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# ॥ सुखिनो भवन्तु ॥

(A Monthly Newsletter of Sustainability Standards Board)

*Happy International Women's Day*



**The Institute of Cost Accountants of India**  
(Statutory body under an Act of Parliament)

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*Behind every successful business decision, there is always a CMA*

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# Chairman's Message

**A**s we immerse ourselves in the pages of this special International Women's Day edition of *Sukhinobhavantu*, we embark on a journey of celebration, reflection, and concrete presence of women in global development. International Women's celebration is not just about honouring the achievements of women; but at the same time it is about recognizing the pivotal role they play in sustaining progress and fostering a future that embraces both diversity and sustainability.

Sustainability is not just about protecting the planet; it is about creating a world where every individual, regardless of gender, has equal opportunities and access to resources. By fostering an inclusive and diverse environment, we empower our women to become catalysts for positive change, driving sustainability efforts forward in global level.

I am delighted to inform you all that the Sustainability Standards Board has started organizing *Vasudhaiva Kutumbakam* webinars on 2<sup>nd</sup> and 4<sup>th</sup> Fridays of every month on diverse areas of Sustainability. This edition of *Sukhinobhavantu* includes the highlights of the *Vasudhaiva Kutumbakam* webinars held during the month of February 2024 and webinars to be held during March 2024.

Let us embrace the learnings of *Vasudhaiva Kutumbakam* webinars and recognize that our actions, no matter how small, contribute to the well-being of our global family. May this month's newsletter inspire and empower each one of us to be stewards of sustainability, fostering a world where compassion, unity and environmental consciousness prevail.

This edition includes the highlights of Interim Budget for FY 2024-25 with respect to measures and initiatives outlined to align global environmental goals with the diverse needs of the Indian population. We are also attempting to provide the readers the highlights of Conference of Parties (COP) held so far. This will be covered in the series Sustain the Sustainability Column.

I encourage you to delve into the insightful contents of this special edition, share your thoughts, and actively participate in the *Vasudhaiva Kutumbakam* webinars organized by the Sustainability Standards Board.

I wish all the readers a very happy International Women's Day in advance.

Professionally yours,

CMA (Dr.) Ashish P. Thatte  
February 25, 2024



# SUSTAIN THE SUSTAINABILITY

## Conference of Parties (Part-I)

**CMA (Dr.) Aditi Dasgupta**  
Jt. Director, ICMAI

The Conference of Parties (COP) is the single largest and most impactful UN conference which deals with climate issues. It attracts 80,000 participants from every corner of the planet, united with one focus – climate action. 197 countries, as well as the EU, are party to the United Nations Framework Convention on Climate Change (UNFCCC). The 2-week global mega-event brings together heads of state, climate experts, political leaders, young people and civil society to collaborate on the crucial challenge of climate change. By far 28 such conferences have been held.

COP	DATES	CITY	COUNTRY
1	28-03-1995 to 07-04-1995	BERLIN	GERMANY
2	08-07-1996 to 19-07-1996	GENEVA	SWITZERLAND
3	01-12-1997 to 10-12-1997	KYOTO	JAPAN
4	02-11-1998 to 13-11-1998	BUENOS AIRES	ARGENTINA
5	25-10-1999 to 05-11-1999	BONN	GERMANY
6	13-11-2000 to 24-11-2000	THE HAGUE	NETHERLANDS
7	29-10-2001 to 10-11-2001	MARRAKECH	MOROCCO
8	23-10-2002 to 01-11-2002	NEW DELHI	INDIA
9	01-12-2003 to 12-12-2003	MILAN	ITALY
10	06-12-2004 to 17-12-2004	BUENOS AIRES	ARGENTINA
11	28-11-2005 to 09-12-2005	MONTREAL	CANADA
12	06-11-2006 to 17-11-2006	NAIROBI	KENYA
13	03-12-2007 to 17-12-2007	BALI	INDONESIA
14	01-12-2008 to 12-12-2008	POZNAN	POLAND
15	07-12-2009 to 18-12-2009	COPENHAGEN	DENMARK
16	28-11-2010 to 10-12-2010	CANCUN	MEXICO
17	28-11-2011 to 09-12-2011	DURBAN	SOUTH AFRICA
18	26-11-2012 to 07-12-2012	DOHA	QATAR
19	11-11-2013 to 23-11-2013	WARSAW	POLAND

COP	DATES	CITY	COUNTRY
20	01-12-2014 to 12-12-2014	LIMA	PERU
21	30-11-2015 to 12-12-2015	PARIS	FRANCE
22	07-11-2016 to 18-11-2016	MARRAKECH	MOROCCO
23	06-11-2017 to 17-11-2017	BONN	GERMANY
24	03-12-2018 to 14-12-2018	KATOWICE	POLAND
25	02-12-2019 to 13-12-2019	MADRID	SPAIN
26	31-10-2021 to 12-11-2021	GLASGOW	SCOTLAND
27	06-11-2022 to 18-11-2022	SHARM EL SHEIKH	EGYPT
28	30-11-2023 to 12-12-2023	DUBAI	UAE

This series on COP is an attempt to highlight major sustainability decisions taken during the conference.



The first COP took place in Berlin, Germany, in 1995. During this conference, representatives from participating countries discussed various issues related to climate change, such as greenhouse gas emissions reductions, adaptation measures, and financial assistance to developing countries.

Key outcomes of COP-1 included the establishment of subsidiary bodies to support the implementation of the UNFCCC, the adoption of a work program to strengthen national communication and reporting on climate change activities, and the initiation of negotiations on legally binding emissions targets for developed countries, which ultimately led to the Kyoto Protocol in 1997.



COP-2 took place in July 1996 in Geneva, Switzerland. During this conference, discussions primarily revolved around implementation issues related to the UNFCCC, including setting emission reduction targets and establishing mechanisms for monitoring and reporting on progress.

One of the significant outcomes of COP-2 was the establishment of the Subsidiary Body for Implementation (SBI) and the Subsidiary Body for Scientific and Technological Advice (SBSTA). These bodies were tasked with providing advice and assistance to the parties in implementing the Convention and assessing the latest scientific findings related to climate change.

While COP-2 did not result in any binding agreements or protocols, it laid the groundwork for future negotiations and

actions to address climate change on a global scale. Subsequent COP meetings have built upon the discussions and decisions made during COP-2, leading to agreements such as the Kyoto Protocol and the Paris Agreement.



The third Conference of the Parties (COP-3) took place in Kyoto, Japan, in December 1997. This conference resulted in the Kyoto Protocol, which is an international treaty that legally binds developed countries to reduce their greenhouse gas emissions. The protocol established legally binding emission reduction targets for developed countries, collectively known as Annex I countries, for the period 2008-2012.

Key features of the Kyoto Protocol include:

1. **Emission Reduction Targets:** Annex I countries agreed to reduce their overall emissions of six greenhouse gases by an average of 5.2% below 1990 levels by the commitment period of 2008-2012.
2. **Flexibility Mechanisms:** The Kyoto Protocol introduced three flexibility mechanisms to help countries meet their emission reduction targets more cost-effectively:
  - **Emissions Trading:** Annex I countries can trade emissions credits among themselves. Annex I comprise of 29 countries. The list of Annex I countries is as per the link:

[https://en.wikipedia.org/wiki/United\\_Nations\\_Framework\\_Convention\\_on\\_Climate\\_Change](https://en.wikipedia.org/wiki/United_Nations_Framework_Convention_on_Climate_Change)



- **Clean Development Mechanism (CDM):** Annex I countries can invest in emission reduction projects in developing countries and receive credits for the reductions achieved.
  - **Joint Implementation (JI):** Annex I countries can undertake emission reduction projects in other Annex I countries and receive credits.
3. **Adaptation and Financial Assistance:** The protocol also established the Adaptation Fund to help developing countries cope with the impacts of climate change, and it mandated developed countries to provide financial and technological support to developing countries to assist them in mitigating and adapting to climate change.

The Kyoto Protocol entered into force on February 16, 2005, after it was ratified by enough countries. However, its effectiveness has been debated, particularly due to the absence of binding commitments for major developing countries such as China and India, and the withdrawal of the United States, one of the largest emitters of greenhouse gases at the time, from the agreement. Nevertheless, the Kyoto Protocol laid the groundwork for subsequent climate negotiations and agreements, including the Paris Agreement in 2015.



The "COP-4" likely refers to the Fourth Conference of the Parties (CoP) to the United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC is an international environmental treaty adopted in 1992 to address global warming and its impacts. The CoP meetings are held annually to assess progress in dealing with climate change and to negotiate further actions.

COP-4 took place in Buenos Aires, Argentina, in 1998. At this conference, discussions continued on how to implement the principles and commitments outlined in the UNFCCC. Participants discussed various issues related to climate change, including mitigation measures, adaptation strategies, financial mechanisms, and technology transfer.

Key outcomes of COP-4 included:

1. **Buenos Aires Plan of Action:** This plan outlined specific actions to be taken by parties to the UNFCCC to address climate change. It emphasized the importance of

enhancing scientific research, promoting technology transfer, and increasing financial resources for developing countries.

2. **Buenos Aires Declaration:** This declaration reaffirmed the commitment of participating countries to the principles of the UNFCCC and called for urgent and concerted global action to address climate change.
3. **Establishment of the Clean Development Mechanism (CDM):** COP-4 established the CDM as one of the flexible mechanisms under the Kyoto Protocol, which was adopted the following year. The CDM allows industrialized countries to invest in emission reduction projects in developing countries as a way to meet their own emission reduction targets.

Overall, COP-4 marked another step forward in international efforts to address climate change, setting the stage for further negotiations and agreements in subsequent conferences, including the landmark Kyoto Protocol adopted at COP-3.



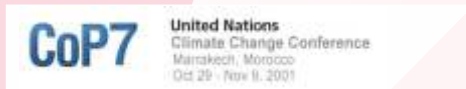
COP 5 took place between 25 October and 5 November 1999, in Bonn, Germany. It was primarily a technical meeting, and did not reach major conclusions. COP-5 took place in Bonn, Germany, in 1999. During this conference, significant discussions occurred regarding the implementation of the Kyoto Protocol, which was adopted in 1997. The Kyoto Protocol aimed to reduce greenhouse gas emissions from industrialized countries. COP-5 focused on various issues related to the protocol, such as establishing mechanisms for emissions trading and defining guidelines for compliance.

Overall, COP-5 was a crucial milestone in international efforts to address climate change, particularly in advancing the implementation of the Kyoto Protocol. It laid the groundwork for subsequent CoP meetings and ongoing global cooperation on climate action.



The 6<sup>th</sup> CoP, held in the year 2000, took place in The Hague, Netherlands. It was a significant event in the ongoing efforts to combat climate change, particularly because it aimed to finalize the implementation details of the Kyoto Protocol, which was adopted in 1997 during the third CoP.

