EGIF GLOBAL

ANNUAL REPORT

2024/2025

Emeraldgears Initiative Foundation

Brand Name

EGIF/GLOBAL

Empowering society: Science, Sustainability, Scalability

Emeraldgears Initiative Foundation (EGIF) Global, operating under Section-8 of the Companies Act, 2013, signifies the fusion of enduring qualities represented by emeralds and the dynamic nature of gears. Our mission is to lead transformative research that pushes the boundaries of sustainability, encompassing advancements in life sciences and stocks. Through interdisciplinary collaborations and the integration of cutting-edge technologies, including machine learning and artificial intelligence (AI), we strive to provide pioneering solutions to global challenges.

EGIF Global envisions a future where it makes a significant global impact, education acts as a catalyst for change, inclusive innovation benefits all, and measurable progress towards Sustainable Development Goals (SDGs) is realized. We foresee resilient ecosystems, ethical leadership in sustainability, and continuous adaptation to the evolving world. Our dynamic vision includes tangible outcomes, education, inclusivity, ethical leadership, and perpetual adaptation, shaping a sustainable future for generations to come

EGIF Global, our mission is to pioneer transformative research that redefines sustainability boundaries, extending our focus to advancements in life sciences and stocks. Through interdisciplinary collaboration and the integration of emerging technologies, including machine learning and artificial intelligence, we are committed to contributing to SDGs and the global net-zero pledge, turning the dream of sustainability into actionable initiatives.

We believe that true progress stems from the ability to embrace change and pursue continuous growth. By pioneering innovative, sustainable solutions, we aim to make a meaningful impact on both people and the planet. At the heart of our mission is a thriving community, united by a shared commitment to environmental stewardship and collective action for a better future.

EGIF Strategic Initiative

- Eco Energy Initiatives
- Environmental Excellence Initiatives
- Life Sciences and Livestock Initiatives
- Digital Intelligence Initiatives
- Capacity Strengthening initiatives

Regulatory and Financial

EGIF GLOBAL, a registered entity under Section 8 of the Companies Act, 2013, operates with the crucial support of self-promoters. The organization actively seeks backing from various support, including governments, industry trusts, and both domestic and international foundations. Grants and donations directed towards EGIF GLOBAL hold the significant benefit of eligibility for exemptions under Section 80G of the Income Tax Act, 1961.Highlighted below are the key regulatory and statutory aspects that define EGIF GLOBAL's legal framework:

1. Incorporation under Section 8 of the Companies Act, 2013:

EGIF GLOBAL has been established as a Section 8 company, indicating its commitment to fulfilled objectives and social welfare activities as outlined in the Companies Act, 2013.

2. Registration under Section 12A of the Income Tax Act, 1961:

The organization is also registered under Section 12A of the Income Tax Act, 1961.

3. Approval under Section 80G of the Income Tax Act, 1961:

EGIF GLOBAL has obtained approval under Section 80G of the Income Tax Act, 1961. This approval underscores the organization's commitment to activities that benefit the public and provides donors with the opportunity to avail themselves of tax benefits on their contributions.

4. Registration with NITI Aayog Darpan:

EGIF GLOBAL is officially registered with NITI Aayog Darpan, reflecting its acknowledgment and recognition by the government's premier policy-making institution.

5. Registration with MSME (Micro, Small, and Medium Enterprises):

The organization is registered with the Ministry of Micro, Small, and Medium Enterprises (MSME), signifying its classification within this crucial sector of the economy.

6. Registration with E ANUDHAN, Government of India, Ministry of Social Justice & Empowerment under the Department of Social Justice & Empowerment.

EGIF GLOBAL's compliance with these regulatory and statutory aspects affirms its commitment to transparent and responsible operations, positioning it as a recognized and reputable entity within the charitable and social welfare landscape.

Message from the Founder & Managing Director, EGIF Global

EGIF Global, we believe that the future belongs to those who are bold enough to reimagine it. Founded with the vision of fusing the enduring resilience of emeralds with the dynamic momentum of gears, EGIF Global stands as a symbol of innovation, progress, and purpose. As a Section-8 company under the Companies Act, 2013, we are committed to driving transformative change through research, education, and sustainability.

Our mission is rooted in the belief that meaningful impact arises from the intersection of interdisciplinary collaboration and technological innovation. By harnessing the power of machine learning, artificial intelligence, and scientific inquiry, we are expanding the frontiers of sustainability—redefining possibilities in life sciences, environmental resilience, and inclusive development.

The year 2024–25 marked a period of purposeful growth and societal impact for EGIF Global, driven by its mission to generate knowledge, strengthen capacities, and promote sustainability through a purely nonprofit lens. Our initiatives across life sciences, clean energy, digital intelligence, and environmental stewardship were guided by a deep commitment to community welfare, scientific advancement, and equitable access to sustainable solutions.

Under the Life Sciences and Livestock Initiatives, EGIF Global achieved a landmark milestone with the publication of a biotechnology patent entitled *Sustainable Livestock Nutrition: The Role of Seaweed and Turmeric in Cattle Supplements*. This innovation represents a meaningful contribution to sustainable agriculture by integrating natural resources into livestock nutrition systems for improved animal health and environmental balance. Complementing this scientific progress, a series of Strategic Veterinary Training Programs on Disease Prevention and Control were organized across various cities—Lucknow, Varanasi, and Ghazipur—to empower veterinary practitioners, rural farmers, and livestock owners. These programs emphasized knowledge dissemination and capacity building to enhance disease management and ensure animal welfare. Additionally, public awareness campaigns such as *HPV Vaccine: Your Shield Against Cancer*, *Fight Dengue, Save Lives*, and *Every Drop Counts: Newborn Screening for a Healthy Future* furthered our efforts in preventive healthcare and community education.

Within the Eco Energy Initiatives, EGIF Global hosted international webinars and published thought articles addressing areas critical to India's sustainable energy transition, including *Empowering India's Clean Energy Transition through Critical Mineral Strategies* and *Circular Carbon Economy (CCE) Frameworks*. Our Managing Director's book publication contributed to the discourse on renewable energy development and equitable access to clean resources. Through these initiatives, EGIF reaffirmed its role as a knowledge platform facilitating collaboration between researchers, policymakers, and civil society.

Our Digital Intelligence Initiatives expanded the organization's engagement in global conferences, emphasizing the ethical use of artificial intelligence and digital technologies to accelerate sustainability

transitions. The Environmental Excellence Initiatives brought forth enriching dialogues through invited lectures and thematic discussions such as *Decoding Blue, Green, and Gold Carbon Credits: India's Perspective & Global Trading Models* and *Navigating Climate Finance: Mitigation and Adaptation*. These engagements amplified awareness on climate finance, carbon markets, and adaptive ecosystem strategies.

In the realm of Capacity Strengthening, EGIF Global partnered with the Anuradha Welfare Society to organize the *Empowering Young Minds* workshop for underprivileged girls in Bhopal, Madhya Pradesh. This initiative focused on environmental literacy, gender inclusion, and sustainability leadership—reflecting our firm belief in education as the foundation of equitable development.

Throughout the year, our expanding membership and partnerships reinforced the organization's collaborative ethos, fostering networks that bridge academia, public institutions, and grassroots organizations. As a nonprofit devoted to public good, EGIF Global remains steadfast in its vision—leveraging science, compassion, and community participation to cultivate a sustainable and inclusive future for all.

Dr. Vivek Kumar Singh

Managing director

Objectives & Activities executed in 2024-25

Contents

I. Life Sciences and Livestock Initiatives

I. Patent Achievement: Advancing Sustainable Livestock Nutrition

In the financial year 2024–25, our organization reached a significant milestone in the field of biotechnology and animal health. On 28 March 2025, our research work titled: “Sustainable Livestock Nutrition: The Role of Seaweed and Turmeric in Cattle Supplements" was officially published as a patent by the Indian Patent Office. This innovative formulation leverages the nutritional and therapeutic benefits of natural ingredients such as seaweed and turmeric to enhance cattle health and productivity in a sustainable manner.

This achievement not only represents a major scientific advancement but also reflects our commitment to promoting eco-conscious livestock management practices. The patent strengthens our position in the life sciences domain and adds critical value to our portfolio of solutions for sustainable agriculture.

We are especially grateful to our valued partner, Aadink Pharma Pvt. Ltd., for their collaboration and support in sponsoring the government fees and associated costs for the patent application process. Their strategic partnership has been instrumental in translating this research into a nationally recognized innovation. This patent stands as one of the most notable accomplishments of the year, reinforcing our mission to combine scientific excellence with real-world impact in the livestock and veterinary sectors. *The present invention relates to enhancing agricultural productivity, lowering environmental impact, and improving animal health all depend on sustainable livestock nutrition. The potential of seaweed and turmeric as natural supplements in cattle diets is investigated in this study. Rich in bioactive compounds, seaweed has several advantages, including better immune system performance, better digestion, and a decrease in methane, which is a key component in reducing greenhouse gas emissions.*

Turmeric promotes general cattle health and disease resistance because of its anti-inflammatory and antioxidant qualities. By including these natural additives in livestock feed, we can lessen our dependency on artificial supplements, improve animal welfare, and encourage ecologically friendly farming methods. Seaweed has been shown to reduce methane emissions by as much as 80%, and turmeric improves gut health and nutrient absorption. The necessity of more research into dosage optimization, long-term effects, and economic viability is emphasized in this paper. Turmeric and seaweed are viable, sustainable substitutes for traditional cattle feed that will help make the livestock sector more resilient and environmentally friendly.

