the ideal leader to drive Habitat forward as we pursue the strategic direction to grow and deepen our impact. We are confident that under his guidance, Habitat for Humanity India will continue to thrive and make a significant difference in the lives of families we serve at the grassroots. I would also like to thank James Samuel for his incredible dedication and commitment as the interim National Director."

Anand is a seasoned professional with deep rooted knowledge about the development sector in India. He has led numerous humanitarian response programmes, including relief, rehabilitation, and resettlement efforts, demonstrating his ability to navigate complex challenges and deliver impactful solutions. His experience in multi-stakeholder engagement and inclusive policy promotion underscores his dedication to build partnerships that drive sustainable change and transform marginalised communities.

Ujjwala and Santosh Bhurud along with their son Suyash stand proudly in front of their new home built in partnership with Habitat

"To lead Habitat for Humanity India is an honour for me, particularly at a time when the need for housing is more pertinent than ever." said Anand. "I am deeply inspired by the organisation's mission to empower vulnerable families by partnering with them to build strength, stability, and self-reliance through shelter. I look forward to collaborating with the Board, work with our remarkable team and foster close connections with our network of supporters to advance Habitat's mission and impact the lives of families across India."

As the National Director, Anand will lead the organisation in its efforts to address housing challenges, promote community resilience, and create a lasting change for families in need of decent shelter. His strategic vision, coupled with his commitment to inclusivity and social justice, will guide Habitat for Humanity India as it continues to support families and build brighter futures.

Anand's appointment marks an exciting new chapter for Habitat for Humanity India as the organisation reaffirms its commitment towards the vision of a world where everyone has a decent place to live.

Punjab Kings announces partnership with Shikhar Dhawan Foundation & M3M Foundation to promote girl child education initiative

On International Women's Day, the KPH Dream Cricket Limited via the Indian Premier League franchise Punjab Kings announced their partnership with Shikhar Dhawan Foundation & M3M Foundation to support girl child education and skills. As part of the partnership, the Punjab Kings will help in amplifying the initiative with implementation partners Shikhar Dhawan Foundation (SDF), in collaboration with Funding partner M3M Foundation.

In an innovative scholarship, the M3M Foundation with its implementing partner Shikhar Dhawan Foundation, will commit support to one girl child for her vocational education for every 25 runs scored or 3 wickets taken by Punjab Kings during their home games. Through the initiative, the organisation will offer vocational education support to 111 girls for up to Rs. 5 Lakhs, covering a total amount of Rs. 5.55 crore over the next five years. The scholarship would be used towards funding the education of deserving girls from economically disadvantaged homes for their higher vocational training to make them independent financially and to shape their future. The funds will be provided to the girls from the undergraduate level till they finish graduating and will be agnostic to their education choice.

The enrolments for the scholarships will be taken through registrations at the https://shikhardhawanfoundation.com/ Website.

Speaking on the initiative, Punjab Kings captain Shikhar Dhawan said, "I am delighted that my IPL franchise decided to partner with our cause and amplify our initiative in such a unique and interesting way. With the support of our Shers, we hope to secure the future of young girls in the country and to ensure our aid reaches those who are in need to have a sustainable future." KPH Dream Cricket Limited CEO Mr. Satish Menon said, "This is a wonderful initiative, and we are delighted to do our part in enabling equal opportunities to each one. We are confident that we will be able to help those in need, and we hope to create a society where all girls can spread their wings and achieve their dreams."

M3M Foundation Chairperson and Trustee Dr. Payal Kanodia Said "As stewards of progress and champions of change, we acknowledge that educating girls is pivotal in building a thriving society. We are happy that together, we are trying to pave the path towards a future where every girl, irrespective of her background, is empowered through education to reach her fullest potential and illuminate the world with her brilliance. With deep appreciation, we extend our gratitude to Shikhar Dhawan Foundation and Punjab Kings for their invaluable partnership in advancing girl child education with us through this initiative."

Drone Destination announces mega pan India expansion with #EverythingDrones – increases presence across the full spectrum of Drone Ecosystem in India

Drone Destination, a leading name in the Drone Industry, has unveiled "#Everything Drones," their strategic initiative of providing complete end-to-end solutions for the drone ecosystem.

The company plans to establish India's largest network of fixed and mobile "Drone Hubs" which will offer "Everything Drones". Over the next 3 months, the company aims to roll out 250 such hubs and also aims to establish a network of over 1000 such hubs in the next two years. This network will focus on cost effectiveness, efficiency, and turnaround time.

The company launched the following new initiatives under the umbrella of #EverythingDrones:

- **Drone Hub on Wheels** - offering integrated services like Drone Sales, Repairs & Maintenance, Drone Services, and Drone Training through "Drone Dost", "Drone Doctor" and "Drone Guru." (Dost/ Doctor/Guru are personas of the same Engineer/ Pilot wearing three different hats)
- **Drone Shiksha**- An initiative to introduce Drones as a new STEM learning in schools starting from the elementary level itself. The students will be trained to build, code and fly Drones.
- **Drone Kaushal** - For students who intend to make a career in Drones post-schooling, Drone Destination offers several skilling programs including a certified Drone Pilot program.
- **A strategic partnership with Hubblefly Batteries Private Limited** showcased "New Drone Batteries" which will be used by Drone Destination for all its Drone activities.
- **Drone Soccer** - in association with the Drone Soccer Association of India, Drone Soccer is a new exciting sport that can be played by children to senior citizens, fit or differently abled. Drone Soccer Association of India (DSAI) is a founding member of FIDA (Federation of Internation Drone Soccer Association). The first Drone Soccer World Cup Championship is scheduled to be held in Korea in 2025 and DSAI in association with Drone Destination will send an Indian Representative Team for the same.

Drone Destination is India's leading Drone-as-a-Service and largest Drone Training Organization and is listed on NSE Emerge.

Key offerings under #EverthingDrones include several products and services across the value chain of the Drone ecosystem including Drones, Batteries & Components, Drone Services, Drone Education and Skilling, Drone Repair and Maintenance, and Drone Sports.

Launching these initiatives - Alok Sharma, Chairman of Drone Destination, said, "Drones being a nascent industry has some critical gaps, which we, as pioneers aim to plug with the offerings being launched today. A pan India rollout of 'Drone Hub on Wheels' will offer "#EverythingDrones" with a focus on "turnaround time" - from Drones / Drone Services to after-sales and training. Each pilot is trained on multiple skills like 'Drone Dost' providing drone services like agri-spray, 'Drone Doctor ' for fixing out-of-action drones, and 'Drone Guru' for training local youth on drones. The offerings launched today will provide indigenous solutions for the drone industry in the country, in line with the Hon'ble PM's call for 'Make in India' and 'Atmanirbhar Bharat' and shall further boost India's technological leadership in the world."

Commenting on the success of the company, in a short span, Chirag Sharma, MD of Drone Destination, said "Drone Destination, has set an example in the start-up ecosystem by being prudent to all its stakeholders and following financial discipline, ensuring profitability ahead of the curve. Going forward with #EverythingDrones, we are confident of supercharging the company's growth and creating an impact that shall be visible across multiple industries from - agriculture, survey and mapping, smart cities, infrastructure like rail, road, port, telecom, power, utilities, BFSI to logistics and delivery and much more. Also, by combining new-age technology like AI with drone technology, we see ourselves delivering substantial ESG outcomes for businesses. #EverythingDrones, is poised to redefine the industry landscape and set new standards for excellence and innovation."

USAID Launches Women's Health and Livelihood Alliance - Bridging Healthcare and Economic Gaps for Women in India

The United States Agency for International Development (USAID) and Samhita's Collective Good Foundation partnered to launch the Women's Health and Livelihood Alliance (WOHLA), a multi-stakeholder initiative designed to empower women in underserved communities across India by addressing the intersecting aspects of their health and economic wellbeing.

WOHLA aims to empower women by increasing their access to sexual and reproductive health information, services, and products. Additionally, it seeks to enhance their financial and digital literacy, thereby fostering livelihood opportunities and promoting workforce participation.

USAID Assistant Administrator for Global Health, Dr. Atul Gawande, said, "When women are given the opportunity to thrive, the entire community thrives too. Women's economic security and rights is the critical foundation for communities, peace, and resilient economies. The Women's Health and Livelihood Alliance in India provides career development and job opportunities for women, and expands access to sexual and reproductive health care—services that promote gender equity and economic security for women."

Dr. Amit Bhanot, India Country Director and Chief of Party, USAID's Frontier Health Market (FHM) Engage program, said, "WOHLA is designed to mobilize private sector resources, foster partnerships, and implement targeted interventions to cultivate an ecosystem that prioritizes the symbiotic relationship between women's reproductive health and professional advancement. The benefits are far-reaching and may even eliminate genderbased violence."

Priya Naik, Founder and CEO at Samhita Social Ventures Pvt Ltd, said, "Deeply committed to advancing the well-being of women and girls through multiple WOHLA interventions, we aim to increase access to reproductive healthcare information, products and services and unlock access to livelihood interventions for empowering young women."

Sandeep Varma, Chief Executive Officer, The Credit Guarantee Fund Trust for Micro and Small Enterprise, Ministry of Medium and Small Enterprises, said, "We are committed to scaling micro and small enterprises led by women in the healthcare sector, facilitating seamless access to finance. Our goal is to empower these enterprises to turn aspirations into tangible achievements, thereby catalyzing economic growth. Through our collaborative efforts, we aim to ensure essential credit accessibility for India's medium and small enterprises."

Tuan Pham, Head of Social Impact at LinkedIn in Asia Pacific, said, "LinkedIn is proud to join forces with WOHLA in our shared mission to uplift and empower women in India. Through this initiative, we are dedicated to leveraging our platform's capabilities to foster positive change in women's economic opportunities and success. Together, we are not just advocating for progress – we are actively working to create a future where every woman has the resources and support needed to thrive."

Ashwini Saxena, CEO, JSW Foundation, said, "WOHLA India syncs with JSW's goal to catalyze entrepreneurial journeys of two million rural women in India, giving them enhanced agency and incomes."

WHY SOME COUNTRIES ARE AIMING FOR 'NET-NEGATIVE' EMISSIONS

Last month, Germany became the first major economy to announce that it intends to introduce a target to reach "net-negative" emissions later this century

While "net-zero" describes a state where a country's emissions are balanced by the amount of greenhouse gases it can remove from the atmosphere, "net-negative" describes a state of removals exceeding emissions.

Therefore, when a country achieves "net-negative" emissions, it has not only stopped its contribution to climate change, but is actively helping to reduce warming.

Many of the scenarios for achieving the world's most ambitious climate goals require the world to become net-negative in the second half of this century.

In these scenarios, failure to cut emissions fast enough in the near term causes the world to "overshoot" its climate targets, meaning they can only be met later on in the century by removing billions of tonnes of carbon dioxide (CO2) from the atmosphere. Some experts have also called on developed countries to aim to reach net-negative emissions earlier on this century, arguing they have a moral responsibility to reduce climate change and to create space for other countries to emit as they develop.

However, the ability of countries to remove CO2 from the atmosphere is defined by a range of factors, including their land area, forest cover and population size.

There is also a risk that setting distant net-negative targets could become a "distraction" from the urgent need to reduce emissions this decade, a researcher tells Carbon Brief.

Below, Carbon Brief explores which countries are or have targets to be net-negative, as well as the moral and scientific arguments for setting such a milestone.

WHAT IS MEANT BY 'NET-NEGATIVE' EMISSIONS?

According to the Intergovernmental Panel on Climate Change (IPCC), "net-negative emissions" is achieved when human-caused greenhouse gas removals exceed human-caused greenhouse gas emissions.

> **High income countries have to take a progressive and active role when it comes to tackling climate change.**
>
> –EMMA KARI
> Environment Minister, Finland

The specification of "greenhouse gases" rather than CO2 "makes a very big difference" when it comes to net-negative emissions, says Prof Joeri Rogelj, an IPCC lead author and climate scientist at Imperial College London. The reason for this, he explains, is that there are some non-CO2 greenhouse gas emissions that will be almost impossible to eliminate completely. This is true even if the world makes every effort to meet the goals of the Paris Agreement, the global deal aimed at keeping temperatures well below 2°C by the end of the century, with an ambition of keeping them below 1.5°C.