However, the negotiations during COP-6 did not yield the desired outcomes. There were disagreements over issues such as emissions trading, clean development mechanisms, and compliance mechanisms. The conference ultimately ended without a comprehensive agreement, leading to what is commonly known as the "failure of The Hague" or the "Hague deadlock."



COP-7 took place in Marrakech, Morocco, from October 29 to November 10, 2001. One of the key outcomes of COP-7 was the adoption of the Marrakech Accords, which were a set of decisions and rules designed to implement the Kyoto Protocol, an international treaty aimed at reducing greenhouse gas emissions. The Marrakech Accords helped to establish the rules and mechanisms necessary for the operation of the Kyoto Protocol, including emissions trading, clean development mechanism, and compliance mechanisms. The date of the World Summit on Sustainable Development (August–September 2002) was put forward as a target to bring the Kyoto Protocol into force.

Overall, COP-7 was significant in advancing global efforts to address climate change, particularly through the implementation of the Kyoto Protocol. It laid the groundwork for subsequent climate negotiations and actions, although challenges and debates around climate change have persisted since then.



COP-8 took place in New Delhi, India, from October 23 to November 1, 2002. During this conference, discussions would have focused on various issues related to climate change, including mitigation strategies, adaptation measures, financing mechanisms, technology transfer, and more.

One of the significant outcomes of COP-8 was the adoption of the New Delhi Ministerial Declaration, which emphasized the importance of implementing the Kyoto Protocol and urged developed countries to fulfill their commitments under the agreement. These COP meetings are crucial in shaping

international climate policy and fostering global cooperation to tackle the challenges posed by climate change.



The 9<sup>th</sup> CoP took place in Milan, Italy, in December 2003. At this conference, delegates discussed various issues related to climate change, including progress on implementing the Kyoto Protocol, which was adopted in 1997 and aimed to reduce greenhouse gas emissions from industrialized countries.

Key topics at COP-9 included:

1. **Kyoto Protocol Implementation:** Discussions focused on the progress made by countries in meeting their emission reduction targets under the Kyoto Protocol. This included discussions on emissions trading, clean development mechanisms (CDM), and other mechanisms for achieving emission reductions.
2. **Adaptation:** There were discussions on strategies and measures to help countries adapt to the impacts of climate change, particularly in vulnerable regions such as small island states and developing countries.
3. **Financing:** Financing mechanisms for climate change mitigation and adaptation efforts were a major focus. This included discussions on the role of developed countries in providing financial assistance to developing countries to support their efforts to address climate change.
4. **Technology Transfer:** Discussions centered on facilitating the transfer of clean and sustainable technologies from developed to developing countries to support their efforts to mitigate and adapt to climate change.
5. **Capacity Building:** There were discussions on building the capacity of developing countries to effectively participate in and implement climate change initiatives.

Overall, COP-9 provided an important forum for countries to assess progress on climate change efforts, negotiate agreements, and set the stage for future action. SB

( to be continued...)



# MONTHLY NEWS

## SUSTAINABILITY – A GLOBAL OUTLOOK

### 1. Ukraine may seek easing of Green Deal requirements at EU talks, Kyiv source says

KYIV, Feb 13 (Reuters) - Ukraine could consider forgoing the European Union's agrarian subsidies in exchange for an easing of the bloc's Green Deal requirements during accession talks starting next month, a senior Ukrainian official told Reuters.

[Read More](#)

### 5. Delayed Tuvalu election result highlights climate impacts

An election result in Tuvalu has been delayed by two weeks as dangerous weather stops boats from bringing new lawmakers to the capital to vote for prime minister, highlighting why climate change is the top political issue in the Pacific Islands nation.

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### 2. Europe may need to better direct private funds to save green goals

The European Union may need to do more to direct private funds into sustainable investments or it could fail to meet net-zero economy targets, an EU discussion document showed on Tuesday. The EU's executive European Commission said in the informal discussion document that private sources will have to provide the bulk of financing for the low carbon transition.

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### 6. Have We Crossed a Dangerous Warming Threshold? Here's What to Know.

Our planet's hottest January on record also helped global warming pass a different, unwelcome milestone, according to data released on Thursday by the European Union climate monitor: Over the past 12 months, the average temperature worldwide was more than 1.5 degrees Celsius, or 2.7 degrees Fahrenheit, higher than it was at the dawn of the industrial age.

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### 3. Three COP summit hosts unite to raise climate ambitions

The United Arab Emirates, host of last year's COP28 climate summit, and Azerbaijan and Brazil, the hosts of the next two U.N. climate summits, said on Tuesday they would team up to push for more ambitious emissions-cutting goals.

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### 7. Conversion process turns greenhouse gas into ethylene

Engineers at the University of Cincinnati created a more efficient way of converting carbon dioxide into valuable products while simultaneously addressing climate change.

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### 4. Carbon capture tech a 'complete falsehood', says Fortescue Metals chairman

Carbon capture is not a solution for the energy transition and political leaders need to provide real, non-greenwashed, commitments to encourage investment, said the executive chairman of Fortescue Metals.

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### 8. Ambitious roadmap for circular carbon plastics economy

Researchers have outlined ambitious targets to help deliver a sustainable and net zero plastic economy. The authors argue for a rethinking of the technical, economic, and policy paradigms that have entrenched the status-quo, one of rising carbon emissions and uncontrolled pollution.

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# SUSTAINABILITY – INDIAN CONTEXT

## 1. India ranks 3rd in USGBC's global list on green building certification for 2023

India secures third place in US Green Building Council's (USGBC) LEED certification list for 2023. LEED, a recognized symbol of sustainability, promotes green building practices. Mainland China leads, followed by Canada. India's 248 certified projects cover 7.23 million square meters. Despite the US not making the list, it remains the largest market for LEED. USGBC's annual report highlights global progress in sustainable building practices, overseen in India by the Green Business Certification Inc (GBCI).

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## 2. As sustainability becomes prominent, demand for green leadership skills rises

Climate change is driving the development of leadership roles in the green industry. The demand for renewable energy professionals, especially at CXO levels, is increasing. R&D and technology leaders in battery and storage systems, digitalization in renewables, and data analytics are in high demand. The manufacturing of green hydrogen and ammonia is a growing focus.

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## 3. Make public transport cool, even for car people

Finance Minister, Nirmala Sitharaman, has indicated a heightened emphasis on deploying electric buses in the country's public transport system as part of the third iteration of the subsidy scheme, Faster Adoption and Manufacturing of Electric Vehicles (FAME III). This move aligns with India's commitment to transition towards a net-zero economy by 2070. The deployment of electric buses is considered a crucial element in the broader strategy for low-carbon mobility, aiming to reduce emissions, enhance energy efficiency, and promote sustainable lifestyles.

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## 4. India aspires to a \$5 trillion economy. It must factor the environment cost

The concept of green GDP, which takes into account the environmental costs of production, is crucial in assessing the true value of goods and services. Factoring in environmental costs would lead to more sustainable

production methods and a reevaluation of economic growth models.

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## 5. Sustainable entrepreneurship: Finding the perfect equilibrium to create profit and social impact

Sustainable entrepreneurship is a practical approach that integrates eco-friendly and socially responsible practices into the very fabric of business models.

[Read More](#)

## 6. India paving the path for solar independence: A manufacturer's outlook

India's solar journey is a testament to the confluence of governmental vision and entrepreneurial spirit. Policies incentivizing solar adoption, coupled with a burgeoning market, have paved the way for a robust manufacturing ecosystem.

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## 7. REC to be the nodal agency for PM Suryodaya Yojana

The ministry of new and renewable energy has designated REC as the nodal agency for the implementation of Pradhan Mantri Suryodaya Yojana.

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## 8. India Energy Week to focus on green hydrogen, biogas

The second edition of India Energy Week, scheduled to take place in Goa from February 6-9 is expected to host Energy ministers from 17 different countries, over 35,000 attendees, and more than 900 exhibitors.

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## 9. Biocon included in S&P Global Sustainability Yearbook 2024

Biocon Limited announced its inclusion in S&P's Sustainability Yearbook 2024 for the second consecutive year, based on the S&P Global Corporate Sustainability Assessment (CSA) of Biocon and Biocon Biologics Limited for 2023.

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## Interim Budget 2024: Charting a Sustainable and Inclusive Future

# Paving the way for Sustainable and Comprehensive Growth

**CMA Arunabha Saha**

Practicing Cost Accountant  
Thane

### Introduction:

The Interim Budget for the fiscal year 2024-25, presented by Finance Minister Nirmala Sitharaman, stands as a testament to the government's commitment to forging a path of sustainable and inclusive development. This visionary budget not only addresses economic concerns but also places a strong emphasis on sustainability, social justice, and holistic well-being. In this comprehensive analysis, we look into the key initiatives that define the budget, exploring their potential impact on the nation's trajectory.

### 1. Rooftop Solarisation and Muft Bijli (Free Electricity):



The flagship scheme to empower one crore households through rooftop solarisation is a bold step towards sustainable energy and economic empowerment. Under this initiative, households can receive up to 300 units of

free electricity monthly. The benefits expected from this scheme include substantial annual savings for households, opportunities for electric vehicle charging, entrepreneurship opportunities for vendors, and employment opportunities for the youth skilled in manufacturing, installation, and maintenance.

- **Expected Benefits:** Annual savings of Rs. 15,000 - Rs. 18,000 for households, opportunities for entrepreneurship, and employment generation for skilled youth.
- **Alignment with Global Goals:** This initiative resonates with the global commitment to sustainable energy transition and 'net-zero' targets.

### 2. Housing for the Middle Class:

The budget introduces a scheme aimed at assisting sections of the middle class in acquiring their own homes. By targeting those living in rented houses, slums, chawls, and unauthorised colonies, this initiative aims to address the pressing housing challenges faced by a significant portion of the population.

- **Goal:** Promoting inclusive development by providing affordable housing solutions.
- **Impact:** Addressing the housing needs of the middle class contributes to social and economic stability.





### 3. Medical Colleges and Healthcare:

The proposal to establish more medical colleges, utilising existing hospital infrastructure, is a strategic move to meet the growing demand for healthcare professionals. Additionally, the focus on preventive healthcare, including cervical cancer vaccination for girls aged 9 to 14, reflects a commitment to public health.

- **Public Health Focus:** Comprehensive programs for maternal and child care consolidate various schemes for improved nutrition delivery and early childhood development.
- **Impact on Aspiring Youth:** Creating avenues for ambitious youth to pursue medical education aligns with the nation's health and educational aspirations.

### 4. Lakhpati Didi and Women Empowerment:



Recognising the transformative success of Self-Help Groups (SHGs) with nine crore women, the budget seeks to honour and increase the target for "Lakhpati Didi" from 2 crore to 3 crore. This underlines the government's commitment to empowering women and fostering self-reliance in rural areas.