Office of the Controller General of Patents, Designs & Trade Marks
Department for Promotion of Industry and Internal Trade
Ministry of Commerce & Industry,
Government of India

(http://ipindia.nic.in/index.htm)

INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS | GEOGRAPHICAL INDICATIONS
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Application Details	
APPLICATION NUMBER	202511022598
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	13/03/2025
APPLICANT NAME	**1 . Dr. Vivek Kumar Singh** **2 . Umesh Kumar Pandey** **3 . Dr. Jeetendra Kumar** **4 . Anand Kumar**
TITLE OF INVENTION	SUSTAINABLE LIVESTOCK NUTRITION: THE ROLE OF SEAWEED AND TURMERIC IN CATTLE SUPPLEMENTS
FIELD OF INVENTION	BIOTECHNOLOGY
E-MAIL (As Per Record)	patent.vaagaiip@gmail.com
ADDITIONAL-EMAIL (As Per Record)	
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	21/03/2025

II. Empowering Farmers with Vital Animal Health Knowledge at Ghazipur

EGIF Global took a significant step toward strengthening rural health and sustainability by launching an impactful awareness program aimed at enhancing animal health management among farmers. This initiative is part of the broader EGIF Strategic Life Sciences & Livestock Initiatives, which focuses on empowering rural communities with knowledge and tools to improve livestock productivity and overall farm sustainability.

The program, titled "Farmer Meeting on Awareness Programme on the Causes of Infertility, Mastitis, and Zoonotic Diseases," was organized in collaboration with our esteemed Knowledge Partner, Aadink Pharma Private Limited. It seeks to educate farmers on prevalent livestock health issues that can severely affect dairy and farming outcomes if left unaddressed. The awareness sessions are tailored to build understanding around reproductive disorders, the implications of mastitis on milk quality, and the risks posed by zoonotic diseases that can be transmitted from animals to humans. The program is especially noteworthy for its on-ground implementation in rural and underserved regions, reflecting EGIF Global's commitment to inclusive development. This outreach began in the Ghazipur district of Uttar Pradesh, specifically around Kasimabad, where 30 farmers directly participated in an interactive training session. These farmers received hands-on guidance, practical demonstrations, and printed educational materials, designed to support behavioral change and knowledge retention. The ripple effect of the event is expected to indirectly benefit over 200 additional farmers in adjacent villages through peer-sharing and community awareness.

A special highlight of the event was the presence of Dr. Amit Singh, Veterinary Officer at the Government Veterinary Hospital, Kasimabad, whose active engagement and expert inputs greatly enhanced the credibility and depth of the sessions. His detailed explanations and willingness to address individual farmer queries helped build trust and rapport among attendees.

The success of this initiative was also made possible through the dedicated efforts of Mr. Abhinav Pandey and Mr. Akash Singh, committed EGIF Global team members who worked tirelessly on-ground to mobilize farmers, coordinate logistics, and ensure the smooth execution of the program. Their contributions reflect the spirit of service and resilience that underpins EGIF Global's mission.

In a symbolic yet thoughtful gesture that exemplifies EGIF's philosophy of "Small Acts, Big Impact," umbrellas were distributed to the participating farmers during the ongoing monsoon season. This simple act not only offered practical support but also served as a token of appreciation, reinforcing the bond between the organization and the rural communities it serves.

This initiative is just one step in a series of programs EGIF Global plans to scale across rural India to ensure that farmers are not left behind in the journey toward healthier livestock, better livelihoods, and sustainable agricultural futures.


GPS Map Camera
Sukaha, Uttar Pradesh, India
QMH9+PJ9, Ghazipur Kasimabad Road, Sukaha, Uttar Pradesh 233230, India
Lat 25.779044°
Long 83.668866°


EGIF STRATEGIC LIFE SCIENCES
CAUSE OF INFERTILITY, MASTITIS
& ZOONOTIC DISEASE
1:13 pm


EGIF STRATEGIC LIFE SCIENCES
KNOWLEDGE PARTNERS
AADINK PHARMA PRIVATE
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Google

III. Strategic Veterinary Training for Disease Prevention and Control – EGIF Global Hosts a Capacity-Building Session in Lucknow

25 October 2024

In line with its commitment to advancing animal health and rural sustainability, EGIF Global, in collaboration with Aadink Pharma Pvt. Ltd., successfully organized a high-impact Strategic Veterinary Training Program on Disease Prevention and Control in Prayagraj, Uttar Pradesh. This initiative formed an integral part of the EGIF Strategic Life Sciences & Livestock Initiatives, aimed at bridging the knowledge gap in veterinary care at the grassroots level.

The training session served as a vital platform for capacity-building, focusing on empowering veterinary officers, field workers, and key stakeholders with advanced insights into disease prevention strategies, early diagnosis, and effective management of common and emerging animal health issues such as infertility, mastitis, and zoonotic infections.

A notable highlight of the event was the presence of Chief Guest Dr. Vineet Kumar Singh, a respected academic from Banaras Hindu University (BHU). His insightful address emphasized the need for integrating academic research with field-level veterinary practices and encouraged collaborative knowledge exchange between universities and rural health systems. His presence inspired participants and reinforced the scientific credibility of the program.

Further, the training emphasized the importance of proactive veterinary interventions and the implementation of robust biosecurity protocols to safeguard livestock against infectious outbreaks. Participants engaged in live demonstrations, shared their experiences, and received printed resources for future reference.

The Lucknow event is part of EGIF Global's broader agenda to promote sustainable livestock development, foster community-based veterinary

leadership, and scale its impact across multiple districts in India. With the collective effort of its team and partners, EGIF continues to lead the charge in transforming veterinary science into a tool for rural empowerment and disease-free livestock ecosystems.

IV. Strategic Veterinary Training Program on Disease Prevention and Control Varanasi, Uttar Pradesh, India

20 April 2024

EGIF Global, in collaboration with Aadink Pharma Pvt. Ltd., successfully organized a Strategic Veterinary Training Program on Disease Prevention and Control in Varanasi, Uttar Pradesh. This initiative aimed to empower veterinary professionals, livestock owners, and community stakeholders with vital knowledge and skills to identify, prevent, and manage prevalent livestock diseases in rural and peri-urban settings. Veterinary diseases such as Foot and Mouth Disease (FMD), Haemorrhagic Septicaemia (HS), Bovine Mastitis, Brucellosis, and Black Quarter (BQ) remain major threats to livestock productivity and farmer incomes in India. These diseases not only result in significant animal suffering and economic losses but also pose public health risks in some cases.

The training emphasized early disease detection, preventive vaccination strategies, biosecurity measures, and proper livestock nutrition. Experts highlighted the importance of regular deworming, vaccination schedules, and hygienic practices in cattle sheds. Special focus was given to zoonotic diseases like Brucellosis, which can transmit from animals to humans if not properly managed. Participants included veterinary officers, para-vets, dairy farmers, and rural youth. The session combined expert lectures, interactive Q&A, and practical demonstrations, offering a comprehensive and accessible learning experience.

EGIF Global and Aadink Pharma reaffirmed their commitment to strengthening rural veterinary services through knowledge sharing, innovation, and sustainable partnerships. This training marks a crucial step toward a healthier livestock population and a resilient rural economy.

V. HPV Vaccine: Your Shield Against Cancer

https://egifglobal.org/blog_details.php?id=4

Dr. Ritesh Kumar Gupta, 11 Jun 2024

HPV: Don't be scared, be prepared! Here's the quick guide to this common virus.

What is HPV?
• It's a super common virus spread through skin-to-skin contact in the genital area.

What is HPV?
• Some HPV types can lead to cancers like cervical cancer.

The good news?
• There's a vaccine to prevent it!

The HPV vaccine, **recommended by the World Health Organization** (**WHO**), **is for everyone ages 9-26** (**and even older in some cases**).
Think of it as a superhero shield! It helps your body fight off HPV before it causes problems.

India is working towards including the HPV vaccine in the national immunization program!
This will make it more accessible and affordable, protecting more people.

Ready to get vaccinated? **Here's what to do**:
1. **Schedule a doctor's appointment**: Talk to your doctor about HPV and the vaccine. They'll answer your questions and see if it's right for you.
2. **The vaccination process**: Getting the vaccine is quick and easy. It's usually given as a series of shots.

Amazing NGOs are spreading the word!
NGOs (**Non-profit Organizations**) help raise awareness about HPV and the vaccine.
They fight misinformation and encourage vaccination, making communities healthier.

Because of them, **more people understand the importance of HPV prevention**!

Here's the bottom line:
• HPV is common, but the vaccine can prevent serious health issues.
• Talk to your doctor about getting the HPV vaccine!
• Spread the word! Help others understand the importance of HPV prevention.