This includes, for example, methane emissions from rice production. There are currently no technologies available to eliminate these emissions completely – and it is unrealistic to expect rice production to cease entirely in the future.

Scientists call these kinds of emissions “residual non-CO2 emissions”. Rogelj explains:

“Because of residual non-CO2 emissions, we will always reach net-zero CO2 emissions before we reach net-zero greenhouse gas emissions.”

To reach net-zero greenhouse gas emissions, some additional CO2 removal will be needed to compensate for impossible-to-eliminate non-CO2 emissions, he adds:

“To reach net-zero greenhouse gas emissions, we already need to reach net-negative CO2 emissions – because we know that non-CO2 emissions will always be an emissions contribution.”

Because of this, a national target to reach net-negative greenhouse gas emissions can always be interpreted as “significantly more ambitious” than a net-negative CO2 target over the same timescale, he adds.

WHICH COUNTRIES ARE ALREADY AT NET-NEGATIVE EMISSIONS?

Though the vast majority of countries are not close to being net-zero – let alone net-negative – there are a small number of global south countries that already remove more CO2 from the atmosphere than they emit each year.

This net-negative group includes Suriname in South America, Panama in Central America and Bhutan in south Asia.

Suriname is one of the most highly forested countries in the world. It has trees over 97 per cent of its land surface. Trees absorb CO2 as they grow and can store it in their leaves, trunks and roots. Tropical forests are particularly carbon dense, storing a quarter of all the world’s land carbon.

As well as being heavily forested, Suriname is also the smallest country in South America by population, with just 618,000 people.

Its low consumption combined with its ability to remove large amounts of CO2 through its forests each year has allowed Suriname to remain a net-negative country.

However, Suriname’s UN climate plan, known as its “nationally determined contribution” (NDC), says that “significant international support is needed” from developed countries in order for its forests to keep being protected.

In 2023, Reuters reported that Suriname has plans to sell forest carbon offset credits to developed nations under the Paris Agreement.

This means that Suriname wants to sell off some of its ability to remove CO2 from the atmosphere through its forests to more-polluting developed countries, who can then claim that they have effectively paid to reduce their own emissions.

Suriname argues this will bring in finance needed to protect its forests, Reuters said.

However, experts have questioned whether developed nations should be able to claim that they have reduced their own emissions by protecting Suriname’s forests. This is because these forests may have remained intact even without developed nations’ investment. If this were the case, it would mean that no real emissions reduction would have taken place.

(See Carbon Brief’s in-depth carbon offsets series to understand more about the accounting problems associated with forest carbon offset schemes.)

Much like Suriname, Bhutan in south Asia is characterised by high forest cover and a small population. It has trees covering 71 per cent of its land, and 51 per cent of its total land area is covered by strict laws ensuring forest cover is maintained.

At the COP26 climate summit in Glasgow in 2021, Bhutan started a “carbon-negative” club with Suriname as a founding member.

During the summit, Panama’s president declared that the country was also net-negative and that it would be joining the carbon-negative club. According to Panama’s NDC, its emissions are currently more than balanced by its CO2 removals, which come largely from its forests. This is despite the country’s tree cover declining by 8.5 per cent between 2000 and 2022.

The country has targets to restore 50,000 hectares of forest by 2050 and to cut its energy emissions by at least 24 per cent by 2050, when compared to a business-as-usual baseline, according to its NDC.

At COP28 in Dubai in 2023, Panama also joined the Group of Negative Emitters, a small alliance of countries that are or are aiming to be net-negative led by Denmark (more on this below).

Aside from these three countries, there are other global south countries that claim to be “carbon sinks” in their NDCs – implying that they remove more CO2 than they emit each year. This includes the heavily forested nations Gabon in Central Africa and Guyana in South America, as well as small island nations the Comoros, a volcanic archipelago off Africa’s east coast, and Niue, a south Pacific island.

The African island Madagascar has also claimed to be a carbon sink, but it is worth noting that the nation has lost 27 per cent of its tree cover since 2001.

WHICH COUNTRIES ARE AIMING FOR NET-NEGATIVE EMISSIONS?

The past few years have seen a small number of global north countries commit to becoming net-negative on a variety of different timescales – and for a variety of different reasons.

Most recently in February 2024, Germany announced that it intends to introduce a target to reach net-negative greenhouse gas emissions by 2060.

In a document laying out the key features of its proposed target, the

German government argues that reaching net-negative emissions, at least in some parts of the world, will be necessary to balance out unavoidable greenhouse gas emissions, such as methane from farming.

The government also says that, given the current pace of global emissions, limiting global temperature rise to 1.5°C is looking "increasingly unlikely".

It alludes to a situation in which the world first overshoots 1.5°C and then uses CO2 removal techniques to bring temperatures back down, saying:

"Beyond carbon neutrality, net-negative emissions must therefore be used to reduce the greenhouse gas concentration in the atmosphere again in order to meet the 1.5°C target and thus minimise the risks of serious and irreversible consequences for humans and ecosystems on Earth."

(More on this below in: Does the world need to be net-negative to meet global climate goals?)

Back in 2022, both Denmark and Finland announced targets to reach net-negative emissions.

Finland announced targets to reach net-zero greenhouse gas emissions by 2035, and net-negative greenhouse gas emissions by 2040.

According to the climate not-for-profit Carbon Gap, Finland's 2035 and 2040 goals represent the most ambitious legally-binding CO2 removal targets of any country globally.

Climate Home News reported that Finland's targets were based on an analysis by the country's independent climate panel. The analysis aimed to calculate what Finland's "fair share" of global emissions should be, based on its share of the global population, its ability to pay to reduce emissions and its historic responsibility for causing climate change.

Finnish environment minister Emma Kari told Climate Home it was "very important" that the target was underpinned by research, adding:

"High income countries have to take a progressive and active role when it comes to tackling climate change."

Denmark, meanwhile, announced targets to reach net-zero greenhouse gas emissions by 2045 and to cut greenhouse gas emissions by 110 per cent by 2050, achieving net-negative emissions.

In a document explaining the rationale behind the new targets to the people of Denmark, the government said that the country has "an opportunity and an obligation to promote the spread of green solutions in the EU and globally".

It said its new targets will "increase the implementation of already decided initiatives", likely referring to the Paris Agreement.

At COP28 in December 2023, Denmark announced it was starting the Group of Negative Emitters, an alliance of countries that are at or are aiming for net-negative emissions. The group included Denmark, Finland and Panama. However, it was neighbouring Sweden that was the first global north country to set a net-negative target.

Back in 2017, it committed to reaching net-zero greenhouse gas emissions by 2045 and net-negative emissions shortly after.

Reporting on Sweden's climate law in 2017, New Scientist said it was the first country to significantly update its climate targets in light of the Paris Agreement. One global north nation that has not yet set a net-negative target but has been advised to do so is Scotland.

Scotland has committed to reaching net-zero greenhouse gas emissions by 2045 – five years before the overall UK target of 2050.

The UK's independent climate advisers, the Climate Change Committee (CCC), says that its central scenario for how the UK as a whole can reach its 2050 net-zero target sees Scotland becoming net-negative "well before" 2050.

Under this central scenario – known as the "balanced pathway" – Scotland reaches net-negative emissions sooner to compensate for slower action in Wales, England and Northern Ireland.

This reflects that Scotland has the largest remaining intact forests of any nation in the UK – and that Wales and Northern Ireland face a particularly steep challenge in reducing emissions in agriculture, the CCC says.

(Under the CCC's most ambitious net-zero scenario – known as "tailwinds" – the UK as a whole reaches net-negative emissions shortly after 2042. The UK government has not indicated that it intends to act based on the CCC's most ambitious scenario – and is currently behind on meeting its less ambitious targets.)

Another global north power that has been advised to set a net-negative target is the EU.

In advice published ahead of a recommendation for a new EU 2040 target in February, the bloc's science advisers said that the EU could "improve the fairness" of its contribution to global climate action by adopting a net-negative target for "beyond 2050".

The 2021 Europe Climate Law commits the bloc to achieving "negative emissions" after 2050. However, EU member states have not yet agreed a specific target for reaching net-negative emissions.

DOES THE WORLD NEED TO BE NET-NEGATIVE TO MEET GLOBAL CLIMATE GOALS?

The question of whether, scientifically speaking, the world needs to reach net-negative greenhouse gas emissions in order to meet the Paris Agreement's targets depends on what actions countries take in the next few years.

In its latest assessment of how the world can tackle climate change, the IPCC presents a range of scenarios for how the world can meet its temperature goals by the end of the century. In some of these scenarios, global emissions fall extremely rapidly, avoiding the need for the world to reach net-negative greenhouse gas emissions.

However, because global emissions have remained so high in recent years, the path to limiting global warming to 1.5°C or 2°C is getting steeper and steeper, the IPCC says.

Many of its scenarios for keeping temperatures well below 2°C by 2100 do rely on the world reaching net-negative greenhouse gas emissions in the second half of this century.

In these scenarios, failure to cut emissions fast enough in the next few years would see the world temporarily overshoot 1.5°C. This is before large-scale CO2 removal techniques are rolled out globally, alongside ambitious measures to slash emissions, including rapid declines in fossil-fuel use.

At the point when greenhouse gas removals exceed emissions – when the world becomes net-negative – temperatures will be in decline and, depending on the scenario, may fall below 1.5°C or 2°C by the end of the century.

Summarising what the IPCC scenarios say about net-negative emissions, Rogelj says:

"Net-zero CO2 is a geophysical necessity, we need that to stop warming increasing. Net-zero greenhouse gases is more of a policy milestone. When we reach net-zero greenhouse gas emissions – let alone net-negative greenhouse gas emissions – global warming will be slowly reducing at the rate of a couple of tenths of a degree per century."

Although many of the IPCC scenarios see the world turning net-negative this century, there are some scenarios where the world takes immediate action to rapidly cut emissions – meaning temperatures can be kept at 1.5°C without large amounts of CO2 removal.

The charts below, adapted from the IPCC's report on how to tackle climate change, illustrate how global greenhouse gas emissions change under various scenarios where temperatures are kept to 1.5°C or well below 2°C by 2100.

In the first scenario, "Neg", temperatures are highly likely to overshoot 1.5°C this century before returning to this level of warming by 2100. In this scenario, the extensive use of CO2 removal techniques sees the world reach net-negative greenhouse gas emissions (turquoise dotted line) by 2080.

(CO2 removal techniques include direct air capture (DAC – purple), land-use change such as tree planting (blue) and bioenergy with carbon capture and storage (BECCS – green). All of these methods are discussed in more detail below.)