- **Empowerment:** SHGs have transformed the rural socio-economic landscape, and increasing the target acknowledges and catalyses further empowerment.
- **Social Impact:** Women empowerment is a key driver for social progress, and this initiative contributes to a more inclusive society.

### 5. Green Energy and Environmental Initiatives:

The holistic approach taken by the Interim Budget 2024 towards Green Energy and Environmental Initiatives reflects a strategic vision that extends beyond immediate gains, aiming for a comprehensive transformation in the energy landscape. The multifaceted measures outlined in the budget not only address the urgent need for sustainable practices but

also align with global environmental goals, reinforcing India's commitment to a green and responsible future.

#### a. Net-Zero Commitment:



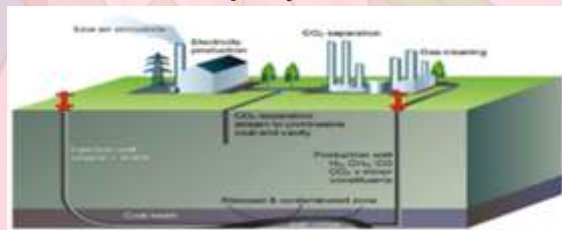
The announcement to achieve 'net-zero' by 2070 signifies a profound commitment to mitigating climate change and reducing the carbon footprint. This ambitious target places India at the forefront of nations actively working towards global environmental sustainability. By setting a definitive timeline, the budget provides a clear roadmap for long-term planning and implementation, ensuring that environmental considerations are integrated into the fabric of economic development.

#### b. Viability Gap Funding for Offshore Wind Energy:



The provision of viability gap funding for offshore wind energy projects is a pivotal step in promoting renewable energy sources. Offshore wind has the potential to harness vast and consistent wind resources, contributing significantly to the green energy grid. The viability gap funding mechanism addresses the economic challenges associated with these projects, making them more attractive for investors and fostering a robust offshore wind sector.

#### c. Coal Gasification Capacity:



While there is a global push towards reducing reliance on traditional coal-based energy, the budget's emphasis on coal gasification introduces a nuanced approach. By enhancing coal gasification capacity, the government acknowledges the existing infrastructure and seeks to make it more environmentally friendly. This transitional strategy aligns with the recognition that a sudden and drastic shift



might have socio-economic repercussions, emphasising a pragmatic and inclusive pathway towards cleaner energy.

d. **Mandatory Blending of Compressed Biogas:**



The mandatory blending of compressed biogas is a noteworthy initiative that integrates sustainable practices into the existing energy framework. By promoting the use of biogas, derived from organic waste, the government not only addresses waste management concerns but also contributes to reducing the carbon intensity of the energy sector. This approach underscores the importance of circular economy principles, where waste is transformed into a valuable resource.

e. **Strengthening the Electric Vehicle Ecosystem:**

The budget's focus on strengthening the electric vehicle (EV) ecosystem aligns with the global trend towards sustainable transportation. Recognising the environmental benefits of EVs, the budget promotes their adoption through various measures. This includes support for manufacturing, creating charging infrastructure, and encouraging the use of electric buses for public transport.

f. **Supporting Manufacturing:**

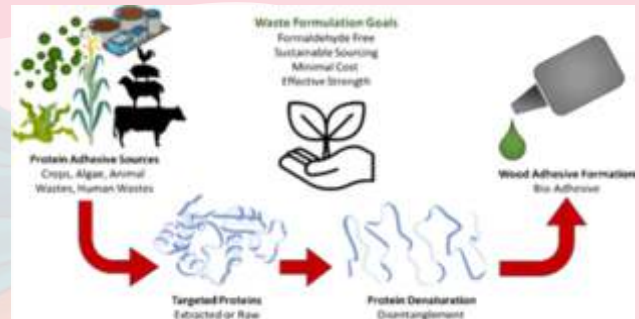
The emphasis on supporting manufacturing within the electric vehicle sector not only contributes to economic growth but also aligns with the broader objective of reducing dependence on conventional vehicles. By incentivising domestic production, the budget aims to create a self-sustaining ecosystem that fosters innovation and job creation in the green technology sector.

g. **Encouraging Adoption of E-Buses:**

The promotion of e-buses for public transport reflects a commitment to transforming urban mobility. E-buses not only reduce air pollution but also contribute to lowering the overall carbon footprint of public transportation. This aligns with global efforts to transition away from fossil fuel-

based transport systems, promoting cleaner and more sustainable alternatives for the masses.

6. **Bio-manufacturing, Bio-foundry, and Blue Economy 2.0:**



The holistic view presented by the Interim Budget 2024 towards the introduction of a scheme for bio-manufacturing and bio-foundry, along with the emphasis on Blue Economy 2.0 and Circular Economy, underscores a strategic commitment to sustainable and environmentally responsible practices. These initiatives reflect a comprehensive understanding of the interconnectedness of economic growth, environmental stewardship, and the well-being of coastal communities.

A. **Bio-manufacturing and Bio-foundry: A Leap Towards Green Growth:**

The introduction of a dedicated scheme for bio-manufacturing and bio-foundry marks a significant stride towards green growth. This initiative recognises the potential of biotechnology in providing sustainable alternatives across various sectors. The focus on biodegradable polymers, bio-plastics, bio-pharmaceuticals, and bio-agri-inputs aligns with the principles of utilising nature-inspired solutions that are not only eco-friendly but also contribute to mitigating environmental challenges.

a. The emphasis on biodegradable polymers and bio-plastics signals a shift towards reducing the environmental impact of plastic waste. Traditional plastics contribute significantly to pollution and have long-lasting ecological consequences. Bio-based alternatives offer a promising solution by breaking down naturally, minimising the adverse effects on ecosystems.

b. **Bio-pharmaceuticals:** The integration of bio-manufacturing in the pharmaceutical sector promotes the development of bio-pharmaceuticals. This not only opens avenues for innovative and sustainable medical solutions but also aligns with global efforts to reduce the ecological footprint of pharmaceutical production.

- c. **Bio-agri-inputs:** The focus on bio-agri-inputs emphasises sustainable agricultural practices. By promoting the use of bio-based inputs in agriculture, the scheme aims to enhance soil health, reduce dependence on chemical fertilisers, and foster a more resilient and environmentally friendly farming ecosystem.

## B. Blue Economy 2.0: Nurturing Climate-Resilient Coastal Activities:

Blue Economy 2.0 represents a forward-looking strategy that goes beyond traditional approaches to coastal development. By focusing on climate resilient activities in coastal areas, the budget recognises the vulnerability of these regions to climate change and



aims to harness the economic potential of oceans sustainably.

- a. **Restoration and Adaptation Measures:** The inclusion of restoration and adaptation measures in Blue Economy 2.0 signifies a commitment to preserving and restoring coastal ecosystems. This holistic approach acknowledges the interconnectedness of ecological health and economic sustainability in coastal regions.
- b. **Coastal Aquaculture and Mariculture:** The emphasis on coastal aquaculture and mariculture promotes sustainable practices in the fisheries sector. By encouraging responsible aquaculture methods, the scheme aims to prevent overfishing, protect marine biodiversity, and provide livelihood opportunities for coastal communities.

## C. Circular Economy: Integration with Bio-manufacturing:

The focus on bio-manufacturing seamlessly aligns with the principles of a circular economy, emphasising the sustainable use of resources and minimising waste. The circular economy model aims to reduce, reuse, and recycle materials, closing the loop on resource consumption and waste generation.

- a. **Reducing Dependence on Non-renewable Resources:** Bio-manufacturing, by its nature,

involves harnessing biological processes to create products. This reduces dependence on traditional, non-renewable resources, aligning with the circular economy's objective of breaking free from the linear "take, make, dispose" model.

- b. **Promoting Sustainable Consumption and Production:** The integration of bio-manufacturing into the circular economy promotes sustainable consumption and production patterns. It encourages the creation of products with a reduced environmental footprint, fostering a more responsible approach to resource utilisation.

## D. Social Justice and Inclusive Development:



The budget reiterates the government's commitment to "Sabka Saath, Sabka Vikas, and Sabka Vishwas," emphasising social justice and the empowerment of marginalised sections. The focus on the 'Garib' (Poor), 'Mahilayen' (Women), 'Yuva' (Youth), and 'Annadata' (Farmer) reflects a comprehensive approach to inclusive development.

- a. **Transparent Governance:** The commitment to transparent and accountable governance with a 'citizen-first' approach addresses systemic issues, reducing corruption and nepotism.
- b. **Outcome-driven Approach:** The focus on outcomes ensures that the benefits of development reach all eligible individuals, reducing disparities and promoting socio-economic transformation.

## Conclusion:

The Interim Budget for 2024 goes beyond conventional economic measures, presenting a roadmap for a sustainable and inclusive India. The initiatives outlined in the budget are not only aligned with global environmental goals but also address the diverse needs of the Indian population. As the nation aspires for 'Viksit Bharat' by 2047, this budget serves as a crucial milestone, setting the stage for a more sustainable and equitable future. Through a strategic blend of economic, environmental, and social initiatives, the government aims to foster a balanced and prosperous nation that embraces the principles of sustainability, inclusivity, and social justice. SB



# Sustainability is Everyone's Responsibility

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**O**rganizations with the resources and capabilities to take meaningful action must ingrain sustainability into every aspect of the business and treat it not merely as a matter of compliance but as a matter of existence. So, how can organizations build a culture of sustainability that becomes an inseparable part of its character?

It is a long and continuing journey, and it is important to get everyone – across business divisions and functions – on board. A report by The Conference Board and Baker Tilly reveals that only 13 percent of business executives believe that sustainability is 'deeply' embedded in their firm's cultural DNA, 49 percent think it is 'moderately' embedded, while 37 percent say it is 'slightly' embedded. Most pertinently, 75 percent of the participants have identified 'a sense of ownership' as the most important element in a culture of sustainability.

## **Igniting the spark of ownership**

It is human nature to value and feel responsible for the things we own. We are unlikely to see much change if we treat sustainability as someone else's problem or merely support it 'in principle'. There are many ways of nurturing ownership and letting it play out. For instance, the 'Make Your Mark' initiative by Marks & Spencer's encouraged employees to help jobless young people gain confidence and develop industry-relevant skills. It started off as a small initiative but went on to become an integral part of the company's culture.

Likewise, Apraava Energy, an integrated energy solutions provider in India, has an employee-led group called 'Action Ambassadors' that puts its energy in action for varied sustainability and inclusion initiatives. One of their initiatives involved learning sign language and creating a video introducing the organization to members of all communities – including the deaf, the mute, and the visually disabled – so that they could interact and engage with the organization. The aim was to try and create an equitable world.