#HPV #Vaccine #CancerPrevention #HealthForAll #GetVaccinatedIndia

VI. Fight Dengue, Save Lives: Protecting Our Communities on National Dengue Day!

https://egifglobal.org/blog_details.php?id=5

Dr. Maneesha Mall, 17 May 2024

Yesterday, it was on National Dengue Day (May 16th), on this occasion we come together to raise awareness about this serious mosquito-borne viral infection. Dengue fever is a significant public health concern in India, with millions susceptible, particularly in tropical and subtropical regions.

The Dengue Landscape in India

Dengue cases can be debilitating, causing high fever, severe headaches, muscle and joint pain, and even lead to life-threatening complications. While there's no specific cure, early detection and proper treatment are crucial.

Government Initiatives

The Indian government, recognizing the criticality of this issue, observes National Dengue Day. This year's theme, "Dengue Prevention: Our Responsibility for a Safer Tomorrow," emphasizes a collective effort.

Government initiatives include:

a. public awareness campaigns: Educating communities about symptoms, prevention methods, and the importance of seeking medical care.

b. Strengthening healthcare systems: Ensuring proper diagnosis, treatment facilities, and adequate medical supplies are readily available.
c. Improved surveillance and reporting: Implementing robust systems to track outbreaks and take timely action.

The Role of NGOs
NGOs play a vital role in bridging the gap and reaching out to vulnerable communities. They can:
1. Organize educational workshops: Disseminating information about dengue prevention and control measures.
2. Conduct community mobilization drives: Encouraging active participation in source reduction activities.
3. Support research and innovation: Contributing to the development of new diagnostic tools and potential vaccines.

Awareness and Advocacy: Our Shared Responsibility
We all have a part to play in preventing dengue. Here's what you can do:
(i) Stay informed: Learn about dengue symptoms and how to protect yourself and your family.
(ii) Eliminate mosquito breeding grounds: Regularly check and clear stagnant water sources around your home.
(iii) Use mosquito repellents: Apply repellents containing DEET or other approved ingredients when outdoors.
(iv) Wear protective clothing: Wear long-sleeved shirts and pants, especially during peak mosquito hours (dawn and dusk).
(v) Advocate for community action: Encourage neighbors and local authorities to prioritize mosquito control measures.

By working together – the government, NGOs, and all individuals – we can significantly reduce the burden of dengue in India. Let's make "Dengue Prevention: Our Responsibility for a Safer Tomorrow" a reality.

#NationalDengueDay #DengueAwareness #StopDengue

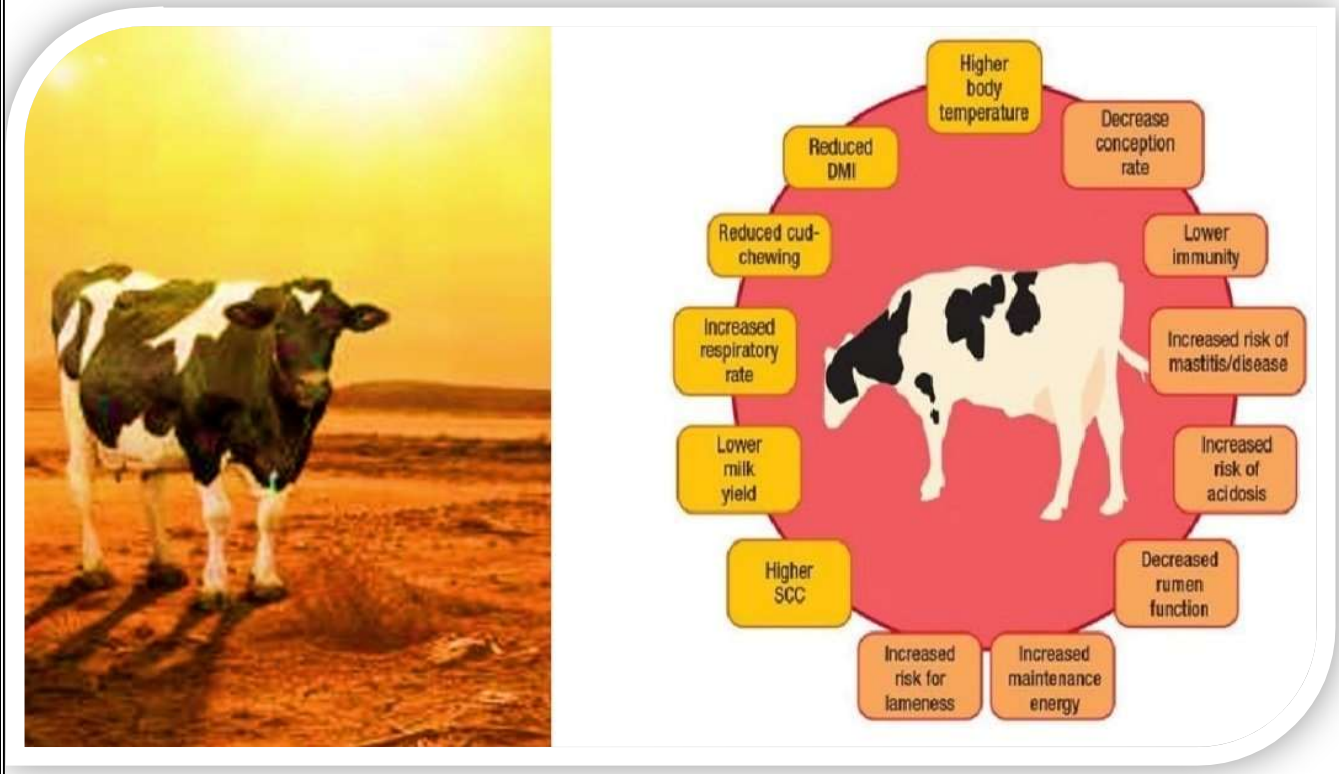
VII. Understanding Summer Milk Production Challenges in Dairy Animals

https://egifglobal.org/blog_details.php?id=6

Umesh Kumar Pandey & Dr. Vivek Kr Singh, 17 May 2024

Summer poses unique challenges for dairy farmers, impacting the milk production of their animals due to various factors. One of the primary hurdles faced during this season is the scarcity of green fodder. As the temperatures rise and crops are harvested, the availability of lush grazing material dwindles. This shortage directly affects the nutritional intake of dairy animals, leading to insufficient nourishment and consequently, a decline in milk production.

In addition to the scarcity of green fodder, dairy animals experience significant physiological changes during the summer months. Hormonal fluctuations and variations in pH levels within their bodies can trigger stress responses. This stress often manifests through increased saliva production and the expulsion of alkaline substances, disrupting the animals' digestive processes and diminishing their appetite. Consequently, these physiological disruptions contribute to reduced milk output.



To address these challenges, veterinary experts emphasize the importance of implementing comprehensive care strategies for dairy animals during the summer. Providing shaded areas where animals can seek refuge from the scorching heat is essential to prevent heat stress. Regularly bathing the animals with cool water before sunrise and after sunset aids in temperature regulation and alleviates heat-induced discomfort. To help prevent heat stroke, it's important to drink plenty of water mixed with jaggery, a rich source of glucose. Ensure the water is clean, fresh, and changed daily to prevent bacterial growth. With the new crop harvested this season, the chaff is highly enriched with phosphorus but has low protein content, which can lead to indigestion. Therefore, it's recommended to administer antidiarrheal drugs and digestive tonics.

Furthermore, supplementing the animals' diets with specialized nutritional products designed for dairy animals, such as MINROL 21 and PV-MIL-21, can help maintain their health and support consistent milk production during the summer months. These supplements are formulated to provide essential nutrients that may be lacking in the animals' diet due to the scarcity of green fodder.

Farmers are also encouraged to cultivate diverse types of green fodder in their fields to ensure a continuous and quality food supply for their animals. Growing a variety of forage plants can help mitigate the impact of seasonal fluctuations and provide a balanced diet rich in essential nutrients. This proactive approach not only supports the health and well-being of dairy animals but also contributes to sustaining milk production levels despite the challenges posed by summer.

In conclusion, understanding the specific challenges that dairy animals face during the summer is crucial for devising effective solutions to optimize milk production and ensure animal welfare. By addressing issues such as the scarcity of green fodder, hormonal fluctuations, and heat stress through strategic care practices and nutritional interventions, farmers can mitigate the negative impact of summer on milk production and maintain the overall health and productivity of their dairy herds. This holistic approach underscores the importance of proactive management and informed decision-making in the dairy farming industry, especially during challenging seasonal conditions.

VIII. Every Drop Counts: Newborn Screening for a Healthy Future

https://egifglobal.org/blog_details.php?id=3

Dr. Ritesh Gupta, 16 May 2024

Did you know a few simple tests soon after birth can significantly improve a child's life? Newborn screening (NBS) is a crucial public health initiative that identifies babies at risk for serious but treatable genetic and metabolic disorders. Early detection allows for prompt intervention, preventing lifelong complications and disabilities.

Current Status of Newborn Screening in India:

The good news: India has recognized the importance of NBS. The Indian Academy of Pediatrics (IAP) recommends screening for several disorders, including Congenital Hypothyroidism (CH) and Phenylketonuria (PKU).

However, challenges remain:

1. Limited access: NBS facilities are not uniformly available across all regions, particularly in rural areas.
2. Awareness: Many parents and healthcare providers lack complete knowledge about NBS and its benefits.