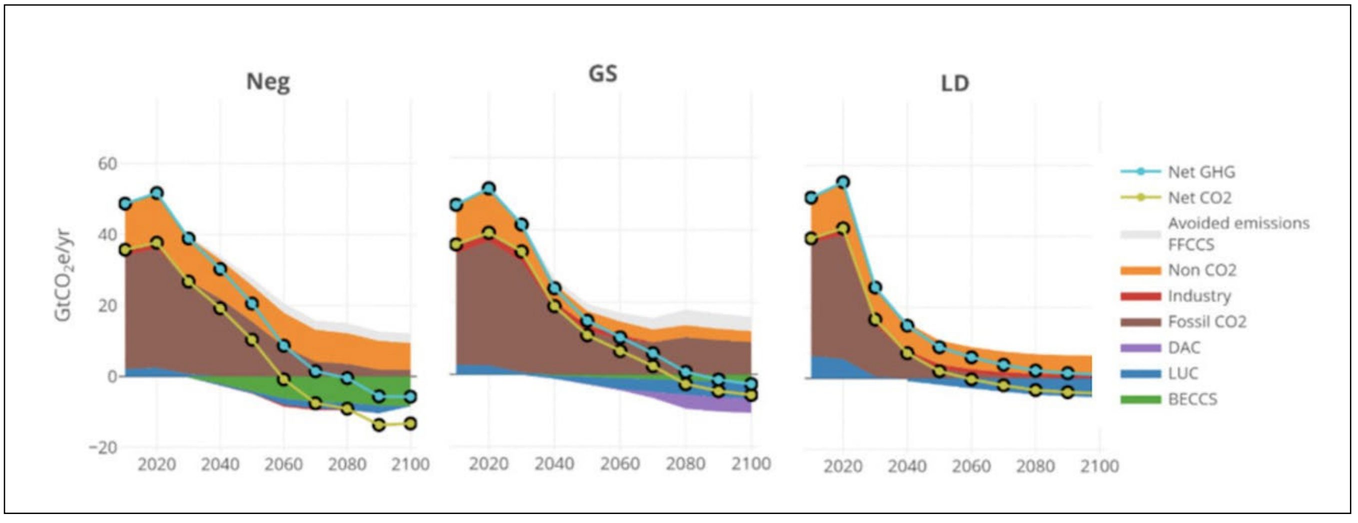
In the second scenario, GS, there is a gradual strengthening of climate policies, giving the world a 66 per cent chance of limiting warming to well below 2°C by 2100. In this scenario, the world reaches net-negative greenhouse gas emissions around 2090.

In the third scenario, LD, a low demand for energy coupled with a rapid fossil fuel phaseout sees net greenhouse gas emissions drop to near – but not below – zero, limiting warming to below 1.5°C without the world becoming net-negative.

(For a more thorough look at scenarios for keeping global warming below 1.5°C or 2°C, see Carbon Brief's recently published interactive on the topic.)

Although almost all IPCC scenarios limiting warming to 1.5°C – and most that stay below 2°C – see a role for large-scale CO2 removal, the report also notes that the techniques available for doing this are at varying levels of readiness and pose different challenges and trade-offs.

Currently, tree-planting and ecosystem restoration are the only "widely deployed" forms of CO2



Three IPCC illustrative scenarios for limiting global warming to 1.5°C (Neg, LD) or well-below 2°C (GS) by 2100. Adapted from IPCC (2022) Figure 3.7

removal, according to the IPCC. However, research suggests that relying too much on land-based CO2 removal methods, such as tree-planting and BECCS – a still emerging technique involving burning crops to produce energy before capturing the resultant CO2 – could take up large areas of land, threatening wildlife and food production.

DAC – which involves directly removing CO2 from air using giant fans that use chemical reactions to filter out the greenhouse gas – is currently limited by its large energy requirements and by cost, the IPCC says.

It is also worth noting that, while the IPCC sets out various scenarios for meeting the 1.5°C and 2°C targets, it does not map out the role that individual countries can or should play in meeting these goals.

Some argue that, given their wealth and historic responsibility for climate change, it is only fair that developed countries reach net-negative emissions in order to create space for ongoing emissions in developing nations. This is discussed in more detail below.

DO SOME COUNTRIES NEED TO BE NET-NEGATIVE TO MEET CLIMATE GOALS FAIRLY?

When setting its net-negative target, Finland made it clear that the rationale was to do its "fair share" when it comes to tackling climate change.

Under the Paris Agreement adopted by nearly every country in the world in 2015, it is officially recognised that developed nations should "take the lead" with slashing their emissions. Additionally, developed nations committed to providing financial assistance to help developing nations transition their economies.

This reflects the fact that developed nations hold the most historic responsibility for climate change. For example, the US and Europe have produced nearly half of all of the greenhouse gas emissions released into the atmosphere since the 1800s.

It also reflects the fact that developed nations have the most resources for addressing climate change.

It follows that developed nations should take the lead when it comes to reaching net-negative emissions, says Rogelj:

"Developed countries should decline emissions first and farthest. That also includes going net-negative, both CO2 and greenhouse gas emissions."

Getting to net-negative emissions sooner could provide more room for developing nations to transition their economies while still prioritising development, he adds:

"When we think of the global pathway that needs to be achieved, the more ambitious that any country that is in a position to do so can be, the more leeway this provides for developing regions to pursue alternative paths."

However, it is worth noting that not all countries will feasibly be able to go net-negative, he adds.

The ability of a country to go net-negative is defined by a variety of factors, including its land size, forest cover, economy and population size.

For example, heavily forested nations with relatively small populations will be more able to get to a position where they are removing more CO2 from the atmosphere than they are emitting each year.

Two out of three of the countries that are already at net-negative emissions, Bhutan and Suriname, are heavily forested with small populations.

Finland, which has the world's most ambitious CO2 removal goals, has forests over nearly three-quarters of its land area.

Rogelj adds:

"I think countries that have CO2 removal potential should [set net-negative goals]. However, countries without CO2 removal potential, it's useless to say you have to go net-negative."

Prof David Reiner, a researcher of climate policy at the University of Cambridge, was part of a research effort to work out how the responsibility for CO2 removal could be shared equally between countries.

He says that trying to figure out who should be responsible for reaching net-negative greenhouse gas emissions is fraught with complicated questions, beyond which countries have the technical capacity. He tells Carbon Brief:

"It's challenging to impose historical responsibility for climate change. We've seen in many areas, people chafe or resist what their grandparents might have done. One example is reparations for slavery. It becomes difficult to assign that. There are people here [in the UK] whose parents moved from the Indian subcontinent, whose emissions are they responsible for?"

He adds that there is a risk that more attention on setting net-negative targets could be a distraction from the urgent need for countries to reduce their emissions this decade:

"What I wouldn't want to see is a rush for more and more countries to adopt net-negative targets to divert attention from the fact that they haven't established how they're going to get their net-zero targets. Or to say: 'Well, now it's even easier for us to justify missing our 2030 target, because look how tough our 2070 target is going to be.'"

Rogelj agrees that, while net-negative targets could have an important role to play in addressing climate change, there is a risk they could be a distraction unless coupled with more near-term action. He tells Carbon Brief:

"Any long-term target without a near-term plan is not credible."

(Source: https://www.eco-business.com/news/explainer-why-some-countries-are-aiming-for-net-negative-emissions/)

GYSS 2024 - Panel discussion by Prof Martin GreenProfessor Martin Green, a veteran solar panel researcher, speaking at the Global Young Scientists Summit organised by Singapore's National Research Foundation in January 2024. *Image: NRF Singapore.*

Ten-fold solar growth needed in climate fight, says photovoltaics 'godfather'

Researchers should also look beyond the hype in perovskites, a next-gen solar technology promising efficiency but harbouring durability and lead pollution risks, to consider alternative designs, **Professor Martin Green** tells Eco-Business' Liang Lei

Nevermind that nations at last month's COP28 climate negotiations agreed to help triple renewable energy capacity globally in seven years. A pioneer of photovoltaic technology wants the solar industry to focus on a larger goal: increase the yearly installed capacity by 10 times, in the next 10 years.

That would be the level at which fossil fuels can be replaced, and climate change meaningfully tackled, Professor Martin Green said. International organisations do not model such high growth rates because their calculations tend to be conservative, he added. The 76-year old Australian engineering don has spent decades poring over the chemistry and circuitry of solar panels. Green has held annual photovoltaic efficiency records for silicon cells in about 30 of the last 40 years. Ninety per cent of the market today uses one of his panel designs. His Chinese students are often credited for an industry boom in the 2000s, when large solar panel factories went global. Media often gives him the "godfather of solar" moniker.

Solar power is seen as a key climate technology today. Annual installation rates have grown tenfold over the past decade, and total capacity surpassed 1 terawatt (TW) in 2022 – contributing to about an eighth of the total power generating potential worldwide.

But the rallying cry is for solar and renewables to displace fossil fuels, and Green acknowledges that another dectupling of solar capacity will be challenging for the mature energy industry. Better government planning will be needed to expand markets, and perhaps large solar farms can float on gentle equatorial waters if land is scarce, he said. Meanwhile, scientists are racing to improve the efficiency of solar cells from 20-odd per cent to over 40 per cent, possibly through stacking advanced materials on top of silicon wafers. A group of materials known as "perovskites" have shown the most promise, though they contain toxic lead and still have durability issues. Other designs have been floated, and Green thinks they should receive more attention.

Eco-Business caught up with Green in Singapore, where he was speaking at the Global Young Scientists Summit, to hear about the latest innovations in photovoltaics and his outlook for the solar industry.

What are the energy and climate implications of eventually having 40 per cent efficient solar cells on the market, compared to the 20 per cent efficient ones today?

Solar cells already provide one of the cheapest way of generating electricity in most countries, according to the International Energy Agency. Commercial solar modules now are in the 20 to 24 per cent sort of efficiency range, and the present cells are cheap enough.

But if you can get to 40 per cent, that will just drive them to a new level of cost efficiency. The lower you can go with cost, the quicker their uptake will be. You can install more panels as a way of overcoming intermittency issues. There have been numerous studies that have shown that you can reliably run electricity networks on solar and wind, combined with storage and transmission.

With more efficient panels you can also use less panels and less land area for a given capacity, which might be particularly important for countries like Singapore where space is not really available.

Can more efficient cells arrive in the market fast enough to fight climate change? We only have a few years left before we breach the 1.5°C warming limit.

I think we've already missed the 1.5°C opportunity – last year planetary warming already reached 1.48°C. But a 2°C limit is still on the table – that is worth shooting for.

In reality things haven't been happening quickly enough to even reach 2°C. The big hope is, if solar can maintain the growth rates it has in the recent past, it will be at a level to provide significant CO_2 emissions reductions and displace fossil fuels. In Australia it is happening more rapidly than most people would expect.

Unfortunately I don't think the adoption of 40 per cent efficient cells is coming fast enough; but we're pushing to bring it about as quickly as we can. There is one technology of particular interest at the moment – stacking what's known as perovskite on top of silicon – but it has stability issues. That is where the real work is required, to get perovskite cells to match the stability of silicon. But perovskite cells could be on the market within a year if someone can demonstrate the long-term viability of the product.

In the early 2000s solar had a breakthrough in costs when Chinese firms grew big, listed in the United States and went international. Today, with China and the United States at loggerheads, do

Staff at a Trina Solar factory in Vietnam commemorate production of silicon wafers, a precursor to solar panels, in August 2023. *Image: Trina Solar.*

you think such cost breakthroughs can still happen?

At that time, there was no other mechanism that was encouraging investment on the scale required for the development of the solar industry, except for US interest in Chinese stocks – so that was what triggered the growth of the industry. Being a sustainable technology sort of helped in that process.

Most solar companies are now listed on the Shenzhen or Hong Kong stock exchanges, rather than the US ones – the US stock markets lost interest about 2010, after the global financial crisis. Once the solar industry matured in China, the Chinese government has sort of looked after them in terms of maintaining growth and encouraging development in a sensible way. It promoted schemes that helped the strong companies to do well while the weaker ones fell by the wayside.

Southeast Asia is a region where renewables and solar growth is far from where it needs to be. What is your assessment of this?

There is a lot of solar manufacturing happening in Southeast Asia – Vietnam, Malaysia, and Thailand to a lesser extent – mainly through companies controlled by China, as a response to the China import tariffs by the US. There is REC group also manufacturing in Singapore.

In terms of solar power, Vietnam is sort of an exception; it was number three in the world for solar installed in 2020. Some of their coal power plans seem to have been shelved now because solar is providing the cheaper option, and can be built faster. Thailand is getting up to 3, 4 per cent penetration of the electricity network with solar. There is a bit of progress on some fronts in this region.