## **A three-step framework for nurturing sustainability**

CB Bhattacharya in his book 'Small Actions, Big Difference' has aptly proposed a framework for creating ownership for

sustainability. The framework has three phases: Incubate, Launch, and Entrench.

## **Incubating sustainability: Defining the purpose and setting goals**

*Incubation* starts with defining a sustainability framework that is true to the company's purpose. Decoding the higher purpose and answering the question 'why do we exist' is the first step in ensuring effective implementation and the desired impact of sustainability programs. As Larry Fink, Chairman & CEO of Blackrock Inc, rightly says, "Purpose unifies management, employees, and communities. It drives ethical behavior and creates an essential check on actions that go against the best interests of stakeholders."

The purpose must be unambiguous, and more importantly, demonstrated in the company's operations. Airbnb's corporate purpose is "to create a world where anyone can belong, anywhere". It was put to the test some years ago when questions were raised about racial discrimination on the platform. Airbnb addressed it by working with civil rights organizations and launching Project Lighthouse to identify ways in which racial discrimination occurs and put a stop to it.

Another excellent example of a purpose-led initiative that comes to mind is the handwashing program by Unilever's soap brand Lifebuoy, which was so impactful that it was institutionalized as a public policy initiative. It thus not only fulfilled but transcended its original purpose – a huge win for both the company and the people.

The second step in 'incubation' involves sharpening and firming up sustainability goals by identifying issues across the value chain and any conflicts or overlaps between the priorities of the company and its stakeholders. Sustainability should permeate the entire value chain, from the sourcing of raw materials to the disposal of the used product. When Coca-Cola widened its footprint analysis to include suppliers, it found that its biggest resource issue was the water being used by its suppliers for growing sugar beet. This was an unexpected finding, and it enabled the company to quickly come up with new practices to reduce water usage.



## Launching sustainability: Engaging everyone and connecting purpose to action

After the 'incubation' of sustainability comes the 'launch' phase, when we, as business leaders, must inject the notion of ownership across the organization. Employees tend to be more enthused to take ownership of something when they see it as an opportunity to make a tangible contribution to business growth and societal welfare. When all employees and stakeholders use the sustainability lens to make decisions, it often leads to new business models or new products. Unilever's waterless soap is a result of this approach. The product not only saves lives by preventing the transmission of dangerous bacteria, but it also saves water – a vital and precious resource in an emerging market like India.

While presenting the idea of sustainability to our employees, we need to do it in a way that moves them at an emotional level. A pharmaceutical company might want to emphasize the fact that the company's purpose is to ensure good health of all. For a financial company, the message could be the importance of striving for financial inclusion. Such an approach can help employees realize that their work transcends profit-making. It also paves the way for conversations around fostering a sense of ownership in sustainability within the company.

If needed, the emotional push can be complemented with more tangible incentives such as linking individual sustainability efforts to monetary incentives, cost savings, or career advancement opportunities. Incorporating purpose metrics into reward programs ensures comprehensive performance evaluation, considering both business outcomes and alignment with the company's ethos. This not only underlines the importance of sustainable practices but also motivates employees to actively engage in initiatives that align with the broader purpose of the company.

A siloed approach to sustainability will almost always lead to failure. It is essential to imbue sustainability into every role, function, and level. Every department should play an active role in developing the capability and empowering a sense of ownership for sustainability-focused actions. The HR team, for instance, should focus on training individuals and implementing sustainability focused programs like offering volunteering leave, incentives for carpool or promoting paperless meetings; the marketing team should raise awareness about the environmental and social benefits; while the finance team can persuade investors and Boards to embrace practices that advance sustainability.

Existing governance structures should be guidelines, not shackles, for new ideas and programs. Apraava has a Sustainability Working Group (SWG) comprising professionals from multiple departments, including HR, IT, Finance, Procurement, Legal, Corporate Secretarial and Marketing. It is led by the Chief Operating Officer. This group provides

guidance to the Sustainability Committee on sustainability strategies for achieving short-term, medium-term, and long-term goals. It also has the responsibility of developing ESG targets and action plans, promoting sustainability initiatives, and keeping the company abreast of emerging sustainability trends.

## Entrenching sustainability: Making it every day work

*After 'incubation' and 'launch' comes the phase of entrenching the sense of ownership so that it becomes a part of everyday work routine. Identifying metrics for success of sustainability efforts and establishing a mechanism for regular feedback can yield greater clarity on the respective roles and contributions of various stakeholders.*

An organization-wide shift towards sustainability is only the beginning. Industrywide shifts are indeed possible, and sustainability seems to be a powerful unifying factor, catalyzing partnerships even between fierce rivals. In 2009, for instance, executives from over 400 companies, including Nestlé, Coca-Cola, and Pepsi, came together to form the Consumer Goods Forum and pledged to jointly work towards zero deforestation through responsible sourcing of the commodities integral to their business. At a global level, the Paris Climate Agreement underscores the need for governments to impose stricter measures for promoting sustainability. Some countries like Sweden and Germany have set legally binding net zero targets for 2045, while the US and many others have committed to achieving net zero by 2050.

## Conclusion: Coming together to fit the pieces of the sustainability jigsaw

In India, we need more sustainability-focused initiatives at the level of both companies and industries. Industrywide collaboration, government initiatives, and individual commitments are all parts of a jigsaw puzzle that all fit neatly together if we try and visualize the big picture. This calls for action, certainly, but more importantly a transformation in the way we think and work. It requires us to not be satisfied with merely achieving compliance but to go further and embrace the sense of collective responsibility that's at the very core of sustainability. When we do this, we automatically commit to environment protection, healthier workplaces, stronger communities, and a legacy of responsibility.

The path ahead is not easy, but we need to walk it anyway. So, what will your first step be? Champion a new initiative within your organization? Or partner with like-minded industry peers? Remember, you are not alone on this journey; we are all in it together. Whatever our industry or business might be, it is time to put the larger goal of sustainability ahead of our individual organizational goals. Every step that we take towards sustainability will contribute to worldwide change, giving us what we, as companies, ultimately want – a thriving business that brings prosperity, earns goodwill, and makes the planet a better place for all.

SB

# Charting Sustainability in the Corporate Landscape

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## **Navigating Sustainability in the Corporate Landscape: A Paradigm Shift**

In today's business world, sustainability has taken on a much broader meaning than it has traditionally held. It has evolved into a comprehensive approach that encompasses environmental stewardship, social responsibility and governance practices. The primary objective of sustainability is to ensure that businesses operate in a way that balances economic growth with social equity and environmental preservation. To this end, one of the key frameworks guiding sustainability efforts is Environmental, Social and Governance (ESG) criteria, which evaluates a company's performance in these three areas. In recent years, companies in the IT sector have been increasingly grappling with sustainability challenges. This is primarily due to growing stakeholder expectations, regulatory pressures and the recognition of sustainability as a driver of long-term value creation. Companies are adopting proactive measures to enhance their sustainability performance, ranging from reducing carbon emissions to promoting diversity and inclusion in the workplace. The IT sector is particularly well-suited to addressing sustainability challenges as it is heavily reliant on technology, which can be used to both measure and reduce environmental impact. In addition, the sector has a significant role to play in addressing social issues such as inequality and access to education. Companies in the IT sector are recognizing this and are taking steps to ensure that their operations are aligned with sustainability goals. This includes incorporating sustainability metrics into their overall business strategy, engaging with stakeholders to understand their concerns and investing in initiatives that promote sustainability. Overall, the shift towards sustainability in the IT sector is an encouraging development. By embracing sustainability, companies in the sector are not only contributing to a more sustainable future but are also likely to benefit from increased stakeholder engagement, improved brand reputation and enhanced long-term profitability.

## **Adapting Mechanisms: The Evolution of Governance Practices**

Regulatory bodies such as the Securities and Exchange Board of India (SEBI) have emerged as significant players in shaping

corporate governance practices. Through initiatives like the Business Responsibility and Sustainability Reporting (BRSR) mandate, SEBI has been fostering transparency and accountability in the corporate sector. The BRSR requires listed companies to disclose information on their Environmental, Social and Governance (ESG) performance, which is crucial in making informed investment decisions. Moreover, a framework for Environment, Social and Governance (ESG) Rating Providers (ERPs) is being developed, which will introduce a new 'ESG rating' category based on parameters defined under the Business Responsibility and Sustainability Report (BRSR) Core metrics. This also aids in achieving the United Nations Sustainable Development Goals (UNSDGs), a global blueprint for creating a sustainable and inclusive future for all. This alignment helps companies demonstrate their commitment to sustainability on a global scale. It consists of 17 interconnected global goals designed to be a blueprint to achieve a better and more sustainable future for all. These goals address global challenges including those related to poverty, inequality, climate change, environmental degradation, peace and justice. By aligning business practices with these goals, organizations can be key contributors to worldwide sustainable development.

## **Cyient's Sustainable Endeavours: Making a Difference**

Cyient has taken significant strides towards contributing to the sustainability development goals. We have adopted a strategic and comprehensive Environment, Social and Governance (ESG) framework and has implemented a range of initiatives focused on each of its pillars: Responsible, Sociable and Accountable. The company is deeply committed to environmental conservation and relies on data-driven insights to guide its initiatives.

In the fiscal year 2022-23, the company relied on renewable sources for 36% of its total electricity consumption, providing a clear indication of the substantial progress made in decarbonization efforts. To minimize its environmental impact and reduce operational costs, Cyient is also focused on improving energy efficiency within its operations. The company tracks its greenhouse gas emissions and has set reduction targets to contribute to global efforts aimed at



combating climate change. Cyient recognizes the importance of water sustainability, especially in water-scarce regions like India. The company has demonstrated a positive trend in water recycling and reuse from fiscal year 2020-21 to 2022-23, with the total amount of water recycled and reused rising from 16,346 kL to 18,286 kL. This demonstrates Cyient's unwavering commitment to water conservation, an essential aspect of ensuring water security and mitigating the impact of water scarcity in the communities where the company operates.

Social responsibility is a key priority for Cyient, as evidenced by its engagement with local communities through initiatives such as the Cyient Urban Micro Skill Center (CUMSC). The goal of this initiative is to promote inclusive economic growth and empower marginalized populations. Cyient's CSR intervention is aligned with the United Nations' Sustainable Development Goals (SDGs). Cyient aims to achieve these goals through its comprehensive interventions in education and IT literacy, skill development, innovation and infrastructure, as well as community development. The company's CSR vision revolves around empowering the community through education and sustainable employment, recognizing that education and skill development are foundational to individual empowerment and national progress. To realize this vision, Cyient is committed to various initiatives, including providing underprivileged children access to quality education, enhancing the skills of unemployed women and youth to secure sustainable livelihoods, and engaging in projects that merge social innovation with business innovation. By aligning its CSR activities with the Sustainable Development Goals (SDGs), Cyient endeavours to make a positive impact on the lives of people in the communities where it operates, contributing to the creation of a more sustainable future for all. Innovation is at the heart of Cyient's sustainability strategy, and the company provides a platform for students and startups to collaborate and ideate on sustainability solutions through initiatives like the CyientifIQ Sustainability Hackathon. By doing so, Cyient fosters a culture of innovation and drives positive change in the corporate ecosystem.