Social Responsibility and the Role of NGOs:

Here's where we all come in! Ensuring healthy futures for our children is a collective responsibility. NGOs play a vital role in:

1. Advocacy: Raising awareness about the importance of NBS among communities and healthcare professionals.
2. Capacity building: Supporting healthcare institutions in establishing and strengthening NBS programs.
3. Financial assistance: Helping underprivileged families access NBS services.

What You Can Do:

a. Talk to your doctor: Ask about NBS options during your pregnancy and ensure your newborn gets screened.
b. Spread awareness: Share information about NBS with your family, friends, and social networks.
c. Support NGOs: Consider donating or volunteering your time to organizations working on newborn health initiatives.

Together, let's make NBS a standard practice for a healthier and brighter future for all Indian children!

#NewbornScreening #NBS #HealthyChildren #India #PublicHealth #NGOs #HealthyStart #ChildHealth #NBSIndia #ChildHealth #SocialResponsibility

II. Eco Energy Initiatives

I. Empowering India's Clean Energy Transition through Critical Mineral Strategies

https://egifglobal.org/blog_details.php?id=7

India's ambitious goals to transition to a clean energy future and meet its climate commitments by 2070 hinge on securing a stable supply of critical minerals. These minerals are essential for manufacturing clean energy technologies such as solar panels, wind turbines, and battery energy storage systems (BESS), as well as for electric vehicles (EVs).

Rising Demand and Supply Challenges

According to the Centre for Social and Economic Progress (CSEP, 2024), the demand for critical minerals is set to increase dramatically. By fiscal year 2025, India will require approximately:

- Lithium: 58 tonnes
- Cobalt: 17 tonnes
- Nickel: 52 tonnes
- Graphite: 609 tonnes

By 2047, these requirements are projected to surge significantly:

- Lithium: 20,845 tonnes
- Cobalt: 5,914 tonnes
- Nickel: 18,599 tonnes
- Graphite: 217,884 tonnes

India's domestic supply of bulk minerals like iron ore, limestone, and bauxite is sufficient. However, the country faces a shortfall in non-bulk critical minerals such as lithium, cobalt, nickel, and graphite, which are currently imported from a small group of countries. This presents a significant challenge as India strives to meet its clean energy goals.

Strategic Imperatives

Enhancing Domestic Production and Recycling

To address domestic scarcity and reduce import dependence, India must enhance domestic production and processing of critical minerals. Developing end-of-life ecosystems for recovery and recycling is crucial. Improved recycling rates could save approximately 1,500 kilotonnes of critical metals over the next two decades. Establishing urban mining initiatives to recover minerals from electronic waste is also vital.

Institutional Capacity and Policy Frameworks

Developing robust policy-regulatory frameworks is essential to support domestic production, processing, and recycling of critical minerals. These frameworks should address investment needs, technical and operational challenges, and socio-environmental impacts.

In July 2023, the Indian government identified 30 minerals as critical by amending the Mines and Minerals (Development and Regulation) Act, 1957, through the MMDR Amendment Act, 2023. This amendment empowers the Central Government to auction blocks of these minerals. The 30 critical minerals identified are:

- Antimony, Beryllium, Bismuth, Cobalt, Copper, Gallium, Germanium, Graphite, Hafnium, Indium, Lithium, Molybdenum, Niobium, Nickel, Platinum Group Elements (PGE), Phosphorous, Potash, Rare Earth Elements (REE), Rhenium, Silicon, Strontium, Tantalum, Tellurium, Tin, Titanium, Tungsten, Vanadium, Zirconium, Selenium, and Cadmium.

Socio-Environmental Considerations

Mitigating socio-environmental impacts of mineral mining is essential to maintain the trust of local communities, avoid project delays, and manage costs effectively. Ensuring environmentally sustainable mining practices is crucial to minimize the ecological footprint of mineral extraction and processing. Building and maintaining trust with local communities involves addressing socio-environmental concerns, providing fair compensation, and ensuring transparent communication. A social license to operate is important for resource development.

Learning from Global Leaders

China dominates the midstream and downstream segments of the critical mineral value chains, establishing itself as a global leader. For India, replicating this success involves developing low-cost economies of scale in mineral processing and manufacturing, and fostering innovation. Establishing

low-cost economies of scale in mineral processing and manufacturing and promoting innovation are important for domestic clean energy technology manufacturing.

Building Strategic Partnerships

India can build strategic partnerships around critical minerals by increasing investments, enhancing diversification, addressing socio-environmental concerns, and leveraging these alliances to secure supplies. To reduce dependency on any single country, India must diversify its sources of critical minerals. This can be achieved through bilateral agreements and partnerships with resource-rich nations. Engaging in strategic alliances and joint ventures with other countries to secure a stable supply of critical minerals is crucial. These partnerships should focus on increasing investments, addressing socio-environmental concerns, and enhancing technological cooperation.

Sector-Specific Insights

Solar Photovoltaic (PV) Technologies

Extending the lifespan of solar PV projects from 20 to 25 years could reduce mineral demand by up to 30% by 2047. This can be achieved through technological innovations and improved maintenance practices.

Wind Turbines

Wind turbines require significant amounts of rare earth elements (REEs) for manufacturing permanent magnets. Developing sustainable and ethical sourcing strategies for REEs is critical to support the growth of wind energy.

Battery Energy Storage Systems (BESS)

BESS is a cornerstone of India's clean energy transition. Ensuring a steady supply of lithium, cobalt, nickel, and graphite for battery manufacturing is essential. Research and development (R&D) into alternative battery technologies that require fewer critical minerals can also help mitigate supply risks.

Policy Recommendations

National Critical Minerals Strategy

Formulating a comprehensive national strategy that outlines the roadmap for securing critical minerals is essential. This strategy should encompass exploration, production, recycling, and international collaboration.

Investment in R&D

Investing in R&D to develop advanced extraction, processing, and recycling technologies is crucial. This includes exploring alternative materials and improving the efficiency of existing technologies.

Economic Incentives

Providing economic incentives such as tax breaks, subsidies, and grants to encourage domestic production and processing of critical minerals can attract investments and spur growth in this sector.

Education and Workforce Development

Developing specialized training programs and educational initiatives to build a skilled workforce capable of supporting the critical minerals sector is vital. This includes training in advanced mining techniques, processing technologies, and environmental management.

Ensuring a stable supply of critical minerals is fundamental to India's clean energy transition and broader climate objectives. By enhancing domestic production, improving recycling rates, developing robust policy frameworks, and building strategic partnerships, India can secure the critical minerals needed to achieve its climate goals and drive sustainable economic growth.

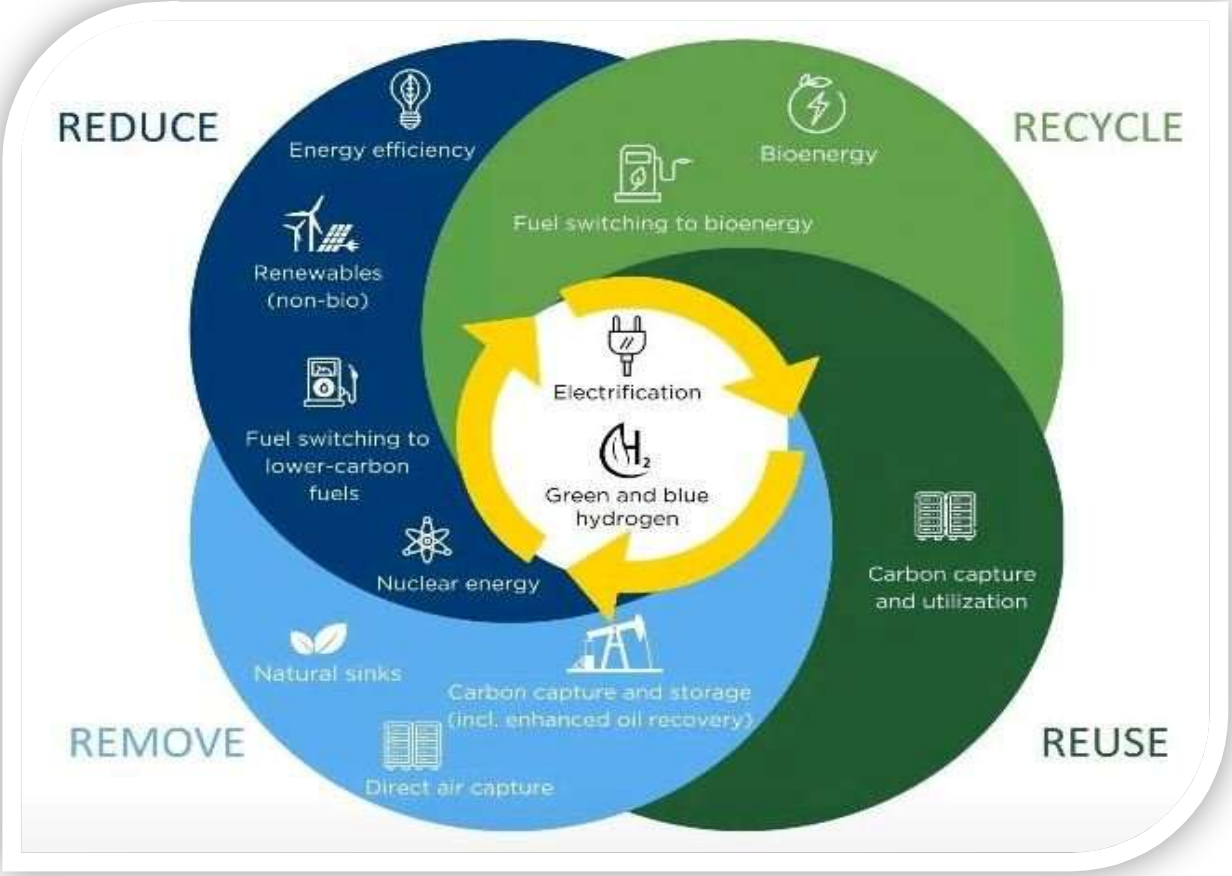
India's path to a clean energy future is fraught with challenges, but also immense opportunities. The proactive steps taken by the government to identify and prioritize critical minerals, coupled with strategic planning and international cooperation, will be key to navigating this complex landscape. By leveraging its strengths and addressing its weaknesses, India can not only meet its climate commitments but also emerge as a global leader in the clean energy revolution.