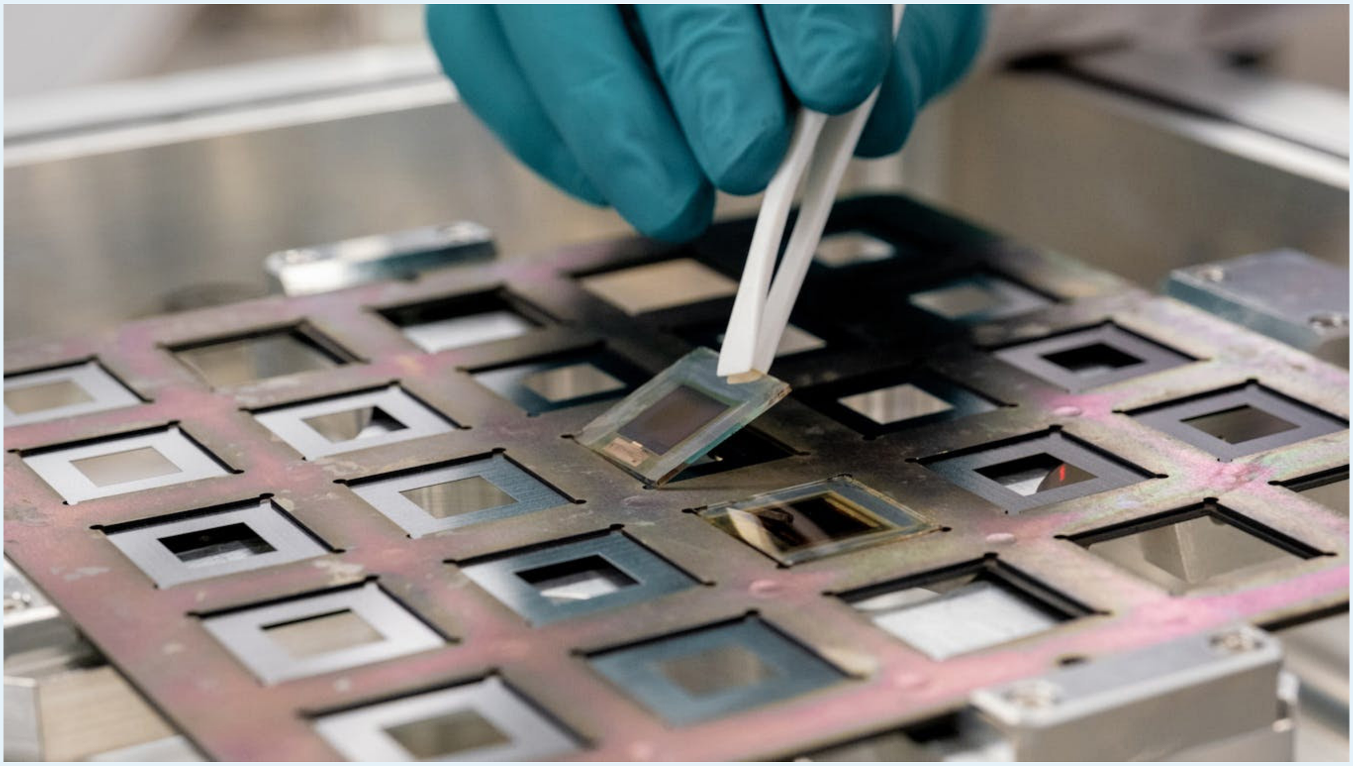
I guess it is about having role models to copy. Countries doing well in the region will provide a model for the rest to follow.

In Australia, regulations for large solar field installations are still being worked through, and there is often a lot of resistance from incumbent electricity generation authorities. An effort to streamline the rapid introduction of solar would be very important for its uptake.

The counterargument to the point about solar being cheap, that we hear here, is that the necessary grid upgrades are expensive. How do you respond to that?

For Australia, many systems have small amounts of battery storage to provide continuity of supply, and there are designated renewable energy zones with common transmission lines. That is the way the issue is being addressed here. You need some form of oversight of the big picture, about where it is most sensible to install solar.

Is research into solar panels still popular? You started your lecture at the Global Young Scientists Summit saying solar is the technology of the 20th century.



Perovskite solar cells invented by scientists at the National University of Singapore set a new efficiency world record last year, at 24.35 per cent. *Image: National University of Singapore.*

I didn't mean that there was nothing else to be done. There is a lot of scientific interest, particularly in perovskites. If you pick up a Science or Nature magazine, and look for an article on solar, it will be on perovskite solar cells.

Some of the most highly cited scientists in the world in recent years have been those working on perovskites. It used to be graphene that was a hot topic, and now it has been knocked off its perch.

Michael Graetzel – he is one of the world's highest cited scientists. His h-index – a way of ranking scientists in terms of the impact of their publications – is over 300, meaning he's had over 300 papers cited over 300 times. It is super high.

So perovskite is a very popular area scientifically, but there is less interest if you're working on technologies that may prove more important in the longer term.

It might be very difficult to get an article published that made a minor improvement in the performance of some of the other cell technologies, whereas with perovskites, you might get a paper published in Nature or Science with any incremental improvement.

A lot of people became interested in perovskite because there are a lot of quality papers on it published in the quality journals – there is a bit of an echo chamber effect occurring here.

It sounds like you feel the excitement in perovskite is unwarranted, or blocking other solar technology?

It'd be better if the effort was spread over other technologies, but for researchers, it is not going to be as rewarding or helpful to their careers, since the prospects of getting a high impact paper is very low because of the lack of interest.

There are different classes of materials (besides perovskite) that you could stack onto silicon to improve the cell's efficiency, but perovskite is receiving 99.99 per cent of the attention.

Is there enough attention within the perovskite community in dealing with the environmental risks of lower durability and lead pollution?

There has been a lot of research on those areas – perovskite cell stability is the real issue and it also affects whether the technology makes it commercially or not.

The amount of waste generated by solar is not really enormous. Aluminium frames are easy to recycle. Glass is fairly easy to recycle, but it hasn't got much value because there is a lot of glass coming from other waste streams as well. There are calculations saying if the world is only powered by solar cells, we'd generate 40 per cent more glass waste than present – you'd rather not do that but it is not a problem entirely out of proportion.

In standard silicon products, there is nothing really toxic apart from the lead in the solder that connects the cells together, some manufacturers are marketing products without any toxic materials at all.

Is that still the case if perovskite cells – with higher lead content – come to market in the next few years? Do they need extra regulations?

I wouldn't recommend them for consumer products, and in many countries – including the whole of Europe – you wouldn't get a lead-based solar cell in a consumer product.

But for professional systems there are exceptions. Some people have done studies saying perovskite cells are thin, so the lead content in them isn't all that much, and would not pollute too much if leached.

There are plenty of arguments along those lines but in terms of environmental legislation, the modules wouldn't pass European hazardous substance standards – unless solar has a special exemption – which it and wind enjoy at the moment, but gets periodically reviewed.

There is the danger that a review somewhere down the road might revoke that special exemption for solar, so it'd be better to have products without toxic elements at all.

Overall, do you see the solar glass half full, or half empty?

The main challenge is just to maintain that really rapid growth we've seen over the last two decades. Ten years ago we had 10 times less installations than now. If we can grow it another 10 times in the next decade, we could have 60 per cent of world electricity supplied by solar – which is the sort of level needed to address climate change.

Growing installations by ten times in a decade is a lot steeper than what the world pledged at COP28, to triple renewables by 2030.

Indeed. So this year solar uptake might amount to 0.4 terawatts of installations, and eventually 4 terawatts a year. That is the level the market could saturate at, and eventually solar could supply all the energy the world needs – the thinking is that the world will become more electrified as it displaces fossil fuels, such as from heating applications.

But as the industry is much bigger now, it obviously becomes more difficult. Analysts are expecting this year to be a bit quieter after high growth last year, but I'm hoping it still grows vigorously this year as well.

The most important thing is having a market for the cells. So some type of international effort to seriously address climate change could provide the path for solar installations to grow by another factor of 10 over this coming decade.

(Source: https://www.eco-business.com/news/ten-fold-solar-growth-needed-in-climate-fight-says-photovoltaics-godfather/?sw-login=true)

The COP28 presidency is now explicitly calling for a target of 11,000 gigawatts (GW) of renewable capacity by 2030, which would mean a tripling of the 3,629GW installed by the end of 2022.
Image: Asian Development Ban, CC BY-SA 3.0, via Flickr.

Q&A: Why deals at COP28 to 'triple renewables' and 'double efficiency' are crucial for 1.5°C

COP28 president Sultan Al Jaber has urged governments to agree on global goals to triple renewables capacity and double the rate of energy efficiency improvements by 2030, an analysis by **Dave Jones**, Carbon Brief

This call from Al-Jaber is supported by the International Energy Agency (IEA) and the International Renewable Energy Agency (IRENA), and political momentum is building.

This month, a US-China joint statement on climate change backed tripling renewables to substitute coal, oil and gas power and bring about "post-peaking meaningful absolute power sector emission reduction".

The context for these targets is a world that remains dramatically off course against global climate goals, with recent assessments pointing to warming of 2.4-2.7°C above pre-industrial levels by 2100.

In its recent report on how to get back on track, the IEA said tripling renewables, doubling efficiency and slashing methane emissions 75 per cent by 2030 would provide 80 per cent of the emissions cuts needed for 1.5°C.

This Q&A explains what tripling renewables and doubling energy efficiency means – and why they are the two biggest actions the world can take to get back on track for 1.5°C, even though they would be insufficient on their own to meet the target. It also looks at what governments would need to do to deliver these goals and the likelihood of them being agreed at COP28.

Why are tripling renewables and doubling efficiency key to 1.5°C?

In the IEA's latest pathway to keeping warming below 1.5°C, global carbon dioxide (CO2) emissions from energy use fall by 35 per cent by 2030, compared to 2022.

Yet the latest analysis from UN Climate Change (UNFCCC) shows that global emissions are set to fall by just 2 per cent below 2019 levels by 2030, if countries continue to follow their current pledges.

The IEA set out five "pillars" to achieve deep emissions reductions by 2030 and keep the path to 1.5°C open, which it suggests should be adopted at COP28. It states that tripling of global renewable capacity is the "single largest driver" of emissions reductions to 2030 in its roadmap.

The other pillars are doubling the rate of global energy efficiency improvements by 2030, cutting methane emissions from fossil fuel production 75 per cent by the same date, developing "innovative, large-scale financing mechanisms" to support such changes in developing countries and measures to ensure an "orderly decline in the use of fossil fuel", such as no new coal power being approved.

As the chart below shows, renewables growth and improved energy efficiency account for almost three-quarters (72 per cent) of the total CO2 emissions cuts needed by 2030 in the IEA pathway.

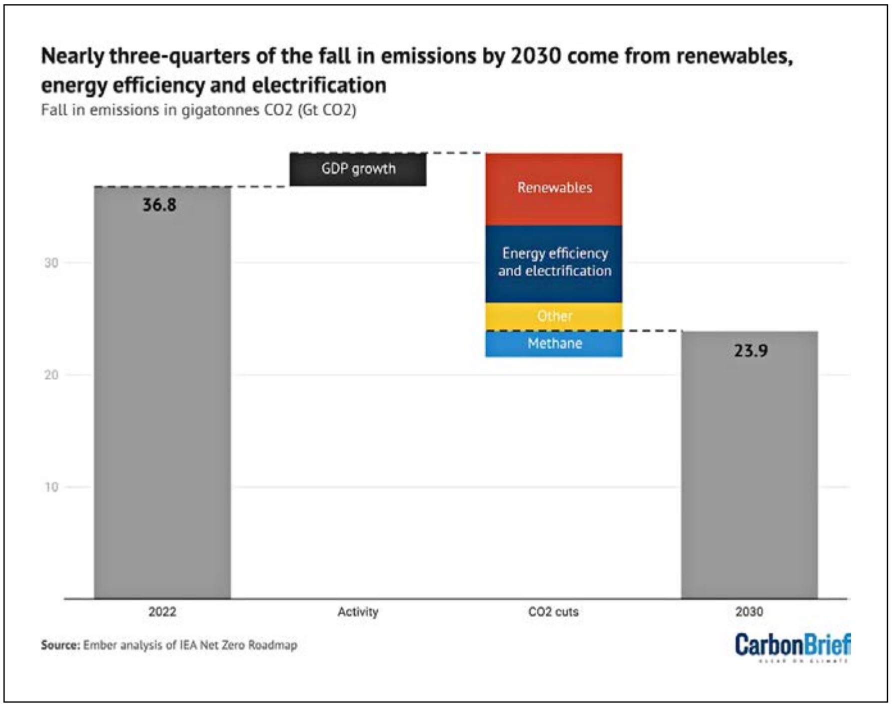
Although tripling renewables is the single largest, energy efficiency – when combined with electrification – makes a slightly larger contribution.