Cyient values the adoption of high standards of corporate governance in all its dealings in India and abroad. The Company also recognizes the importance of ensuring uniformity in governance processes and practices across the Group globally. Given this, the Company has codified the Group's governance philosophy, approach, and practices and developed a Corporate Governance Manual ("Manual"). The Manual is intended to function as a structured framework and guide to the Board, management and employees and to enable Cyient achieve its vision, mission and attain sustainable growth, in the best interest of all stakeholders. The Manual –

- a. Has been prepared in line with the Indian regulatory framework i.e., the Act and SEBI Listing Regulations, 2015, place of Effective Management requirements under Income Tax law and other applicable laws and the Memorandum and Articles of Association of the Company.

- b. Incorporates Indian and global corporate governance best practices and key requirements under the S&P Corporate Sustainability Assessment – Dow Jones Sustainability Index ("DJSI").
- c. Covers key governance aspects including those related to the Company's structure and principles, ESG agenda, Board, Committees and management, delegation of authority, subsidiaries and code of conduct/ ethics.
- d. Should be read in tandem with the codes and policies of the Company approved by the Board from time to time. The links to the codes and policies of the Company are also provided in the Manual itself for easy reference.
- e. Is intended as a 'living document' in the context of changing regulations and emerging best practices towards enhancing the Group's governance.

A process has been instituted for ongoing review of the Company's compliance with the guiding principles laid down in the Manual

## Building a better tomorrow: A Journey Towards Driving Sustainable Change from within

As part of its commitment to sustainability, Cyient has embarked on a journey to accelerate Engineering and Technology Convergence. Cyient has embarked on multiple initiatives in its journey towards sustainability and corporate responsibility. This includes investing in renewable energy sources, with a target of 69% absolute emission reduction from the baseline and to attain a 75% renewable energy share in owned buildings by FY 2050; Cyient is also committed to promoting associate engagement and well-being, recognizing that a healthy and happy workforce is essential for achieving sustainability. However, achieving sustainability is not just the responsibility of corporations alone. Society as a whole needs to take collective action to achieve this goal. As individuals, consumers, and citizens, we have a critical role to play in driving sustainable practices and holding businesses and governments accountable for their actions. This requires demanding transparency from companies and governments, supporting responsible businesses, and advocating for policy reforms that prioritize sustainability. By working together, we can create a more sustainable and equitable world for future generations. Cyient believes that by aligning with the global and national governance directives and by encouraging collective action, we can build a brighter, more sustainable future for all.

## Conclusion

The Ishavasya Upanishad sums up the concept of sustainability in the Indian context as follows:

'Everything animate and inanimate that is within the universe is controlled and owned by the Lord. Therefore, one should only accept those things necessary for himself, which are set aside as his/her quota and one should not accept other things, knowing well to whom they belong'.

SB



# Demystifying Carbon Markets

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## Introduction:

Climate change casts a shadow over our present and poses an existential threat to our future. The dependence on fossil fuels, releasing heat-trapping greenhouse gases into the atmosphere, has pushed our planet to the brink of a tipping point. Yet, amidst the dire warnings, a glimmer of hope emerges: the carbon market. This innovative system offers a win-win opportunity—mitigating climate change while fostering economic opportunities.

Carbon Market is a marketplace where polluters are incentivized to reduce their emissions, by putting a price on carbon. It compels companies and individuals to own up to the environmental cost of their actions. This goes a long way in encouraging adoption of clean technologies and renewable energy sources.

But the impact goes beyond mere economics. Every ton of carbon dioxide removed or avoided is a victory for our planet. However, the path forward is not without its challenges. Ensuring the integrity and effectiveness of these markets is crucial, given practices like greenwashing are to be addressed. Carbon markets can become a powerful tool in the fight against climate change. In this essay, we will delve deeper into the intricacies of carbon markets, exploring their potential, limitations, and the crucial role cost and management accountants can play, in operation of carbon markets.

## What are carbon markets?

Simply put, carbon markets act like stock exchanges for the sale and purchase of carbon credits. They can be used by entities having high greenhouse gas emissions by purchasing carbon credits - from the ones that avoid or reduce greenhouse gas emissions.

**Carbon credits** - One carbon credit is equivalent to a tonne of carbon dioxide or a different greenhouse gas reduced or

removed. These credits can be used just like currency - and once used, they are no longer available for trading.

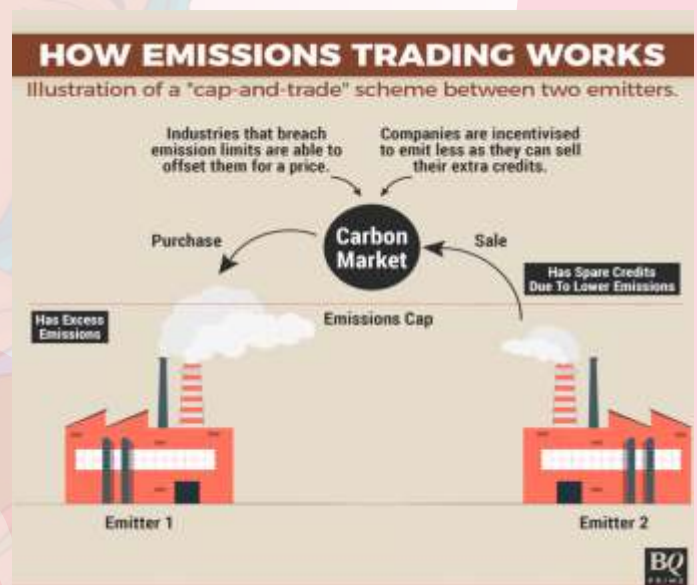


Image 1 - Carbon emissions trading mechanism

**Source:-** [https://media.assettype.com/bloomberqint%2F2022-08%2Fc9892ede-e858-492d-955f-17f91be38894%2FHow\\_Emissions\\_Trading\\_Works.png?auto=format%2Ccompress&format=webp&w=940](https://media.assettype.com/bloomberqint%2F2022-08%2Fc9892ede-e858-492d-955f-17f91be38894%2FHow_Emissions_Trading_Works.png?auto=format%2Ccompress&format=webp&w=940)

## Evolution of Carbon Markets:

The current iteration of carbon markets was started with the signing of the Kyoto protocol. As the Kyoto protocol, was COP (Conference of parties) there were specific targets on governments to reduce emissions. This resulted in the creation of carbon accounting and trading mechanisms. Currently there are 2 types of carbon markets:

Currently, there are 2 ways in which carbon credits can be traded

- Mandatory Carbon Market
- Voluntary Carbon Market

As its name suggests, the mandatory carbon market is used by companies and governments that are legally mandated to offset their emissions.

The countries that have joined these markets are those that have accepted and adopted the emission limits established in the Framework of the United Nations Convention on Climate Change (UNFCCC).

On the other hand, the voluntary carbon market operates outside the compliance markets but in parallel, allowing private companies and individuals to purchase carbon credits voluntarily.

Both the markets have been explained in detail below:

- **Mandatory / Compliance Carbon Market (CCM):**

This market is regulated through international, regional and sub-national carbon reduction schemes, such as the Clean Development Mechanism under the Kyoto Protocol, the European Union Emissions Trading Scheme (EU-ETS) and the California Carbon Market. Each ton of CO<sub>2</sub> is measured in carbon credits or CERs (Certified Emission Reductions). These credits are generated in the implementation phase of the project; and are issued once the reduction has been credited.

This market is now dominated by investments into companies by financial bodies like World Bank which have mandates on investments to be carbon neutral. This market is still under development, but it is expected to be launched in 2026.

- **Voluntary Carbon Market (VCM):**

The main objective for acquiring Verified Emission Reduction (VER) credits, is to neutralize the carbon footprint, motivated mainly by Corporate Social Responsibility (CSR) and considerations such as certification, reputation and environmental and social benefits.

Companies and individuals can acquire or buy carbon credits directly from projects, companies or carbon funds. The main difference is that a VER (voluntary market), unlike CERs (mandatory market), cannot be used to achieve obligations under the Kyoto Protocol compliance regime. Developers of projects resulting in the avoidance, decrease or removal of carbon emissions can apply to private entities, called standards, to certify their project and prove the amount of carbon avoided, decreased or removed. Post

certification, the developer can obtain voluntary carbon credits (VCCs) with One carbon credit = 1 ton of CO<sub>2</sub>e emission reduction.

## Vaults for storing carbon credits:

Vaults are secure digital repositories where carbon credits are stored and tracked. Companies like Verra and AGS offer vaults that meet specific security and transparency standards, ensuring the integrity of the credits, having various features like fractional ownership, trading, and retirement of credits.

The VCCs are stored in a registry owned or retained by the standard that certified the project. The developer can either retire the credits or sell them to another entity owning an account in the registry. There are various ways in which VCCs can be traded and various institutions involved in the process: brokers, exchanges, retail traders, and advisors.

VCCs issued by a given standard and stored in a registry managed or retained by this standard cannot be transferred to a registry of a different standard. For example, a carbon credit issued by Verra is stored at Verra Registry and cannot be moved to the Impact Registry operated by The Gold Standard.

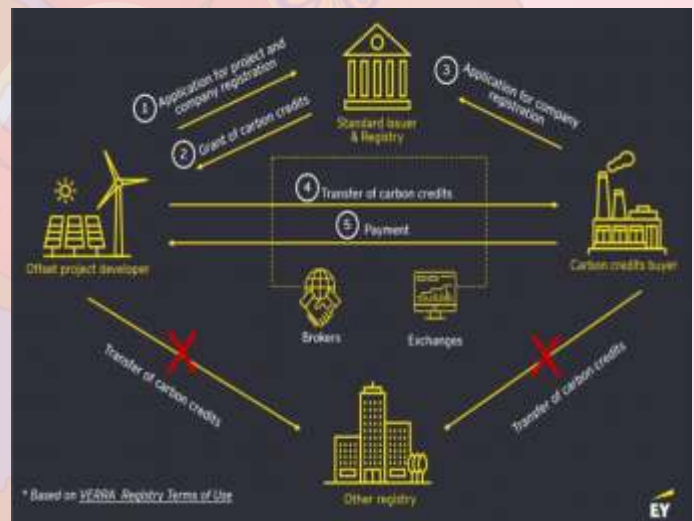


Image 2 - Operation of carbon markets

Source:- [https://assets.ey.com/content/dam/ey-sites/ey-com/en\\_pl/article/ey-vcm-scheme.jpg.rendition.1800.1200.jpg](https://assets.ey.com/content/dam/ey-sites/ey-com/en_pl/article/ey-vcm-scheme.jpg.rendition.1800.1200.jpg)

This market is not regulated by the government and allows entities to offset their emissions by purchasing carbon credits from projects that reduce or remove carbon dioxide from the atmosphere. The VCM in India is growing rapidly, with a valuation exceeding \$1.2 billion and over 1,400 registered projects.