II. Circular Carbon Economy (CCE) Frameworks

https://egifglobal.org/blog_details.php?id=2

The Circular Carbon Economy (CCE) presents a comprehensive approach to tackling climate change by addressing the root cause: carbon emissions. Building upon the principles of the circular economy, which emphasize reducing, reusing, and recycling resources, the CCE specifically targets energy and emissions, adding a crucial fourth pillar: remove. This pillar underscores the importance of actively removing carbon dioxide and other greenhouse gases from the atmosphere to achieve net-zero emissions.

At its core, the CCE seeks to prevent atmospheric carbon dioxide and other GHG emissions, aiming for a balanced carbon cycle where emissions are offset by removal activities. By embracing this framework, countries can effectively plan and implement strategies to align with global climate goals in a cost-effective and equitable manner.



One of the key features of the CCE is its emphasis on economic incentives and benefits associated with carbon management. By integrating carbon pricing mechanisms, subsidies for low-carbon technologies, and incentives for carbon capture and storage, the CCE encourages businesses and industries to transition towards more sustainable practices. This not only helps mitigate climate change but also drives innovation and economic growth in green industries.

Furthermore, the CCE recognizes the importance of prioritizing the most cost-effective mitigation solutions. This involves deploying a diverse range of technologies and approaches, including renewable energy, energy efficiency measures, carbon capture and storage, afforestation, and sustainable land management. By leveraging a combination of these strategies, countries can optimize their efforts to reduce emissions while maximizing societal and economic benefits. In essence, the Circular Carbon Economy offers a flexible and pragmatic framework for nations to navigate the complex challenge of climate change. By integrating energy, emissions, and economics, the CCE provides a roadmap towards a sustainable future where carbon neutrality is achievable, and the planet thrives.

Circular Carbon Economy (CCE)! ðŸŒ It's a holistic framework focusing on energy, emissions, and economic incentives to achieve net-zero emissions. Let's align our efforts for a sustainable future!

III. Webinar International on Sustainability Starts with Yourself

We are pleased to announce the successful completion of our webinar titled "Sustainability Starts with Yourself" held on 21st September 2024. Sustainability truly begins at the individual level. By making conscious choices in our daily lives—like reducing waste, conserving energy, using sustainable products, and supporting eco-friendly practices—we contribute to a healthier planet. Small actions, when multiplied by millions of people, can lead to significant positive impacts on the environment. Personal commitment to sustainability can inspire others and create a ripple effect, fostering a culture of environmental stewardship. With over 30 participants, the event was a resounding success, running for nearly two and a half hours. Attendees explored the importance of individual actions in sustainability and innovations across energy, environment, health, education, and technology.

A heartfelt thanks to our distinguished speakers:

Our speakers:

Dr. Dinesh Kumar- Professor at Bennett University, Greater Noida, India

Sri Kesheo Prasad Dubey- Indian Forest Service Officer

Dr. Carla Henriques- Professor at the Polytechnic Institute of Coimbra, Coimbra Business School, Portugal

Dr. P Raman- Energy Efficiency and Environment, P. Ltd., New Delhi

Sri Arun Chaudhary- Scientist at the R&D Division, Ministry of New and Renewable Energy, Government of India

Sri Arnfried C. Ziebell- Architectural and Engineering Design Office Monteiro, Oliveira do Hospital, Portugal

Sri Umesh Kumar Pandey- Advisor at Aadink Pharma Pvt. Ltd. & EGIF Global, India

Dr. Vivek Kumar Singh- EGIF Global, India, CEO of Aadink Pharma Pvt. Ltd.

Moderator:

Dr. Maneesha Mall- EGIF Global, India

Thank you to everyone who participated! We look forward to more such insightful sessions in the future.

Emeraldgears Initiative Foundation (EGIF) Global

Collaboration with

EG - World Academy

JOINTLY WITH

C3PC Research Foundation

ORGANISES A WORKSHOP ON

SUSTAINABILITY starts with yourself!