The next largest contribution in the IEA's roadmap would come from slashing the amount of methane released during the extraction of fossil fuels.

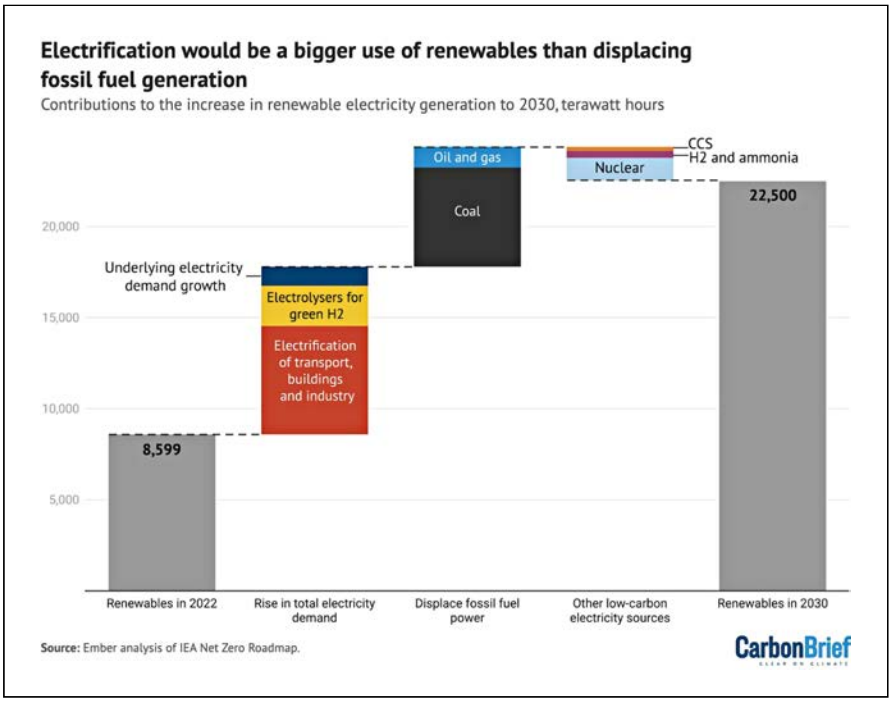
The leftmost column in the chart below shows global energy-related CO2 emissions in 2022. The black wedge shows how this would be expected to increase out to 2030 as a result of economic growth.

The next wedges show how expanding renewables (red), boosting energy efficiency (dark blue) and other mitigation measures (yellow) would cut emissions by 2030. The light blue wedge shows the additional contribution to cutting greenhouse gas emissions from tackling methane.

Renewables would in fact have a hand in both doubling efficiency and slashing methane emissions. Renewables would help to power emissions savings from electric cars and heat pumps, which are both counted in the "efficiency" wedge because they are much more efficient than petrol cars and gas boilers.



Contributions to the change in global energy-related CO2 emissions between 2022 and 2030, under the IEA's 1.5°C net-zero emissions by 2050 pathway. *Source: Ember analysis of IEA Net Zero Roadmap. Chart by Carbon Brief.*



Contributions to the change in global electricity generation from renewables between 2022 and 2030, under the IEA's 1.5°C net-zero emissions by 2050 pathway. *Source: Ember analysis of IEA Net Zero Roadmap. Chart by Carbon Brief.*

Furthermore, tripling renewables would halve the need for coal power, which would in turn deliver almost half of the reduction in coal mine methane required under the IEA's 1.5°C pathway.

Ember's analysis of the IEA's 1.5°C pathway, shown in the chart below, finds that just under half of the increase in renewable generation to 2030 would be used to displace fossil fuel electricity, while just over half would be used to meet rising electricity demand.

The large majority of the rise in electricity demand to 2030 would come from electrifying buildings, transport and industry. Another sizable part of the rise in electricity demand would power electrolysers to manufacture "green hydrogen".

The leftmost column shows global renewable electricity generation in 2022. The second set of wedges shows increases in demand due to electrification (red), production of green hydrogen (yellow) and underlying electricity demand growth (dark blue).

The third set shows the displacement of electricity generated from coal (black), as well as oil and gas (light blue). The final wedges show contributions from other low-carbon sources, including nuclear (sky blue), hydrogen or ammonia (purple) and fossil fuels with carbon capture and storage (orange). The rightmost column shows electricity generation from renewables in 2030 under the IEA pathway.

The chart above also illustrates why energy efficiency improvements are also critical. Without efficiency, total electricity demand would rise substantially faster, meaning there would be much less additional renewable power to displace coal and gas-fired generation.

What does 'tripling renewables' mean?

The target of tripling renewable energy capacity by 2030 was not initially clearly defined, with different groups and different pathways implying slightly different goals. The COP28 presidency is now explicitly calling for a target of 11,000 gigawatts (GW) of renewable capacity by 2030, which would mean a tripling of the 3,629GW installed by the end of 2022. This target is similar to the levels installed by 2030 in 1.5°C pathways from the IEA and IRENA, which reach 11,008GW and 11,174GW respectively.

A global tripling would not mean every country being required to achieve a tripling of domestic capacity. Each country's renewable capacity today affects how ambitious it would be to individually achieve a tripling – and the target is defined at a global level, rather than nationally.

With this in mind the Nairobi Declaration for example, targets a fivefold increase in Africa's renewables capacity, subject to access to financing.

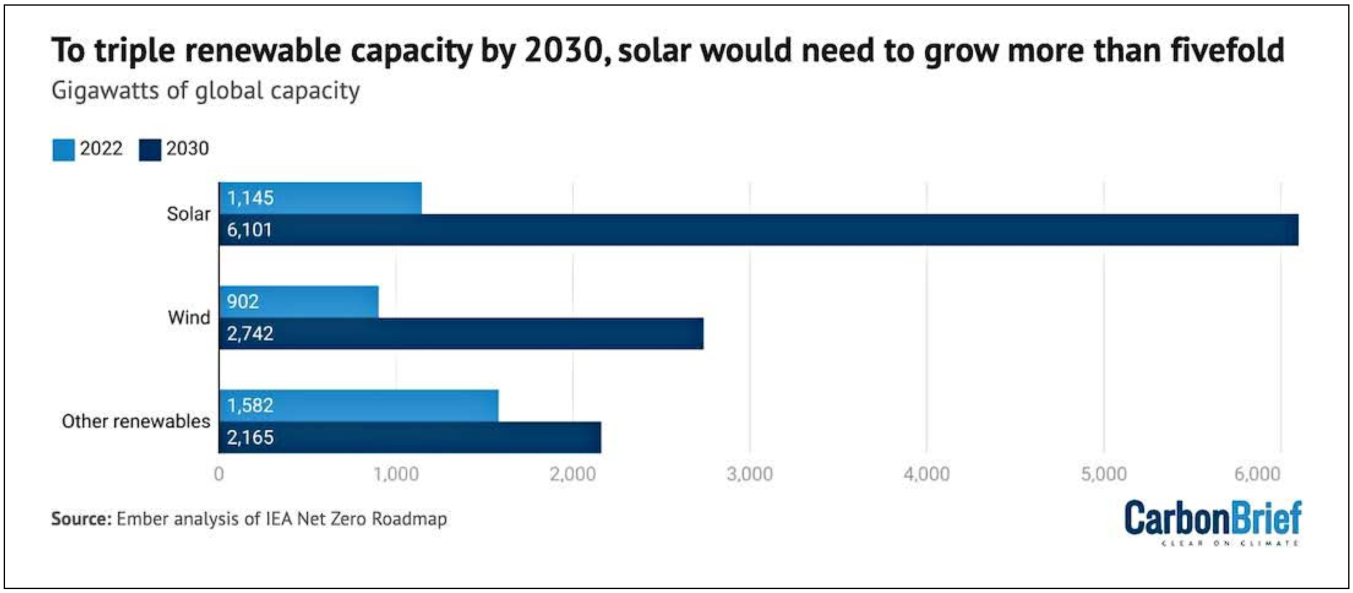
Solar is expected to be the main technology used for tripling capacity. It provides two-thirds of the rise in renewables capacity out to 2030 and half of the increase in generation in the IEA's 1.5°C scenario. This would see solar capacity increasing fivefold from 2022-2030. Combined with a threefold increase in wind , wind and solar would provide 92 per cent of the tripling target.

New hydro, bioenergy, geothermal, marine and other technologies are still significant though, accounting for 8 per cent of new renewable capacity and 15 per cent of the rise in renewable generation.

The figure below shows the increase in capacity expected from solar, wind and other renewables under the IEA's 1.5°C pathway, illustrating the dominant role of wind and solar.

New nuclear and, to a lesser extent, fossil-fired generation with carbon capture and storage, have a much smaller role to play in 2030 under the IEA's 1.5°C pathway.

The increase in global nuclear capacity increase by 2030 would be equivalent to just 2 per cent of that for renewables – though this would



Contributions to the tripling of renewable capacity by 2030 in the IEA's 1.5°C pathway, gigawatts by technology. *Source: Ember analysis of IEA Net Zero Roadmap. Chart by Carbon Brief.*

be equivalent to 9 per cent of the rise in renewables generation.

What does 'doubling energy efficiency' mean?

The proposed target of doubling energy efficiency is a shorthand for saying that the rate of energy efficiency improvements would need to double by 2030, compared with 2022 levels. Specifically, as proposed by the IEA, the target refers to the rate of improvement of global energy intensity, the amount of energy needed to generate each unit of economic output.

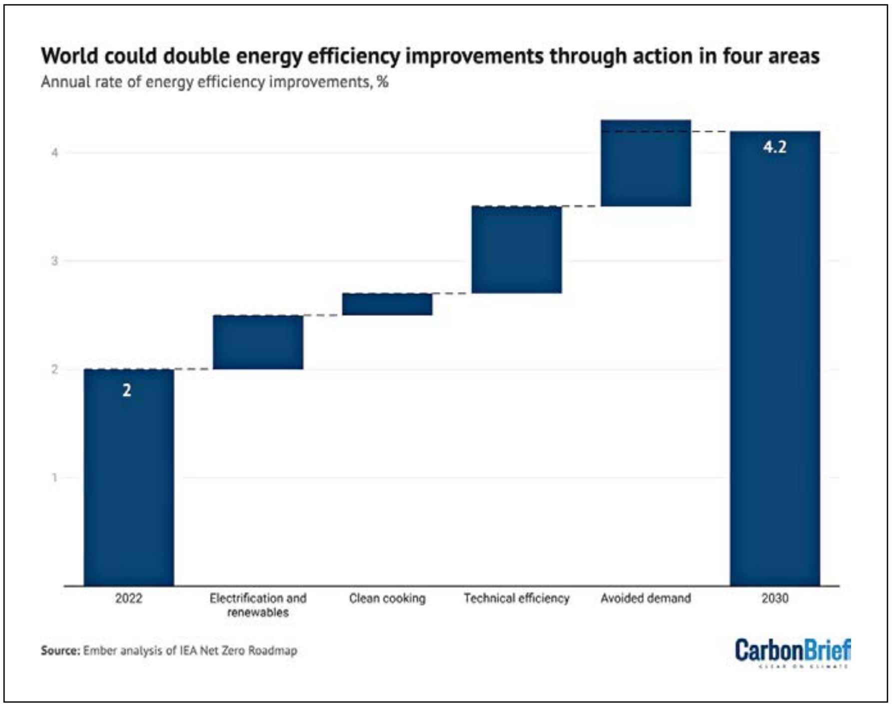
This stood at 2 per cent per year in 2022 – already nearly double the average rate of the previous five years, according to the IEA. In the IEA's 1.5°C pathway, this rate continues to rise, reaching 4 per cent per year in 2030.