The Indian government is currently developing the framework for the CCM, and the draft rules were released in December 2022. The final rules are expected to be released in 2024.

## Regulations on Carbon Markets in India

On 26th June, 2023 the Ministry of Environment, Forests, and Climate Change introduced the 'draft Green Credit Programme Implementation Rules, 2023', while a mere two days later, on 28th June, 2023 the Ministry of Power notified the Carbon Credit Trading Scheme, 2023.

The Carbon Trading scheme was introduced to establish an Indian carbon market, this scheme employs a cap-and-trade mechanism. The government sets the limit, or "cap" on emissions permitted across a given industry. It issues a limited number of annual permits that allow companies to emit a certain amount of carbon dioxide and related pollutants.

The eight activities outlined in the draft rules include tree plantation, water conservation, sustainable agriculture, waste management, air pollution reduction, mangrove conservation, ecomark labeling, and building sustainable buildings.

### • Case study - Soilify

An initiative of Earth Analytics India, Solidify makes use of the financial markets in agriculture. They link service providers, for example- entities engaged in carbon farming or regenerative agriculture, with potential funders like governments, and companies. They prepare to structure an impact bond that will be distributed through loans, financing the shift in practices. This will take the carbon markets beyond mere betting and capture their true essence.

The core of the Soilify Partnership is to:

- Develop, implement and scale remote sensing-based technologies to monitor the effectiveness of soil-enriching strategies.
- Co-create innovations that reward regenerative practices. By engaging diverse stakeholders with interest in supporting carbon sequestration and regenerative practices, identify the concrete opportunities to test such solutions, and get them underway as pilots.
- The Soilify Project supports selected NGOs and FPOs (Farmer Producing Organisations) in South Asia in their work on regenerative agriculture.
- Farmers can monitor soil carbon growth and connect with reward providers & pilot programs using the new tool.

## Carbon Markets Globally

Here are some of the key trends in carbon markets globally:

- The number of carbon pricing initiatives is increasing. As of 2023, there are 64 carbon pricing systems in place or under development around the world, covering about 23% of global greenhouse gas emissions.
- The voluntary carbon market is growing rapidly. The value of the voluntary carbon market was estimated to be \$2 billion in 2021, and it is expected to grow to \$50 billion by 2030.
- There is increasing interest in using carbon markets to achieve international climate goals. The Paris Agreement, which was adopted by 196 countries in 2015, includes provisions for the use of international carbon markets.

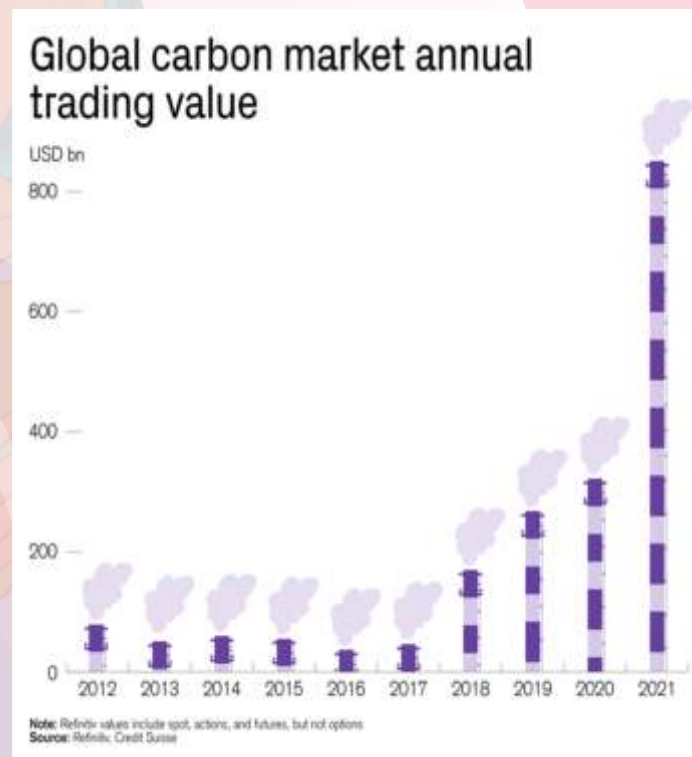


Image 3 - Global Carbon Market Trading Value

Source:- [https://www.credit-suisse.com/about-us-news/en/articles/news-and-expertise/carbon-markets-invest-in-greenhouse-gas-emissions-202204/\\_jcr\\_content/content/image\\_1352029245/image.revampimg.876.high.png/global-carbon-market-annual-trading-value.png](https://www.credit-suisse.com/about-us-news/en/articles/news-and-expertise/carbon-markets-invest-in-greenhouse-gas-emissions-202204/_jcr_content/content/image_1352029245/image.revampimg.876.high.png/global-carbon-market-annual-trading-value.png)

## What are the key benefits of carbon markets in India?

- Environmental advancement: With the incentives that carbon markets provide, more and more businesses are likely to adopt environment-friendly practices resulting in reduced emissions of harmful gases.



- **Use of clean energy:** Carbon markets can help to promote clean energy by creating a demand for carbon credits from renewable energy projects.
- **Increased investment and job opportunities:** The carbon markets can help facilitate investment and job opportunities in the clean energy sector.

## What are some challenges that need to be addressed for carbon markets to be successful in India?

- **Data quality:** There is a need for better data on emissions and carbon offsets to ensure the integrity of the market.
- **Access to finance:** Many businesses and individuals in India need access to the finance they need to invest in clean energy and emissions reduction projects.
- **Extreme Price Fluctuation:** The quantity and vintage of emissions drive carbon credit prices. As credits are hard to get, multiple brokers will combine credits for one buyer. Hence, the same carbon credits can get traded at different prices. In addition, carbon credits get a higher price if linked with SDG's. For example, carbon credits have been traded at \$ 12-13 / MT as the carbon offset was linked with the elimination of manual scavenging.
- **Poor Techno Commercial viability:** Due to the poor prevailing price of carbon credits, the ROI on VCM mechanisms has increased. The current cost structure includes approx. \$ 5000 - \$6000 for Consulting and carbon audit, respectively, with an additional \$3000 for registration in any carbon marketplace. With a typical commission cost of 0.2/carbon, the payback will require at least 15000 credits sold.
- **Investment Deadlines to get Carbon Credits:** Different programs have different timelines to implement projects to showcase carbon credits. For example, CDM projects cannot have begun more than 6 months ago, while VCM credits will be hard to obtain if the project is more than 2 years old. As a result, the project needs to go for validation and verification no more than 2 years from the start date of the project.
- **Quantity and Quality are important:** Quantity and vintage of carbon emission are 2 key parameters that govern carbon prices. While these reflect the base carbon price, the actual price will also depend on the ability to link with SDG Social goals.

- **No Common VCM market:** Multiple markets are being set up by different organizations. For example, Verra, Gold Standard, Plan Vivo, and American Carbon Registry are common platforms. They have individual standards for inclusion and measurement, with no possibility of transfer or credits among them
- **Poor Market player visibility:** As buyers do not have the bandwidth to validate credits, the market is dominated by brokers. As a result, there is no visibility of the buyer. Hence, poor transparency in understanding the vintage of the credit is a challenge faced in these marketplaces.

Despite these challenges, the carbon market in India has the potential to play a significant role in the country's efforts to reduce greenhouse gas emissions and achieve its climate goals. The government is taking steps to address the challenges, and the market is expected to grow rapidly in the coming years.

## Why are Carbon Markets Relevant to Cost Accountants?

Several factors make carbon markets relevant to cost accountants:

- **Cost Management:** Carbon pricing and emissions trading schemes are increasing, making carbon a cost factor for businesses. Major companies are including internal carbon tax while pricing projects. Cost accountants can help companies understand their carbon footprint, identify cost-effective reduction strategies, and evaluate the financial implications of carbon credits.
- **Investment Analysis:** Companies are investing in projects that generate carbon credits, such as renewable energy or forestry. Cost accountants can assess the financial viability of these investments and optimize returns.
- **Reporting and Compliance:** Companies need to report their carbon emissions and track their use of carbon credits. Cost accountants can help develop robust accounting systems and ensure compliance with regulations.
- **Strategic Decision Making:** Carbon reduction and offsetting strategies can impact brand reputation, market access, and investor relations. Cost accountants can provide insights to support informed decision-making.



## Scope for Cost Accountants:

Cost accountants can play various roles in the carbon credit market:

- **Carbon Footprint Measurement and Analysis:** Develop methodologies to measure and analyze Scope 1, 2, and 3 emissions across the value chain.
- **Cost Reduction Strategies:** Identify cost-effective ways to reduce emissions through process improvement, technology adoption, and operational changes.
- **Carbon Credit Sourcing and Evaluation:** Evaluate different carbon credit projects, assess their quality and impact, and negotiate fair prices.
- **Carbon Credit Accounting and Reporting:** Develop systems to track and account for carbon credits, ensuring accuracy and compliance with regulations.
- **Financial Modeling and Analysis:** Build financial models to assess the financial viability of carbon reduction projects and investments in carbon credits.
- **Internal Controls and Risk Management:** Develop internal controls to manage the risks associated with carbon credits, such as fraud and quality issues.

## Developing the Skillset:

To thrive in this emerging field, cost accountants can:

- **Take Continuing Education Courses:** Enroll in courses on carbon accounting, carbon markets, and sustainability reporting.
- **Network with Industry Experts:** Connect with other professionals working in the carbon credit space.

- **Gain Relevant Certifications:** Consider pursuing certifications like the Certified Carbon Reduction Professional (CCRP) or the Greenhouse Gas Inventory Protocol (GHG Protocol) training.

By embracing the opportunities presented by carbon credits, cost accountants can play a vital role in driving sustainability within organizations and contributing to a more sustainable future. **SB**

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# Women Empowerment – Need of the Day

**Swetha Sandeep**  
Company Secretary  
Chennai

**T**he word Women Empowerment is all about giving equal rights to Women and providing them with equal opportunities.

Women in India have always been given equal right and respect in the Vedic age. This reduced in the Indian Culture in between period when India was regarded as a patriarchal society where freedom for women had been lacking. Women started regaining their status only post Independence.

As we see progress in all aspects, there is also a need in the country to concentrate on human and social development which includes women empowerment.

Women Empowerment is so important at present since both men and women have equal right to education, personality development, health care etc. Empowering a woman not only impacts herself but the entire society as a whole and it helps the next generation to progress.