SPEAKERS


Dr. Carla Henriques


Sri Kesheo Prasad Dubey


Dr. P Raman


Arun Kumar Choudhary


Dr. Dinesh Kumar


Umesh Kumar Pandey


Arnfried C. ZiebelL


Dr. Vivek Kumar Singh

Moderator


Dr. Maneesha Mall

SCAN TO REGISTER

Time

3.00 PM IST, AND 10.30 AM UTC ON SATURDAY, 21 SEPTEMBER 2024

https://egifglobal.org/
https://www.c3pc.org/

Tech partner – AAYAAM AI


meet.google.com/noh-uzbs-qke
Raman P (Presenting)
Future of energy transition - Green hydrogen: From biomass
"Sustainability Starts with Yourself"
Webinar- organized by "Egif global"
21st September 2024
P Raman, Ph.D.
Director,
Energy Efficiency and Environment Pvt Ltd.
New Delhi – 110077.
INDIA
e-mail: praman@cleanenergyee.com
Website: https://cleanenergyee.com/
Google scholar: https://scholar.google.co.in/citations?user=BmzfuFgAAAAJ&hl=en
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Maneesha Mall
Kesheo Prasad...
Carla Margarid...
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R. K Gupta
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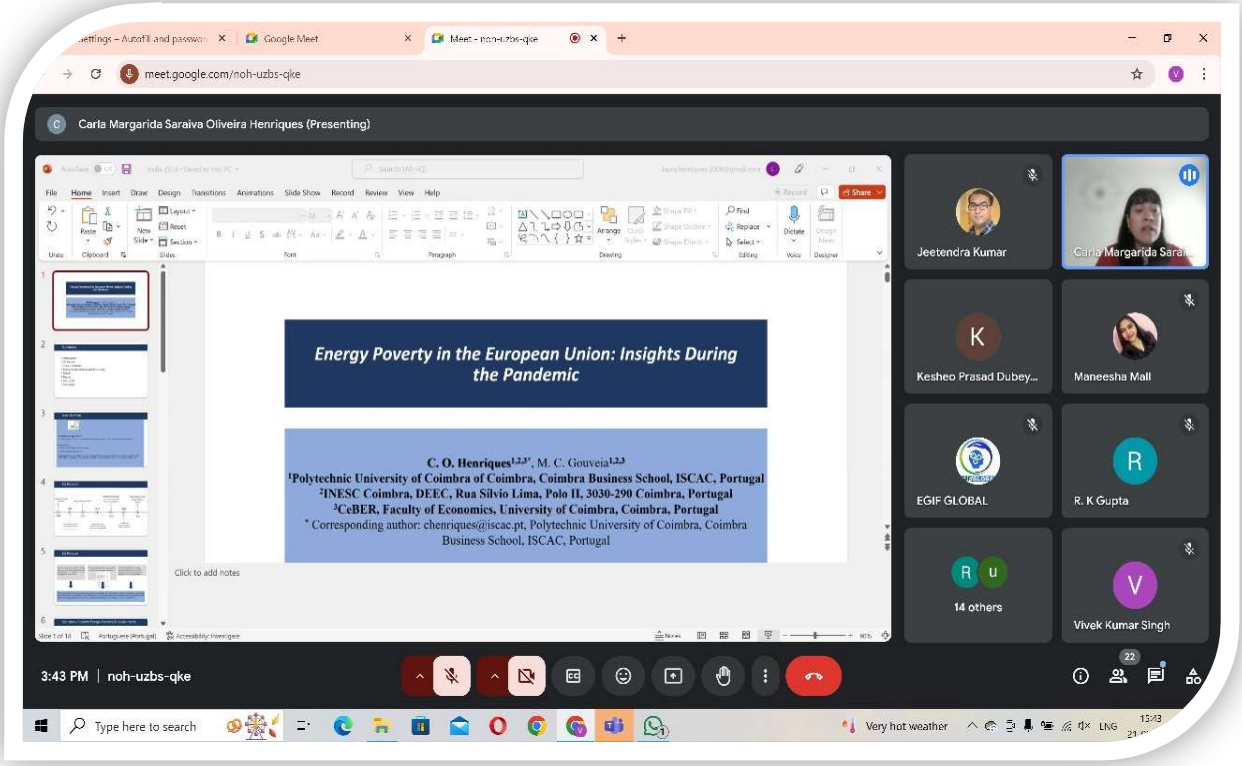
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Carla Margarida Saraiva Oliveira Henriques (Presenting)
Energy Poverty in the European Union: Insights During the Pandemic
C. O. Henriques[1,2,3*], M. C. Gouveia[1,2,3]
[1]Polytechnic University of Coimbra of Coimbra, Coimbra Business School, ISCAC, Portugal
[2]INESC Coimbra, DEEC, Rua Silvio Lima, Polo II, 3030-290 Coimbra, Portugal
[3]CeBER, Faculty of Economics, University of Coimbra, Coimbra, Portugal
* Corresponding author: chenriques@iscac.pt, Polytechnic University of Coimbra, Coimbra Business School, ISCAC, Portugal
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Kesheo Prasad Dubey...
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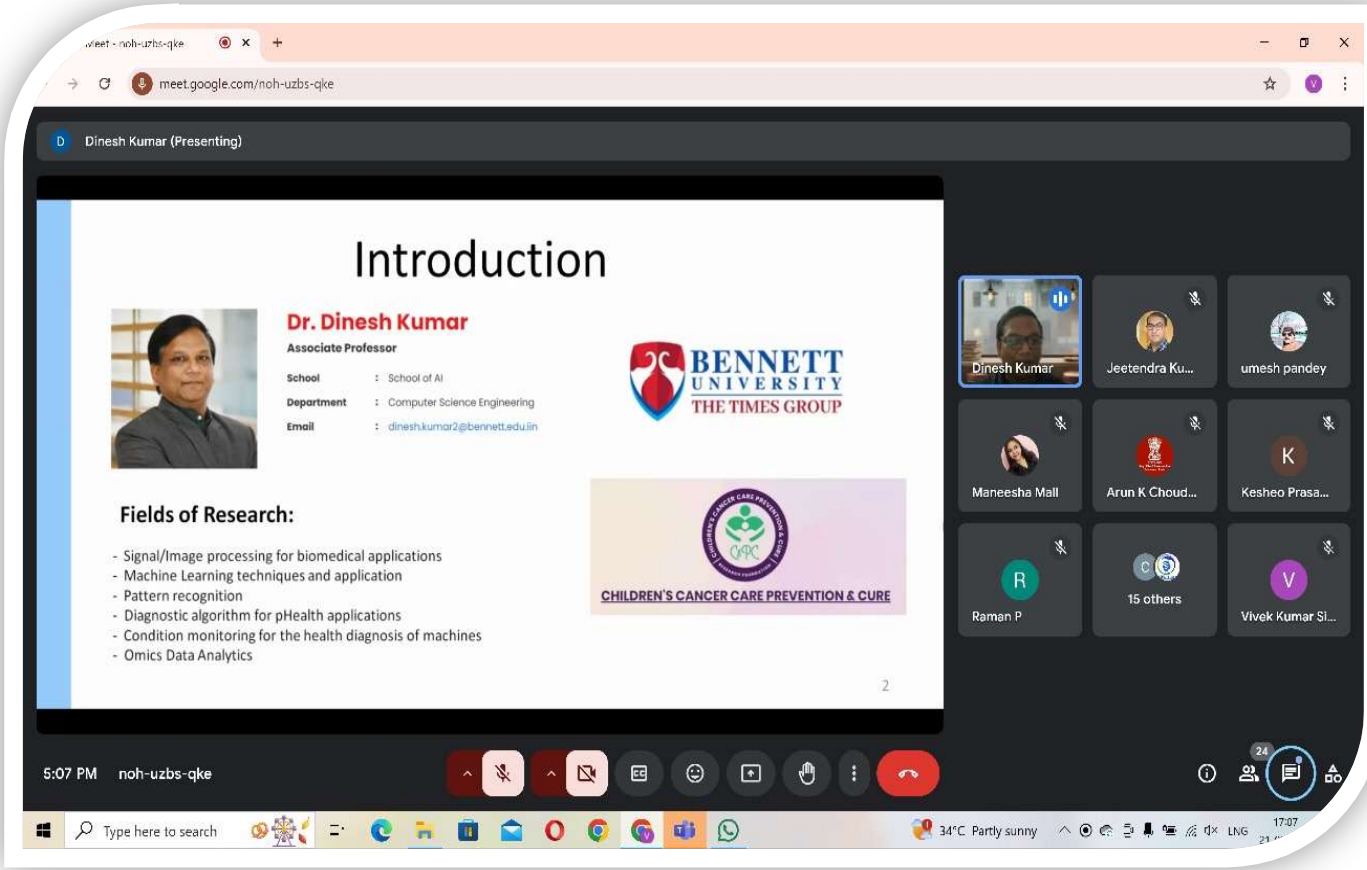
Very hot weather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Dinesh Kumar (Presenting)
Introduction
Dr. Dinesh Kumar
Associate Professor
School : School of AI
Department : Computer Science Engineering
Email : dinesh.kumar2@bennett.edu.in
BENNETT UNIVERSITY
THE TIMES GROUP
Fields of Research:
- Signal/Image processing for biomedical applications
- Machine Learning techniques and application
- Pattern recognition
- Diagnostic algorithm for pHealth applications
- Condition monitoring for the health diagnosis of machines
- Omics Data Analytics
CHILDREN'S CANCER CARE PREVENTION & CURE
2