According to the IEA, doubling the rate of energy efficiency improvements could be achieved through four pillars, shown in the chart below.

First, electrification and renewables. Electric vehicles use two-to-four times less energy than internal combustion engine vehicles; meanwhile, heat pumps use three-to-five times less energy than fossil fuel boilers. Moving to a more electrified economy would substantially reduce overall energy demand.

Second, clean cooking. Traditional use of biomass is extremely inefficient compared to modern improved cooking stoves. Over two billion people today lack access to clean cooking, and the IEA assumes this falls to zero by 2030 in its 1.5°C pathway.

Third, technical efficiency. Focusing on the best available technologies for all electrical appliances, especially air conditioners, makes



Contributions to doubling the annual rate of global energy efficiency improvements, per cent, between 2022 and 2030 in the IEA's 1.5°C pathway. *Source: Ember analysis of IEA Net Zero Roadmap. Chart by Carbon Brief.*

for the largest increase in efficiency of all the pillars.

Fourth, behavioural changes by individuals. The IEA makes relatively stretching assumptions here, including on heating and cooling homes less, reducing demand for flights and shifting surface transport away from cars.

Energy demand globally has been consistently increasing – but at a slower rate than GDP. This has resulted in large gains in energy intensity over at least the last half-century. However, the IEA net-zero scenario shows that to stay below 1.5°C, the world would need to do something new: reduce primary energy demand, even as GDP rises.

Achieving the rise in energy intensity to 4 per cent per year would mean global primary energy demand in 2030 would be nearly 10 per cent lower than in 2022.

Crucially, however, greater energy efficiency would mean the world could generate higher levels of energy services – warm homes, miles driven and so on – even as primary energy demand falls.

Is tripling renewables possible?

While tripling renewable energy capacity in just eight years might seem like an impossibly ambitious target, it's worth reflecting on progress to date.

According to IEA figures, global renewable energy capacity reached 3,629GW in 2022, nearly triple the level seen in 2010. Moreover, within that total, solar capacity increased 29-fold.

(IRENA figures, reflected in the figure below, record a slightly lower total of 3,372GW.)

Both the IEA and IRENA's modelling on what it would take to stay below 1.5°C include renewable capacity tripling to at least 11,000GW by 2030. While the scenarios do not test what is possible, they are based on the agencies' assessments of what it would be reasonable to achieve, in each country and sector of the global economy.

Another way to answer the question of whether the tripling target is possible is to look at current government plans to expand renewable energy capacity.

An analysis by Ember of 57 country-level renewable policies for 2030, covering 90 per cent of global electricity generation, shows that the world is already targeting more than a doubling of renewable capacity to 7,250GW by 2030.

This would be roughly equivalent to repeating the record annual additions expected in 2023 – some 500GW, up from 300GW last year – every year for the rest of the decade, as shown in the figure below.

Still, tripling renewable capacity within eight years would require even more rapid growth, as the chart illustrates. Annual additions would need to rise from 500GW in 2023 to 1,500GW in 2030, an annual growth rate of 17 per cent. It is worth adding that the average growth rate from 2016-2023 was also 17 per cent. The latest IEA assessment of government policies is more optimistic than Ember's, showing global renewable capacity reaching 8,611GW by 2030 or 9,786GW if countries meet their climate pledges.

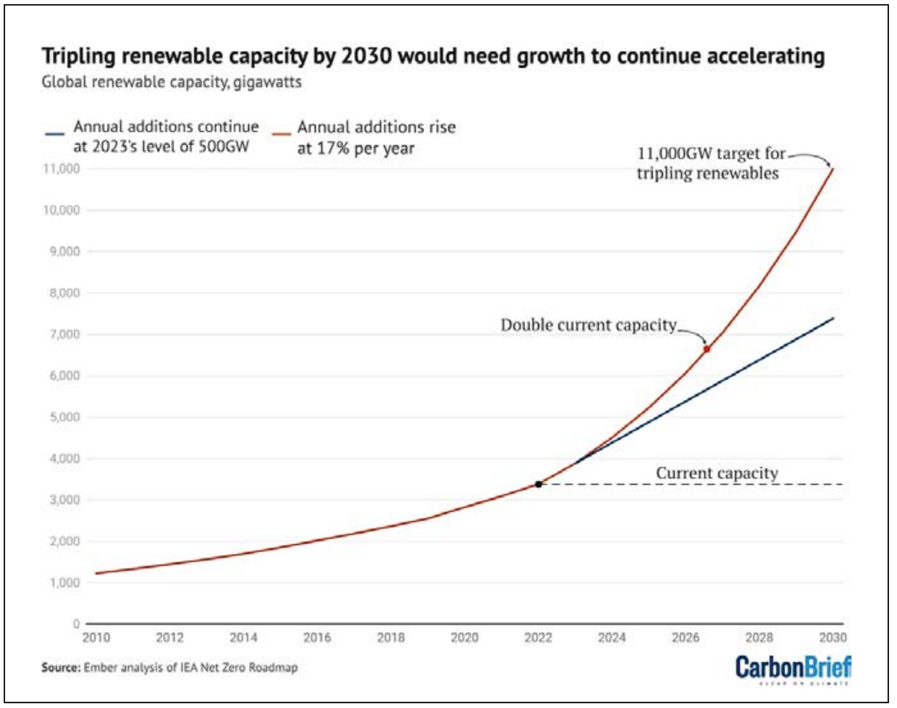
Moreover, Ember's country-level analysis highlights that many national targets were set before the record renewable progress in 2023, meaning their ambition is perhaps lower than it could be.

Nevertheless, it is clear that a tripling target would entail significantly higher ambition than governments are currently envisaging.

What would governments need to do?

Tripling renewables and doubling energy efficiency is achievable, according to a recent flagship report by IRENA, the COP28 presidency and the Global Renewables Alliance.

However, meeting the targets would require significant effort at



Past and projected future global renewable energy capacity, gigawatts, if the tripling by 2030 target is met (red) and if annual additions continue at the 2023 level (dark blue). The dashed light blue line shows capacity at the end of 2022. *Source: Ember analysis of IEA and IRENA data. Chart by Carbon Brief.*

a national and international level, the report says. It identifies the key enablers to unlock a large-scale increase in renewables and energy efficiency through decisive action from policymakers.

The policy priorities in the report include: standards for new appliances and buildings or bans on the least efficient options; reform of tax incentives and subsidy reform, including of direct and indirect fossil fuel subsidies; electricity market redesign, recognising the shift towards systems largely based on zero marginal cost renewables; streamlined permitting, particularly for wind, solar and electricity networks; and efforts to maximise social benefits, via community benefit schemes and other measures.

These policy interventions are needed across the whole of government – not just the climate and energy ministries – according to the report, meaning their implementation would require supporting all government departments to deliver the energy transition.

Expanding low-carbon energy sources in line with the tripling target relies on a fast build-out of new infrastructure. This includes building power grids faster, developing more energy storage, and ensuring smart electrification. In many countries, electricity grids are holding back not just the deployment of renewables, but also the connection of electric cars and heat pumps.

Energy storage will be a key flexibility measure, the report continues, and long-duration storage is highlighted as a major priority, although flexibility would need to be improved everywhere. For example, it highlights that electrification would need to be "smart" so that electric cars and heat pumps are used most when there is abundant sun and wind.

Finally, finance support is critical, the report says. Only 20 per cent of renewables investment happens outside China and developed economies, with access to competitive finance being a major barrier.

The IEA suggests US$80-100bn in annual concessional funding is needed by the early 2030s to lower the cost of finance and mobilise private capital in lower income countries.

Andreas Sieber, of environmental NGDO 350.org, suggests that even more funding would be required, suggesting debt cancellation at scale, as well as US$100bn in concessional finance and US$200bn in grants yearly.

The road to COP

Support for the targets of tripling renewables and doubling energy efficiency is building ahead of COP28, but many hurdles remain.

More than 60 countries, including the EU, US and COP28 hosts the UAE have now said they would support a pledge to triple global renewables, a draft of which would also commit to doubling efficiency. However, this would have a different status to a deal backed by all countries within the final COP28 text.

The recent US-China climate statement committed both countries to support a global tripling of renewables, but overlooked a doubling of energy efficiency, mirroring the G20 position. It remains to be seen if the agreement reached at COP will include either target. If the targets are agreed, there would also be a need for action to meet them.

The recent US-China climate statement committed both countries to support a global tripling of renewables, but overlooked a doubling of energy efficiency, mirroring the G20 position. It remains to be seen if the agreement reached at COP will include either target.

The COP presidency is already urging countries to come to COP with "tangible commitments" to achieve the renewable and efficiency goals. After that, a post-COP review process would deliver accountability for the achievement of the targets.

Beyond the renewable and efficiency targets, COP28 is likely to be debating text in other related areas, including whether to phase down or phase out fossil fuels.

As the charts above show, delivering on renewables and efficiency would yield major reductions in fossil fuel use this decade. However, they are only two parts of the IEA's recipe for staying below 1.5°C.

As IEA executive director Dr Fatih Birol told Carbon Brief in September, implementing some but not all of those ingredients would not be sufficient to get back on track.

In particular, Birol noted the importance of "giving a signal to the markets and the governments and companies around the world that in order to reach this 1.5°C target, we have to see fossil-fuel use decline". A target on renewables alone would be "far from being enough" for 1.5°C, he said.

This story was published with permission from Carbon Brief.

(Source: https://www.eco-business.com/news/qa-why-deals-at-cop28-to-triple-renewables-and-double-efficiency-are-crucial-for-15c/)

An aerial view of Seventy Islands in Palau. Like other Small Island Developing States, it is vulnerable to climate change due to its exposure to sea-level rise, warming oceans and increased storm activity. *Image: pablo_marx, CC BY-SA 2.0, via Flickr.*

CREDIT RATINGS AND CLIMATE CHAOS

During the pandemic, 11 of 16 Small Island Developing States got a downgrade or negative credit outlook from at least one of the big three credit rating agencies, threatening both economic development and climate adaptation efforts, state **Emily Wilkinson** and **Kanni Wignaraja**

The sun-drenched coral islands and reefs of the Maldives are in existential danger. With 80 per cent of the country's population living just one metre above sea level, many islands could become uninhabitable as climate change causes the ocean's level to rise. By the end of this century, half a million people could be displaced. The Maldives is confronting this threat with a range of innovative adaptation initiatives, from restoring coral reefs to floating solar-power systems. But survival does not come cheap.

The Maldives earns much of its revenues from high-end tourism. So, like many other countries, it was hit hard by the Covid-19 pandemic, which brought much global travel to a halt. But in 2021, when restrictions were loosened, a powerful tourism rebound fueled robust economic recovery in the Maldives, with the promise of a return to pre-pandemic growth by 2023.

That recovery was interrupted by two successive credit rating downgrades – first from Moody's and then from Fitch – which caused borrowing costs to rise sharply. The last bonds the Maldives issued in 2021 carried a coupon rate of 9.875 per cent and a yield of 10.5 per cent. Since then, bond yields have surpassed 20 per cent – a reflection of investors' perceptions of higher risk. As a result, the Maldives has effectively been locked out of international markets. It has not issued a bond to finance its development programs since 2021.

The Maldives isn't alone. During the pandemic, 11 of the 16 Small Island Developing States (SIDS) – which are particularly vulnerable to climate change – that are rated faced a downgrade or a negative credit outlook by at least one of the big three credit rating agencies (CRAs): Moody's, Fitch, and Standard & Poor's. This is catastrophic for economic development and climate adaptation efforts.

The use of credit ratings as the ultimate measure of a country's creditworthiness has long been recognised as a threat to financial stability, particularly in the Global South. Downgrades have an enormous impact, triggering sell-offs and market volatility at precisely the moment countries can least afford it. Yet the credit rating industry itself is neither transparent nor competitive.