Women face threats to their lives and health throughout the world and they are always overburdened with work. In most parts of the World, the capabilities of women, their potential go unrecognised.

In India though there is a considerable increase in the number of women who have paved way for themselves, there is still a percentage of rural women who are struggling to carve an identity for themselves. The right to basic Education and in many cases higher education is still denied for many women which is actually a basic right. Women are known for their multitasking abilities both at home and their workplace, they are still facing the unevenness in the society.

Women have always expressed their views about equality and have been striving to achieve an improvement in the quality of their life. To empower more Women the country needs to focus mainly on Education, supportive work environments and eradicating gender inequality. Though there is lot of importance being given to Gender Inequality, a

women faces that in all realms of her life. Every men should ensure that equal opportunities are given to Women which should definitely start only from their own household.

Gender roles or what a man or woman can do is mainly based on their culture, traditions, education, political and Economic situations. Since Women concentrate more on their domestic work, they are more dependent on men financially. This makes them lose many of their opportunities. This gender gap should be bridged and is possible only if equal opportunities are provided without any denial.

In the United Nations, Sustainable Development Goals, there has always been an emphasis about Gender Equality. Though Internationally, there has been a decline in Child marriage and other issues, there are still difficulties that a women faces while trying to achieve her goals. This has further taken a hit after the COVID-19 pandemic. While there is being some progress around the world, there is still a great deal left to be done to resolve the problems of gender inequality.

There is considerable evidence to prove that access to education can bring enough change in the ability which is essential for a woman to gain the questionable capacity and act on the conditions of her lives. She gains knowledge, information and new ideas which helps her to improvise further.

## **Social Economic Development and Women Empowerment**

Every Country needs to invest in women's economic empowerment since it is directly impacting the Economic Growth of the country which in turn eradicates gender Inequalities and poverty. Women contribute to social and economic development taking various roles in businesses, households, as employees, as entrepreneurs.

The hindrances a woman faces without being encouraged is directly proportional in shaping up the economic and political policies of a country. When more women are encouraged to participate in the political process, that would for sure have an impact on the decisions which they take in their own lives and that would start benefitting the society as a whole.

Since most of the women in both Urban and rural areas are confined to their daily household chores, they are not able to pursue their dreams and this limits their opportunities. This has a far reaching socio-economic impact on a country as half the population of a country is not utilising their potential. The formal employment which a woman is capable of doing is undone due to her daily caregiving duties.

The COVID-19 pandemic showcased the vulnerability of women's employment in a time of crisis. Education is another crucial parameter for increasing women's workforce participation. Though there is increase in the Women literacy rate, gender bias, and other household work are still an obstacle for a girl's education.

Women-led organisations are far more successful since they would be able to provide the support the peers require. Also, women serve as platform for knowledge sharing and they possess the capacity to succeed. Women would be able to devise strategies and implement them effectively. The Gender Equality in every country should not be in mere paper but implemented across all sectors though it is still a challenge. This transformation shall benefit not only the individual but the collective society as a whole.

The quest for learning and the passion for growth and development should be the primary motivator for every woman to nurture herself.


## Linkage between women empowerment and sustainability

Women empowerment and sustainability are interconnected concepts that are crucial for the progress and well-being of societies globally. Here's how they intersect and why they are both essential:

1. **Economic Empowerment:** When women are empowered economically, they are better able to contribute to sustainable development. This empowerment can come through access to education, job opportunities, entrepreneurship, and financial inclusion. Women who have economic resources are more likely to invest in their families' health, education, and well-being, which contributes to the long-term sustainability of communities.

2. **Education:** Education is a key driver of both women's empowerment and sustainability. Educated women are more likely to make informed decisions about their health, family planning, and environmental stewardship. They are also better equipped to participate in the workforce and advocate for sustainable practices in their communities.
3. **Health and Well-being:** Women's health and well-being are closely tied to sustainability. Access to reproductive healthcare, including family planning services, not only empowers women to make choices about their bodies and futures but also contributes to population stabilization and reduced strain on natural resources.
4. **Leadership and Decision-making:** Increasing women's representation in leadership and decision-making roles is essential for promoting sustainability. Women often bring different perspectives and priorities to the table, including a focus on social welfare, community resilience, and environmental conservation.
5. **Climate Change:** Women are disproportionately affected by climate change, particularly in developing countries where they often bear the primary responsibility for securing food, water, and fuel for their families. Empowering women with the resources and knowledge to adapt to climate change and participate in mitigation efforts is essential for building sustainable and resilient communities.
6. **Gender Equality:** Gender equality is a fundamental human right and a prerequisite for sustainable development. Empowering women and girls to participate fully in all aspects of society, free from discrimination and violence, is not only morally right but also critical for achieving the Sustainable Development Goals (SDGs) and creating a more just and sustainable world.

Overall, women's empowerment and sustainability are mutually reinforcing goals that require coordinated efforts across sectors and stakeholders. By investing in women and promoting gender equality, we can create more resilient, equitable, and sustainable societies for future generations.

A woman needs to interact and should be open to learn from her peers and also engage herself with the new age ideas with a fresh mind to empower herself. There should always be a – What Next !! ?? 



# Congratulations



**M**r. Pradeep Ramakrishnan has assumed charge as the Executive Director (Capital Markets) at the International Financial Services Centres Authority (IFSCA). IFSCA, a statutory authority under Government of India was set up on April 27, 2020 under the International Financial Services Centres Authority Act, 2019. It is headquartered at GIFT City, Gandhinagar, Gujarat. Prior to this assignment, Mr. Ramakrishnan was working in Securities Exchange Board of India as General Manager. During his two decades of association with SEBI, Mr. Ramakrishnan has handled diversified and key departments viz. Compliance and Monitoring Division, BRSR, Forensic accounting Cell, Department of Hybrid Securities etc. He has played a significant role in shaping and promoting the Bond markets in India viz. Corporate, Municipal and Green. He was instrumental in drafting Corporate Governance Codes for India's listed entities and the BRSR Code - the latter, jointly with the Ministry of Corporate Affairs.

He is a commerce graduate and a Fellow member of the Institute of Company Secretaries of India. A good friend of the CMA profession, Mr. Ramakrishnan is also a prolific writer and has contributed more than a dozen articles in CMA flagship journal-Management Accountant, particularly on sustainable finance.

*Sukhinobhavantu* and the Sustainability Standards Board of ICAI wish Mr. Pradeep Ramakrishnan all the very best in his pursuit of Nation Building.

# Vasudhaiva Kutumbakam Series (2<sup>nd</sup> Webinar)

## Balancing Prosperity with Posterity - Role of SDGs in *Vasudhaiva Kutumbakam*

February 09, 2024 from 4 to 5:15 pm

**CMA Venkateswaran Ramakrishnan**

Deputy General Manager

Systemic Stability Unit & Data Governance Unit  
Securities and Exchange Board of India



The Sustainability Standards Board, with the objective of knowledge dissemination on diverse areas of Sustainability organized the 2<sup>nd</sup> webinar of *Vasudhaiva Kutumbakam* Series on the topic 'Balancing Prosperity with Posterity - Role of SDGs in *Vasudhaiva Kutumbakam*' on February 09, 2024 through online mode.

CMA Venkateswaran Ramakrishnan, Deputy General Manager, Systemic Stability Unit and Data Governance Unit, Securities and Exchange Board of India and Member, SSB, ICMAI was the resource person for the session.

CMA (Dr.) Ashish P. Thatte, Chairman, SSB extended his warm greeting to all participants and conveyed his gratitude to the speaker for taking time of his schedule to address the participants of the webinar. He further appealed the participants to take advantage of the *Vasudhaiva Kutumbakam* webinars which will be held on 2<sup>nd</sup> and 4<sup>th</sup> Fridays of every month.

CMA Venkateswaran started the session with the Introduction of the Theme – Development / Prosperity versus Sustainability / Posterity and deliberated in detail on all 17 Sustainable Development Goals (SDGs). He concluded his session with the SDG India Index 2020-21 showing the performance of all States and Union Territories under the categories of Aspirant, Performer, Front Runner and Achiever.

After the talk, CMA Venkateswaran responded to various queries raised by the participants. CMA Yogender Pal Singh, Secretary of SSB in conclusion, proposed the vote of thanks. Around 260 participants from across the globe attended the webinar. The YouTube link for the session is <https://youtu.be/FGME6J4wxqA?feature=shared>



# Vasudhaiva Kutumbakam Series (3<sup>rd</sup> Webinar)

## Emerging Trends and Opportunities in ESG and Impact Investing Space

February 23, 2024 from 4 to 5:15 pm

**Mr. Pawan Jhabakh**

Legal Counsel & Corporate Attorney



The Third Webinar in the series of *Vasudhaiva Kutumbakam* was held on February 23, 2024 on the topic 'Emerging Trends and Opportunities in ESG and Impact Investing Space'.

Mr. Pawan Jhabakh, Legal Counsel & Corporate Attorney was the speaker for the webinar.

CMA (Dr.) Ashish P. Thatte, Chairman, SSB conveyed his gratitude to the speaker and thanked all participants for attending the webinar.

Mr. Pawan Jhabakh started the webinar with a lucid and illustrative power point presentation on the topic. He in his address covered the Emerging Trends in ESG, how ESG is linked to cash flows, Investment opportunities in India, drivers of ESG Investing in India, transforming India's Investment Landscape through ESG Factors, history of ESG, demand for Transparency and Accountability, the rise of ESG Investing, focus on Social Factors, limitations of ESG Investing, Impact Investing and its rise, Trends and Opportunities in ESG and Impact Investing, Thematic Investing, Regulatory Developments, Alternative Investment Avenues and Common Goals.

In his concluding remarks, he stated that ESG investing is still evolving and these emerging trends present significant opportunities for investors to not only achieve financial returns but also contribute to positive environmental and social outcomes. By staying informed and actively engaging with these trends, investors can play a vital role in advancing sustainable and responsible investment practices started the session with the Introduction of the Theme – Development / Prosperity versus Sustainability / Posterity and deliberated in detail on all 17 Sustainable Development Goals (SDGs). He concluded his session with the SDG India Index 2020-21 showing the performance of all States and Union Territories under the categories of Aspirant, Performer, Front Runner and Achiever.

The webinar was well received by the participants.