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umesh pandey
Maneesha Mall
Arun K Choud...
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Raman P
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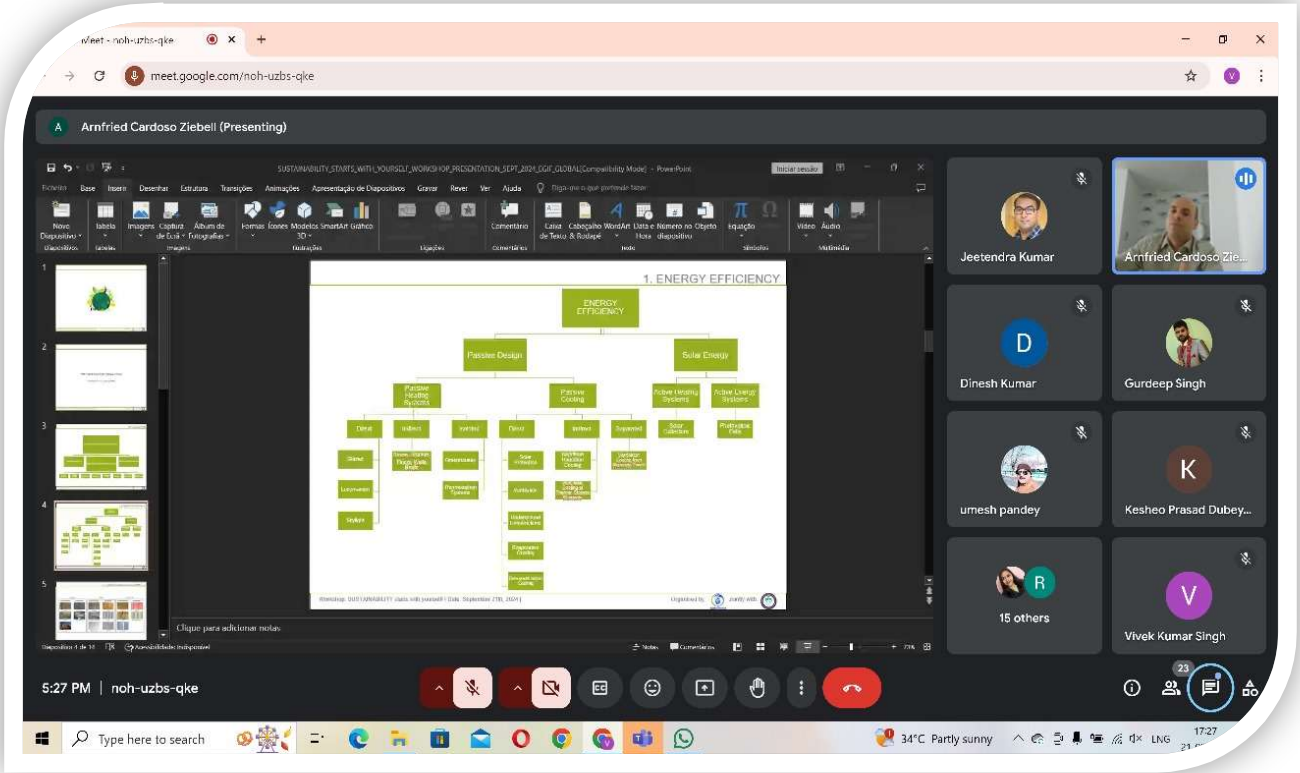
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Arnfried Cardoso Ziebell (Presenting)
1. ENERGY EFFICIENCY
ENERGY EFFICIENCY
Passive Design
Solar Energy
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Dinesh Kumar
Gurdeep Singh
umesh pandey
Kesheo Prasad Dubey...
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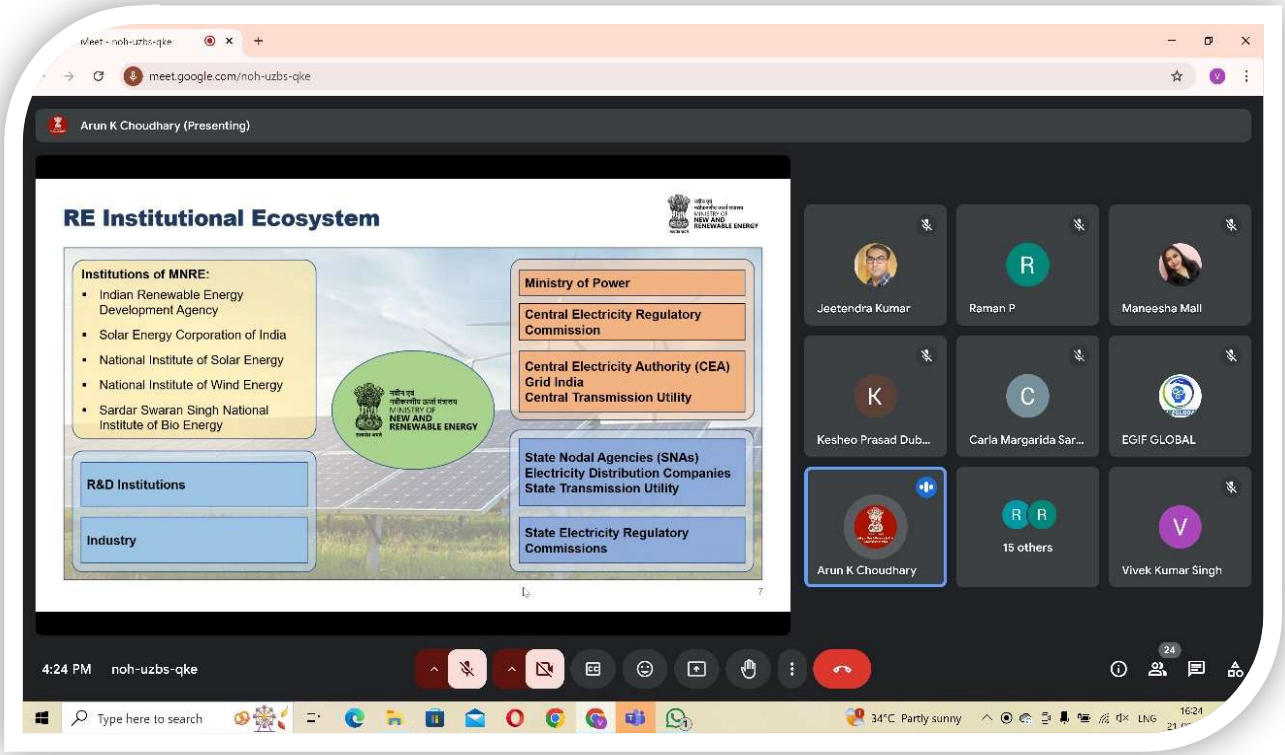
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Arun K Choudhary (Presenting)
RE Institutional Ecosystem
Institutions of MNRE:
Indian Renewable Energy Development Agency
Solar Energy Corporation of India
National Institute of Solar Energy
National Institute of Wind Energy
Sardar Swaran Singh National Institute of Bio Energy
R&D Institutions
Industry
Ministry of Power
Central Electricity Regulatory Commission
Central Electricity Authority (CEA)
Grid India
Central Transmission Utility
State Nodal Agencies (SNAs)
Electricity Distribution Companies
State Transmission Utility
State Electricity Regulatory Commissions
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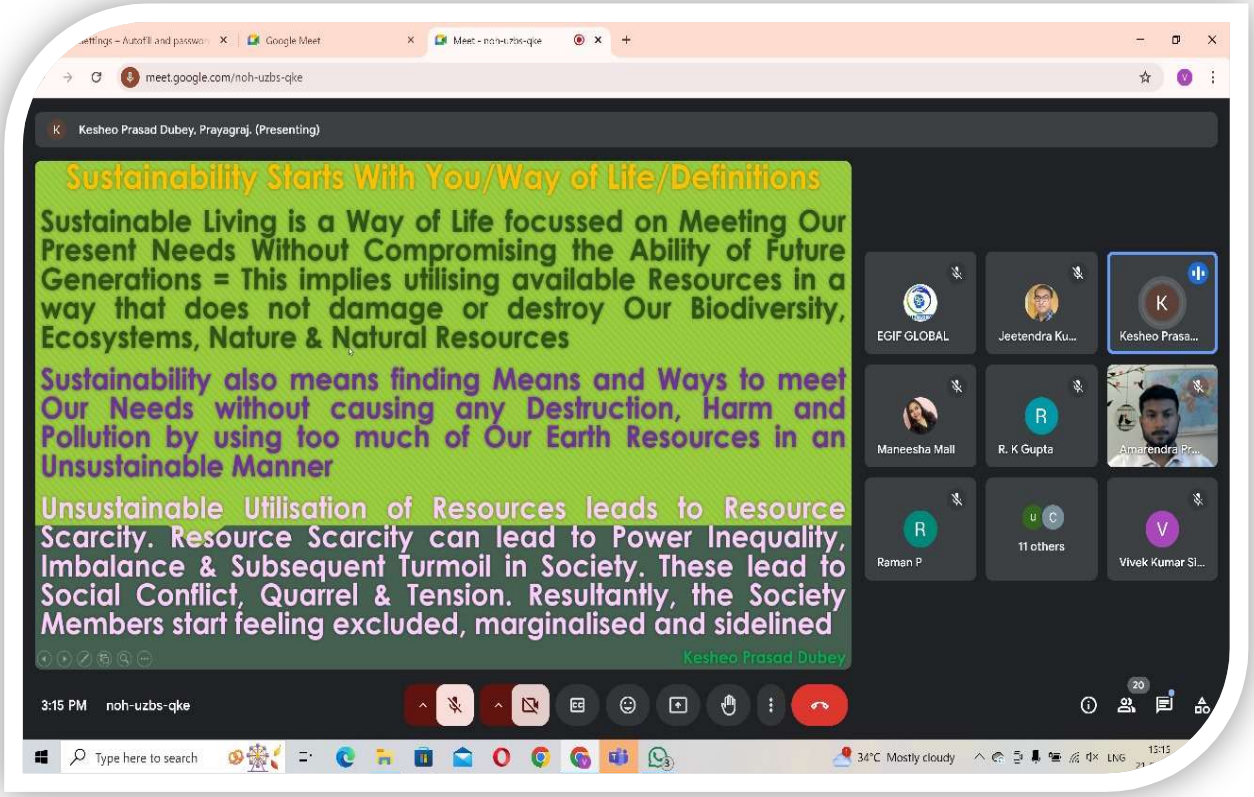
meet.google.com/noh-uzbs-qke
Kesheo Prasad Dubey, Prayagraj. (Presenting)
Sustainability Starts With You/Way of Life/Definitions
Sustainable Living is a Way of Life focussed on Meeting Our Present Needs Without Compromising the Ability of Future Generations = This implies utilising available Resources in a way that does not damage or destroy Our Biodiversity, Ecosystems, Nature & Natural Resources
Sustainability also means finding Means and Ways to meet Our Needs without causing any Destruction, Harm and Pollution by using too much of Our Earth Resources in an Unsustainable Manner
Unsustainable Utilisation of Resources leads to Resource Scarcity. Resource Scarcity can lead to Power Inequality, Imbalance & Subsequent Turmoil in Society. These lead to Social Conflict, Quarrel & Tension. Resultantly, the Society Members start feeling excluded, marginalised and sidelined
Kesheo Prasad Dubey
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Kesheo Prasa...
Maneesha Mall
R. K Gupta
Amarendra Pr...
Raman P
11 others
Vivek Kumar Si...
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IV. MERCOM India Renewable Summit 2024