A recent UNDESA study found that during the pandemic, emerging-market and developing economies' credit ratings were downgraded by a total of 125 notches, whereas advanced economies – which both contracted and accumulated debt more rapidly – were downgraded by only six notches. This probably partly reflects the fact that the big three CRAs are largely staffed and regulated in the Global North.

Moreover, rating decisions are often shaped by ideological biases – such as the belief that government intervention in the economy automatically undermines growth and efficiency – instead of the factors that matter for debt sustainability: economic and social development, as well as climate resilience. Sovereign credit assessments capture climate-related risks indirectly, through environmental, social, and governance (ESG) scores, but efforts to build climate resilience are ignored, despite their important implications for debt sustainability.

The SIDS are among the world's most highly indebted countries: their public-debt-to-GDP ratio averaged 82.5 per cent in 2020, and is set to remain above 70 per cent until 2025. Climate change is an important reason why. As a 2018 study by the United Nations Environment Programme showed, climate vulnerability raised the average cost of debt for a sample of developing economies by 117 basis points over the previous decade, forcing them to pay US$40 billion in additional interest payments. Some have predicted that, over the coming decade, this burden will increase by US$146-168 billion.

This would prove catastrophic for the SIDS. If these countries are to stay above water (literally), they must be able to invest in the building blocks of sustainable growth and development: people, infrastructure, energy, and food security. But their debt-servicing costs are already massive – far bigger than the limited climate finance delivered through global agreements. From 2016 to 2020, SIDS received US$9.42 billion in development and climate finance to strengthen their resilience, and paid out US$26.6 billion to external creditors.

Making matters worse, the SIDS have few options for restructuring their debts – not least because of ratings downgrades. Notably, countries participating in the G20's Common Framework for Debt Treatments beyond the Debt Service Suspension Initiative face the threat of a downgrade. Small wonder, then, that only three eligible countries have so far applied for relief under the Common Framework. Downgrading countries while they try to renegotiate their debts – nearly half of which is held by private bondholders – amounts to a devastating blow, as it compounds the already-high barriers between them and international credit markets.

Secure, prosperous, climate-resilient states are clearly better for the rest of the world – including private creditors and advanced-economy governments – than unstable, debt-ridden countries enduring extensive human and environmental dislocation and loss. If credit ratings are to remain a market barometer, they must be made transparent, fair, and constructive.

To this end, the Office of the UN High Commissioner for Human Rights has rightly called for the suspension of credit ratings during crises. CRAs should also suspend the publication of reviews during periods of upheaval, to allow markets to adjust to changing fundamentals.

CRAs' ideological biases and lack of transparency could be addressed by decentralising them or establishing regional or multilateral ratings agencies. Finally, CRAs should share guidance on how climate risks and adaptation efforts fit into their methodologies, particularly when it comes to rating sovereigns.

Just as the credit rating system in the United States was reformed after the 2008 global financial crisis through the Dodd-Frank Act, CRAs must be improved in response to the challenges SIDS are now facing. Plagued by fires and floods linked to a climate crisis they had no hand in creating, these countries deserve support, not punishment.

Emily Wilkinson is a senior research fellow and Director of the Resilient and Sustainable Islands Initiative at ODI, a global affairs think tank. Kanni Wignaraja, United Nations Assistant Secretary-General, is UN Development Programme Regional Director for Asia and the Pacific.

(Source: https://www.eco-business.com/opinion/credit-ratings-and-climate-chaos/)

Lamp lighting ceremony at a special programme held at Purana Quila at New Delhi by Sabhyata Foundation, announcing adoption of 4 heritage monuments under the Government's "Adopt a Heritage 2.0"project. Present at the occasion (L-R) Smt. Meenakshi Lekhi, MoS for External Affairs and Culture,Shri S. Jaishankar, Hon'ble Minister of External Affairs, Shri Puneet Dalmia, MD & CEO, Dalmia Bharat Ltd, Shri Govind Mohan, Secretary, Ministry of Culture

Sabhyata Foundation Takes Charge of India's Four Historic Monuments under 'Adopt a Heritage 2.0' Initiative

Sabhyata Foundation, a not-for-profit company dedicated to preserving and promoting India's cultural heritage, has been entrusted with the upkeep and promotion of India's four iconic monuments under the Government's "Adopt a Heritage 2.0"project.

The adopted monuments include Purana Qila, Humayun's Tomb, Safdarjung Tomb, and Mehrauli Archaeological Park located in the heart of the capital. The initiative introduced by Ministry of Culture and Archeological Survey of India (ASI), aims for partnerships with private/public sector entities to provide, develop and maintain amenities at centrally protected monuments and sites. The special announcement programme held at the majestic Purana Quila was graced by S. Jaishankar, Minister of External Affairs.

As 'Smaarak Saarthi', Sabhyata Foundation will undertake the responsibility of enhancing visitor experiences at these four heritage sites, positioning them as must-visit destinations. Its primary goals will include increasing footfalls, enhancing amenities and creating memorable experiences while focusing on hygiene, accessibility, safety and knowledge.

Govind Mohan, Secretary, Ministry of Culture sai: "In line with our Prime Minister's vision of 'Virasat Bhi, Vikas Bhi', this initiative exemplifies our commitment to preserving India's diverse heritage through collaborative

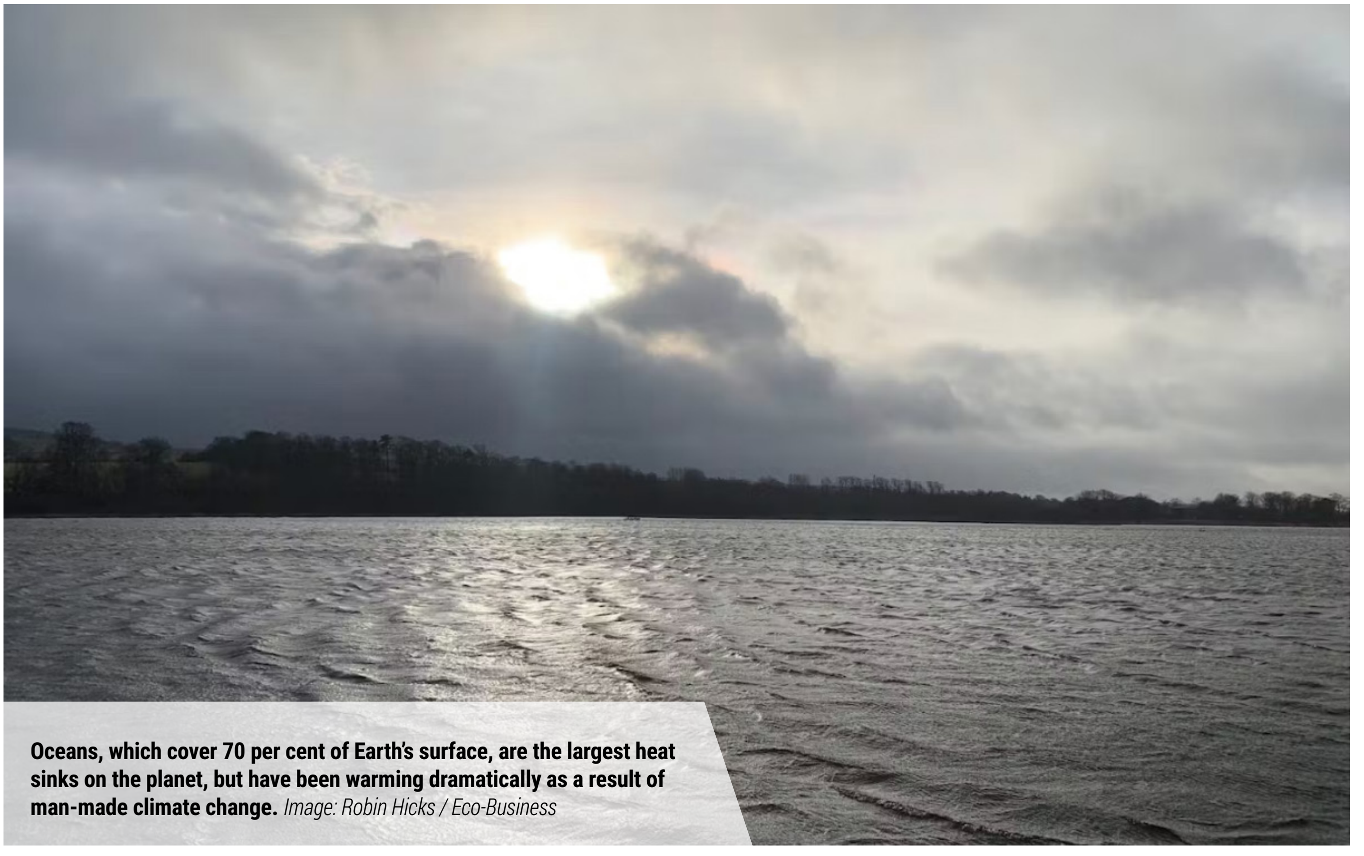
efforts uniting government, corporates and citizens in safeguarding our rich cultural legacy. Sabhyata Foundation's adoption of these four monuments represents the spirit of 'Sabka Saath, Sabka Vikas, Sabka Prayaas', ushering a new era of vibrant heritage appreciation."

Speaking on the occasion, Puneet Dalmia, MD & CEO, Dalmia Bharat and Monument Mitra - Red Fort which has partnered with Sabhyata Foundation on several occasions said, "Monuments and cultural sites are the heart of a nation's identity, shaping its history and heritage, not just as relics of the past, but as symbols of our rich legacy. As our implementation partner at Red Fort, Sabhyata Foundation has done a commendable job in creating unforgettable experiences. I wish them the very best in their future endeavours."

Yadubir Singh Rawat, Director General, Archeological Survey of India commented, "Adopt a Heritage 2.0 has been launched on the back of the demonstrated success of first round initiated in 2017. Red Fort is a shining example how we have added technology and modernity to create enhanced experiences of our heritage landmarks. However, we have 4000 such monuments that require our efforts and we look forward to the participation from private organisations so that the national cultural treasures continue to remain inspirational for the future generations too. We are thankful to the Ministry of Culture for their continued support and encouragement."

Ravi Jhunjhunwala, CEO, HEG Ltd. and Board Member, Sabhyata Foundation said, "Sabhyata Foundation is committed to preserving and promoting the cultural and heritage ecosystem of India and is dedicated to deliver world class experiences of Indian heritage, art, architecture and culture. We are further strengthening our team by building a strong advisory board of passionate and accomplished individuals: Mr. Nakul Anand, former Executive Director, ITC has agreed to join as Chairman of the Advisory Board; Mrs. Avantika Dalmia, Chairperson, Avanee Foundation has joined us as the Co-Chair, Mrs. Vasvi Bharat Ram, Joint Vice Chairperson, The Shri Ram Schools and Mrs. Avarna Jain, Vice Chairperson of the Board, Saregama India Ltd. have joined as esteemed members of the Advisory Board."

Sabhyata Foundation's plan for Purana Qila involves enhancing visitor experiences by interpreting the historical significance of the site through research-backed evidence. Plans include a sound and light show, a museum showcasing excavated artifacts from various historical periods and a souvenir shop. The foundation will organize year-round site activities and work closely with the Ministry of Culture and ASI to access authentic research, experts and historic artifacts. Fine dining experiences themed around 'Ancient Grains of India' will be conducted in strategic locations. Heritage walks and interactive displays will enrich the narrative further. Plans for the other three monuments will be revealed subsequently.



Oceans, which cover 70 per cent of Earth's surface, are the largest heat sinks on the planet, but have been warming dramatically as a result of man-made climate change. *Image: Robin Hicks / Eco-Business*

EXPLAINER: WHAT WARMING OCEANS MEAN FOR OUR PLANET

Man-made climate change is causing the oceans to heat up, which is altering the chemistry of a resource that covers 70 per cent of the planet and changing the physiology of marine organisms, state **Gabriel Lee**

Last year, sea surface temperatures and the energy in the upper 2,000 metres of the ocean both hit record highs, according to a recent study in the journal *Advances in Atmospheric Sciences*.