# FORTHCOMING VASUDHAIVA KUTUMBAKAM SERIES

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**Vasudhaiva Kutumbakam Series**  
4<sup>th</sup> Webinar

*International Women's Day Special Session on  
Sustainability and Succession*

Friday | March 08, 2024 | 4 pm to 5:15 pm

Organised by Sustainability Standards Board (SSB)

**SPEAKERS**

  
CMA Ashwin G. Dalwadi  
President, ICMAI

  
CMA Bibhuti Bhusan Nayak  
Vice President, ICMAI

  
Ms. Lekha Ashok  
Director  
SVJS Knowledge Lab Private Limited

  
CMA (Dr.) Ashish P. Thatte  
Chairman, SSB, ICMAI

  
Mr. Jayan K  
Director  
SVJS Knowledge Lab Private Limited

For queries, email to [ssb@icmai.in](mailto:ssb@icmai.in)

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**Vasudhaiva Kutumbakam Series**  
5<sup>th</sup> Webinar

**Indian Perspective to ESG**

Friday | March 22, 2024 | 4 pm to 5:15 pm

Organised by Sustainability Standards Board (SSB)

**SPEAKER**

  
CMA Ashwin G. Dalwadi  
President, ICMAI

  
CMA Bibhuti Bhusan Nayak  
Vice President, ICMAI

  
Dr. Sudheendra Putty  
AVP, Cyient Limited  
Hyderabad

  
CMA (Dr.) Ashish P. Thatte  
Chairman, SSB, ICMAI



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Behind every successful business decision, there is always a CMA



# SUSTAINABILITY MUSING!

## Empowered by Sun!

**CMA(Dr.) Aditi Dasgupta**  
Jt. Director, ICAI

According to the World Coal Association, over 41 percent of coal is being used to produce electricity, making coal one of the most commonly used resources to generate electricity. Modern civilization relies on fossil fuels since it is one of the most common energy sources. The continued use of fossil fuels has the potential to destroy our planet by producing carbon dioxide, the principal driver of global warming. The Climate Change Conference, COP26, held in Glasgow, UK, in 2021, reached an agreement through the representatives of the 197 countries, where they concurred to move towards reducing dependency on coal and fossil-fuel sources.

Sustainability means "development that suffices the present without compromising the ability of future generations to meet their own needs", and solar energy is a renewable and sustainable energy source that can aid in the fight against global warming, which is now the world's most critical environmental concern and personifies this definition of sustainability, considering that the sun's energy can be used indefinitely without diminishing its future availability. The sun's energy is converted into electrical energy and thus makes use of the greatest, most sustainable resource on the planet - sunlight.

The most appealing aspect of solar energy is that it is freely available in vast quantities and emits no greenhouse emissions. It is encouraging to know that genuine attempts have been made all over the world in recent years to increase solar energy usage in place of fossil fuels.

To name a few -

- Cochin International Airport Limited (CIAL), the world's first airport to run fully on solar energy, has produced 25 crore units of electricity, helping eliminate 1.6 lakh tonnes of carbon footprint. CIAL has become the second largest power producer in the State after Kerala State

Electricity Board Limited (KSEB). The plants established by CIAL has been able to produce around two lakh units of power daily against the 1.6 lakh units of utilisation by the airport facilities. The unit has been able to feed around four crore units of power to the State power grid. This is a model worth emulating globally.

- Canal Solar Power Project, Gujarat, India, ingeniously kills two birds with one stone. Beginning as a pilot project, these strategically placed solar panels placed over canals not only provide much needed electricity but also keeps millions of gallons of water from evaporating annually. With water shortages and erratic access to reliable energy being two major problems for India, this inventive project seems like a doubly fantastic idea.
- The Solar Star photovoltaic power station near Rosemund, California, isn't just the largest capacity solar park in the United States (and also the western hemisphere), it's also the largest solar installation in the country. It's spread over 13 square kilometers (or 5 square miles) and produces 579MW. The second largest U.S. solar farm, the Topaz Solar Farm, produces 550MW.
- Longyangxia Dam Solar Park, China, located in China's Qinghai province, this is one of the largest solar parks in the world, stretching to about 27 square kilometers (or about 10 square miles). This park outputs a whopping 850MW of power, though planned solar farms in India will surpass that number as well as China's own Tengger Desert Solar Park. This solar park shows that it can capture enough clean energy from the sun to power nearly 200,000 homes.

As a renewable source of power, solar energy has an important role in reducing greenhouse gas emissions and

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mitigating climate change, which is critical to protecting humans, wildlife, and ecosystems. Solar energy can also improve air quality, reduce water use from energy production, and provide ecosystem services for host communities through carbon sequestration, pollination, and ground and storm water management. As solar technology progresses, solar power will become increasingly accessible to the general population.

The Indian government has implemented various initiatives and policies to incentivize the adoption of solar energy. The Jawaharlal Nehru National Solar Mission (JNNSM) aims to promote the development of solar energy infrastructure, making it easier for manufacturing companies to invest in solar solutions. Additionally, the government offers financial incentives, subsidies, and tax benefits to encourage the transition to solar energy. During the Interim Budget announcement, Finance Minister Nirmala Sitharaman announced a 102% increase in allocation for green hydrogen and a doubling of the allocation for solar power, setting a clear course for achieving its ambitious green energy goals.

Solar energy seemed to have taken centre stage in the Interim Budget announcements with an allocation of Rs.10,000 crore, representing an uptick from Rs. 4,970 crore in the last fiscal year. The finance minister also said during her budget speech that under rooftop solarisation and 'muft bijli' scheme, one crore households will be enabled to obtain free electricity up to 300 units every month.

Prime Minister Narendra Modi's ambitious vision of rooftop solarisation will provide 300 units of free electricity to 1 crore households every month resulting in savings of Rs.15,000-20,000 per month. This significant announcement promises a bright future not only for the renewable energy industry but also for numerous enthusiasts and entrepreneurs urging new employment opportunities. **SB**

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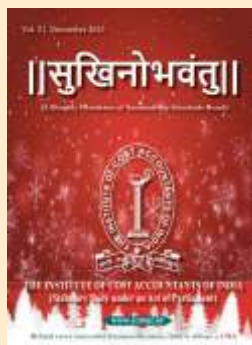
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# SUSTAINABILITY LESSONS FROM ANCIENT SCRIPTURES

**A**ncient rulers from dynasties such as the Chola, Solanki, and Asaf Jahi implemented various innovative and sustainable techniques for managing resources. Here are some examples:

## 1. Chola Dynasty:

The Chola rulers, particularly during the reign of Rajaraja Chola and his successors, were known for their efficient management of water resources.



They constructed numerous irrigation tanks, reservoirs, and canals to ensure proper water supply for agriculture. The Grand Anicut (Kallanai), built across the Kaveri River, is a remarkable feat of engineering from this period, which still serves irrigation purposes today.

## 2. Solanki Dynasty:

The Solanki rulers, who were also known as the Chalukyas of Gujarat, were adept at harnessing natural resources for the benefit of their kingdom. They built stepwells, known as vavs, which served as both water sources and community gathering places. These stepwells were not only functional but also architectural marvels, showcasing intricate designs and carvings.



## 3. Asaf Jahi Dynasty:

The Asaf Jahi rulers, commonly referred to as the Nizams of Hyderabad, implemented various sustainable practices in resource management. They were known for their patronage of agriculture and encouraged the



development of irrigation systems like tanks (cheruvus) and wells to support farming in the arid Deccan Plateau. Additionally, they established institutions like Osmania University, which focused on agricultural research and education.

## 4. Maurya Dynasty:

The Maurya Empire, under the leadership of Emperor Ashoka, implemented several sustainable practices.

Ashoka's reign saw the construction of extensive road networks to facilitate trade and communication while also ensuring the efficient movement of resources. Additionally, he promoted forest conservation through edicts that prohibited the indiscriminate cutting of trees and encouraged afforestation efforts.



## 5. Gupta Dynasty:

The Gupta rulers were known for their support of agriculture and trade, which contributed to economic prosperity during their reign.

They implemented measures to improve agricultural productivity, such as building irrigation systems and providing incentives for farmers. The Gupta Empire also facilitated trade through the establishment of trade routes and markets, fostering sustainable economic growth.



These dynasties serve as examples of how ancient rulers utilized innovative and sustainable techniques to manage available resources, leaving a lasting impact on their societies and environments. **SB**

Source:- Various materials from internet

## DO YOU KNOW?

Copenhagen crowned most sustainable destination!

Copenhagen, the capital of Denmark, earned the title of the most sustainable destination in 2024.

Renowned for its green spaces and dedication to making city centers pedestrian-friendly, Copenhagen is among Europe's oldest and cleanest cities. The nation aims to achieve carbon neutrality by 2025. Over two-thirds of Copenhagen's hotels have an eco-certificate, and machines provide cash for returned empty cans or plastic cups. Stockholm, the capital of Sweden, secured second place as a sustainable travel destination. With ambitions to be fossil-free and climate-positive by 2040, approximately 60% of Sweden's energy comes from renewable sources. The country ranks in the top 10 of the Environmental Performance Index for its eco-friendly performance.



*We are in pursuit of constant improvement and are keen to know your views.*  
**Please write to us at [ssb.newsletters@icmai.in](mailto:ssb.newsletters@icmai.in)**



# SUSTAINABILITY QUIZ

## RAPID FIRE ROUND

1. IFRS S1 requires disclosure of material information about \_\_\_\_\_ related risks and opportunities.
2. The two dimensions of Double Materiality in Sustainability Reporting refer to Financial Materiality and \_\_\_\_\_ Materiality.
3. It is estimated that more than \_\_\_\_% of wastewater resulting from human activities is discharged into rivers or sea without any pollution removal.
4. Principle 4 of BRSR deals with the interest of \_\_\_\_\_.
5. "Sustainable Sourcing" essentially refers to the integration of social, \_\_\_\_\_ and environmental performance factors into the process of selecting suppliers

### WINNERS

SL. No	NAMES
1	Bidyut Basu
2	Hardeep Sodhi
3	Vedanth Atukuri

**CONGRATULATIONS TO ALL THE WINNERS!**

### CORRECT ANSWERS OF PREVIOUS QUIZ

1. Baku, Azerbaijan

2. FY 2026-27

3. 60%

4. Cradle

5. Five (5)

*The names of first 5 participants giving correct responses will be declared in the ensuing newsletter.*

*The responses may be sent to [ssb.newsletters@icmai.in](mailto:ssb.newsletters@icmai.in)*

## Call for Articles

*Sukhinobhavantu is inviting articles on the theme ESG/ Sustainability or related themes for publishing in March 2024 edition. The articles should be relevant and original. The article should clearly cover/depict the scope, opportunity and potential for cost accountants. It should not exceed 1500 - 1800 words and references/ sources are to be given wherever required. It should reach us latest by March 08, 2024, by email to [ssb.newsletters@icmai.in](mailto:ssb.newsletters@icmai.in). The right for selection of articles vests with SSB. Decision of SSB will be final and binding.*

## Research and Compilation:

CMA (Dr.) Aditi Dasgupta, Joint Director, ICMAI  
Dr. Ranjith Krishnan, SSB Member

## Curated and Edited by

Dr. Ranjith Krishnan, SSB Member

## Secretary to SSB:

CMA Yogender Pal Singh, Joint Director, ICMAI

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