In 2023, the oceans soaked up around 9 to 15 zettajoules more heat energy than in 2022, which is enough to boil 2.3 billion Olympic-sized swimming pools, said the US National Oceanic and Atmospheric Administration and the Chinese Institute of Atmospheric Physics.

Analyses show that the amount of heat in the oceans has increased dramatically since the 1950s.

Why are ocean temperatures reaching uncharted levels?

Oceans, which cover 70 per cent of Earth's surface, are the largest heat sinks on the planet, absorbing more than 90 per cent of the warming that has occurred in recent decades, according to Dr Tan Koh Siang, senior research fellow at the Tropical Marine Science Institute (TMSI) in Singapore.

Dr Nicholas Yap, research fellow at the St John's Island National Marine Laboratory, added that ocean surface temperatures are rising due to human-induced climate change.

Dr Tan said that global warming causes air temperatures to rise by releasing heat-trapping greenhouse gases, such as carbon dioxide, into the Earth's atmosphere. Hot air warms the oceans since water is usually cooler than the air above it, he said.

Dr Patrick Martin, assistant professor at Nanyang Technological University's Asian School for the Environment (ASE) said that the ongoing El Nino event that causes the warming of waters in the eastern Pacific Ocean, is also responsible for the rise in ocean temperatures.

Ocean warming is unevenly distributed as there are local effects, such as seasonal oscillation, that moderate general climate trends, noted Leong Wai, research associate at TSMI.

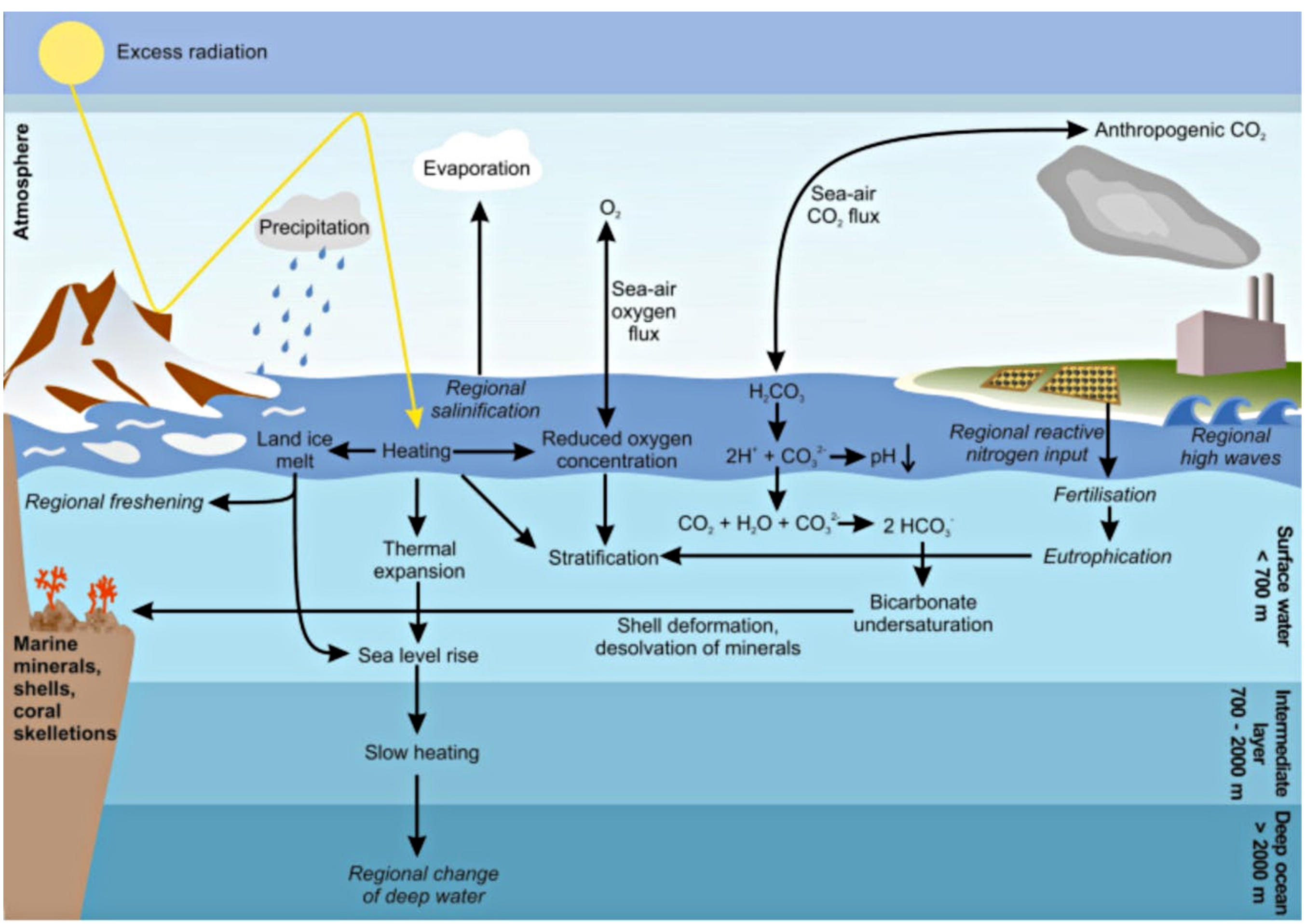
Dr Joyce Ong, assistant professor at ASE, said that Singapore sits within the Indo-Pacific Warm Pool (IPWP), an area of the tropics with very warm sea temperatures constantly. The IPWP has warmed and doubled in size over time because of climate change, she said.

Are rising ocean temperatures a bane or boon?

While some studies suggest that ocean warming might expand resource-rich marine areas, there is little evidence that indicates that ocean warming will bring long-term benefits, said Dr Yap. But evidence relating to the problems caused by ocean warming is plentiful.

Rising ocean temperatures deplete the amount of dissolved oxygen available in the water, increasing the number of fish die-offs, said Leong.

Ocean warming can cause coral bleaching, which occurs when



Overview of climatic changes and their effects on the oceans. *Source: Phytoplankton Responses to Marine Climate Change* water becomes too warm and corals expel the algae within their tissues, noted Chen Mengli, research fellow at TSMI. Leong said that warmer waters have been linked to harmful algal blooms and ecological transitions, such as coral reefs becoming algae-dominated due to more frequent bleaching.

In Singapore, a country that is looking to boost aquaculture to improve food security, the increased likelihood of fish kills and algal blooms will have a disruptive effect, he said.

Societal implications include a proliferation of jellyfish blooms that endanger public health and the possibility of dormant viruses being released when the polar ice melts, Dr Yap noted.

Warmer oceans also make hurricanes stronger for longer after reaching land, ramping up damage wrought on impact, according a 2020 study in the scientific journal Nature. Simultaneously, sea levels are set to rise because of two factors related to global warming: added water from melting polar ice and glaciers, and the expansion of seawater as it warms.

Rising sea levels could lead to devastating outcomes, ranging from sand erosion to wetland flooding and agricultural soil contamination. "Fire-ice", or methane hydrate, a natural gas frozen deep beneath the ocean floor, could be thawed during ocean warming, releasing more heat-trapping methane and creating a positive feedback loop that amplifies climate change, according to a recent study in the scientific journal Nature Geoscience.

Marine heatwaves could cause polar species to go extinct, as with the collapse of the Alaska snow crab fishery in 2022 due to an unexpected. Large numbers of crabs starved to death as a result of their metabolic rates rising with higher water temperatures and an inability to find sufficient food.

> **"Fire-ice", or methane hydrate, a natural gas frozen deep beneath the ocean floor, could be thawed during ocean warming, releasing more heat-trapping methane and creating a positive feedback loop that amplifies climate change.**

Warmer waters are also not ideal for marine organisms in the tropics, since they are already living very close to their upper temperature limits for them to function normally, said Dr Tan.

Warmer oceans directly impact the physiology of marine organisms, for instance, by altering their metabolic mechanisms or interfering with their reproductive cycles, Dr Martin added.

Some fish, such as herring and whiting, for example, need stable water temperatures to spawn and maintain healthy populations, and sudden warming can decimate these fisheries. Other fish, such as black seabream, are leaving coastal areas for deeper waters, exacerbating economic inequalities between big fisheries and under-resourced fishermen while worsening the livelihoods of coastal communities, said Dr Chou Loke Ming, research affiliate at TSMI.

Ocean warming in the United Kingdom has also driven fish such as cod to migrate north in search of colder water, disrupting food webs.

However, thanks to fish migration, Portuguese fisheries have reported nearly 20 new species from tropical or subtropical climates, according to a 2016 study in the journal Fisheries Research.

A raft of opportunity

Experts said that the best solution to prevent rising ocean temperatures is to curb man-made greenhouse emissions that contribute to global warming, and by extension, climate change.

"By switching to renewable energy, we can wean off our reliance on fossil fuels," said Dr Martin.

There is also a need to cut down on agricultural land use, which accounts for one-tenth of global greenhouse gas emissions, he said.

Leong said that this can be done by reducing meat consumption or exploring plant-based substitutes such as alternative protein.

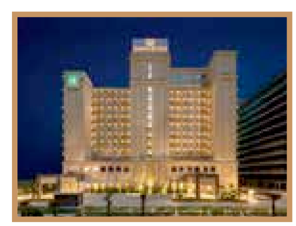
Dr Ong said that sequestering carbon can also reduce the amount of greenhouse gases in the atmosphere. One way is to avoid cutting down carbon-storing forests, she added.

Technologies such as 3D printing offer hope by recreating artificial habitats to help displaced fish find new homes, while Artificial Intelligence could help to automate coral reef restoration.

(Source: https://www.eco-business.com/news/explainer-what-warming-oceans-mean-for-our-planet/)

ABC
Assotech Business Cresterra
Sector - 135, Expressway, Noida

1. **Integrated Intelligent IT Park Complex**
2. **1.8 Million SQFT Mixed Use Development**
3. **LEED Gold Certified Green Building Complex**
4. **Market Leading Floor Efficiency of 83% [+-2%]**
5. **70% leased out of Phase - I**



SERVICED APPARTMENTS
Phase - I

OFFICE SPACES

RETAIL
Phase - I

ASSOTECH
www.assotech.in
Assotech Realty Pvt. Ltd.
46, First Floor, Janpath, New Delhi - 110001
Ph: +91 - 8010821111
info@assotech.in

Our Leasing Partners
CBRE

"The Plans, images and facilities shown in the advertisement are merely indicative in nature (not a legal offer) and are subject to variations and modifications at the sole discretion of the Company or the competent authority. The Project is being developed as an IT/ITES complex as per the IT Policy of Government of Uttar Pradesh. Phase 1 of the Project has been completed and Phase - 2 of the Project consisting of Tower No 4, 5 & 6 is under construction and has been registered under UP RERA vide Registration No. UPRERAPRJ1594."

SAVE LIVES GIVE SMILES

Every Year, **35,000+** children are born with cleft lip and palate in India. Untreated clefts lead to difficulties in eating, breathing, hearing and speaking. The children often face social stigma and drop out of school.

Cleft treatment can change this. Forever.

OUR LEGACY & REACH:

- **640,000+** cleft surgeries since 2000
- **150+** partner hospitals
- **30+** states and UTs
- **300+** cleft medical professionals

Smile Train empowers local medical professionals with training, funding, and resources to provide free cleft surgery and comprehensive cleft care to children across the country. We advance a sustainable and scalable global health model for cleft treatment, drastically improving children's lives, creating both an immediate and long-term impact.

Let your CSR Program transform lives and create lasting impact.

Join us to change India, one smile at a time.

Contact us:

Email ID: csrindia@smiletrain.org

Address: Plot No. 3, LSC, Sector C Pocket 6&7, Vasant Kunj, New Delhi 110070 Ph: 011 47856300

www.smiletrainindia.org

SmileTrain
Changing India One Smile At A Time

National Cleft Helpline – 1800 103 8301