The EGIF Global Team recently participated in the MERCOM India Renewable Summit 2024, held in New Delhi, a premier platform bringing together industry leaders, innovators, and policymakers in the renewable energy sector. The summit highlighted India's accelerating clean energy transition and the opportunities and challenges in scaling renewable technologies nationwide.

Accompanied by our sponsors and guided by our advisors, Dr. Jitendra Kumar and Shree Arun Choudhary from MNRE, the EGIF Global team engaged actively in sessions covering solar, wind, energy storage, and sustainable financing models. They contributed to thematic discussions on renewable energy integration, policy frameworks, and innovative business models to enhance energy access and efficiency. Through interactive panels, collaborative workshops, and high-level networking, the team shared insights on promoting clean energy adoption, innovative technology deployment, and skill development for a sustainable energy ecosystem. EGIF Global also emphasized the role of cross-sector partnerships in accelerating India's net-zero and renewable energy goals.

Their participation underscored EGIF Global's commitment to driving clean energy innovation, knowledge-based policy engagement, and sustainable development. By aligning with national renewable energy priorities, the team reaffirmed its dedication to building a greener, more resilient, and energy-secure India.


Mercom India
CLEANTECH STARTUP PITCH
Competition
#MercomStartupPitchCompetition
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JA SOLAR
GENSOL
SMA
EMMVEE
GAUTAM


WELCOME TO
MERCOM INDIA RENEWABLES SUM
NEW DELHI | JULY 25 – 26
SUPPORTED BY
SECI
SCGJ
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JA SOLAR
PLATINUM PARTNERS
SMA
EMMVEE
GOLD PARTNERS
Envision
POWER
nextracker
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V. 2nd International Conference on Green Hydrogen

The EGIF Global Team recently participated in the 2nd International Conference on Green Hydrogen, held in New Delhi, India, from September 11–13, 2024. This landmark event brought together global experts, industry leaders, and policymakers to discuss the emerging hydrogen economy and sustainable energy solutions for a net-zero future.

Accompanied by our advisors, Dr. Jitendra Kumar and Shree Arun Choudhary from MNRE, the EGIF Global team actively engaged in sessions on green hydrogen production, storage, infrastructure development, and policy frameworks to support large-scale deployment.

Through interactive workshops, panel discussions, and high-level networking, the team contributed insights on advancing renewable-based hydrogen solutions, technology innovation, and cross-sector collaboration. EGIF Global highlighted the importance of knowledge exchange, skill development, and strategic partnerships in accelerating India's transition to a hydrogen-based clean energy ecosystem.

Their participation reaffirmed EGIF Global's commitment to driving sustainable energy innovation, supporting national climate goals, and fostering responsible technology adoption. By aligning with India's green hydrogen roadmap, the team underscored its role in promoting a sustainable, resilient, and low-carbon energy future.

VI. Book publication

https://link.springer.com/book/10.1007/978-981-97-9626-7

We are proud to present our recent publication, “Renewable Energy Development: Technology, Material and Sustainability”, published by Springer and accessible online

Edited by:

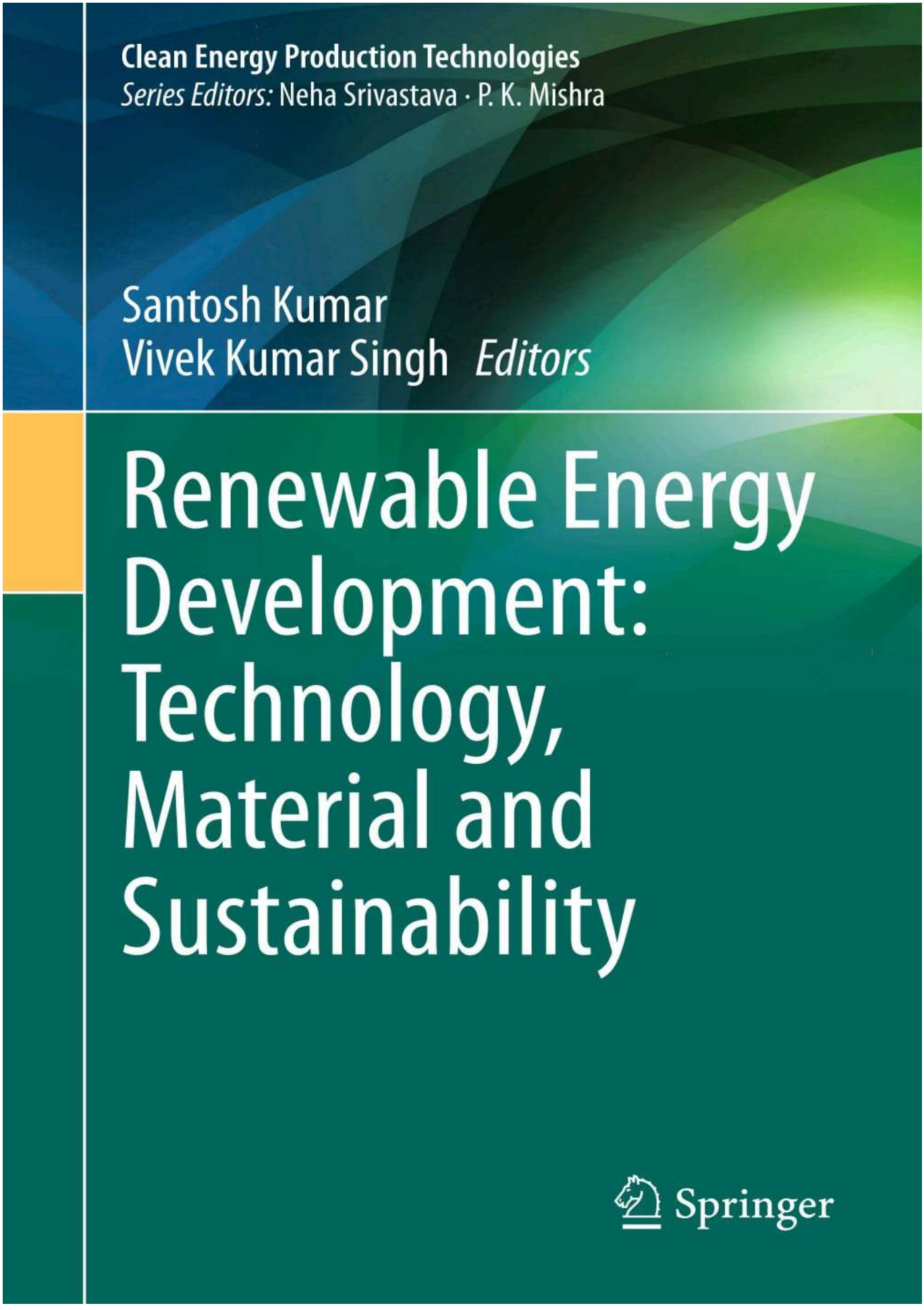
Dr. Santosh Kumar,

Dr. Vivek Kumar Singh

This edited volume offers a comprehensive exploration of modern renewable energy technologies and sustainability frameworks. It brings together pioneering research on solar, wind, hydro, biomass, hydrogen, and smart energy systems, integrating innovation, materials science, and environmental policy for a sustainable future.

The publication is part of Springer’s Clean Energy Production Technologies (CEPT) series and serves as an important academic contribution to advancing renewable energy research. It provides deep insights into cutting-edge technologies, material innovations, and policy strategies that support global transitions toward net-zero emissions.

Through this publication, our contributors aim to bridge the gap between scientific advancement and practical implementation, inspiring further interdisciplinary collaboration among researchers, engineers, and policymakers.


Clean Energy Production Technologies
Series Editors: Neha Srivastava · P. K. Mishra
Santosh Kumar
Vivek Kumar Singh Editors
Renewable Energy Development: Technology, Material and Sustainability
Springer

Preface

Energy consumption is growing around the globe, and there might be various reason behind on that as; economic development, growing population and advancement of technological developments. Environmental issues directly related to energy production and the combustion of fossil fuels are also the leading cause of greenhouse gas emissions. Renewable energy is growing, as innovation brings down cost and starts to supply on the promise of a clean energy. Renewable energy is often brought up as clean energy that comes from natural sources or processes. Renewable energy resources are available from various sources, including solar energy and wind energy.

This book aims to highlight the current renewable energy technologies: solar, wind, hydrogen, hydropower, wave power, biomass, and biofuel. It will offer a unique perspective, opening a new window on traditional renewable energy sources and new technological developments, advanced material innovations, and sustainability aspects. Key topics will include energy storage, transmission, institutional and economic factors, renewable energy applications in smart cities and buildings, solar thermal applications, environmental impacts, electrical energy generation, and climate change mitigation potential to achieve net-zero targets.

Additionally, the book will explore the integration of renewable energy into existing grids, the role of policy and regulatory frameworks, and the importance of international cooperation in accelerating the transition to a sustainable energy future. By examining both established and emerging technologies, the book aims to provide a comprehensive understanding of the current landscape and future potential of renewable energy, offering valuable insights for researchers, policymakers, and industry professionals dedicated to advancing clean energy solutions.

Chapter 1 discusses on renewable energy development sources and technology overview, Chap. 2 discusses on renewable energy insights: sources and technological advancements, Chap. 3 discusses on solar energy and environmental application, Chap. 4 discusses the role of solar energy in sustainable environment, Chap. 5 discusses on solar energy and smart cities: a holistic approach for sustainable development, Chap. 6 discusses on solar energy and its utilization in smart cities, Chap. 7 discusses on integration of renewable energy in buildings, Chap. 8 discusses on

sustainable electricity generation through solar energy technologies, Chap. 9 discusses on biomass energy conversion technologies to produce electrical power, green hydrogen, bio-oil, and biochar through biomass gasification and pyrolysis, Chap. 10 on discusses hydrogen energy: innovation in production, storage, and diverse applications, Chap. 11 discusses on hydrogen horizons: advancements, applications, and global initiatives, Chap. 12 discusses on porous organic polymers for renewable energy development, Chap. 13 discusses on advanced biobased materials for renewable energy development, Chap. 14 discusses on achieving net-zero emission: a sustainable future with renewable energy, Chap. 15 discusses on renewable energy in focus: development trends, challenges, and policy responses, Chap. 16 discusses on environmental aspects and electrical energy generation, and Chap. 17 discusses environmental aspects in electrical energy generation: a comprehensive review.

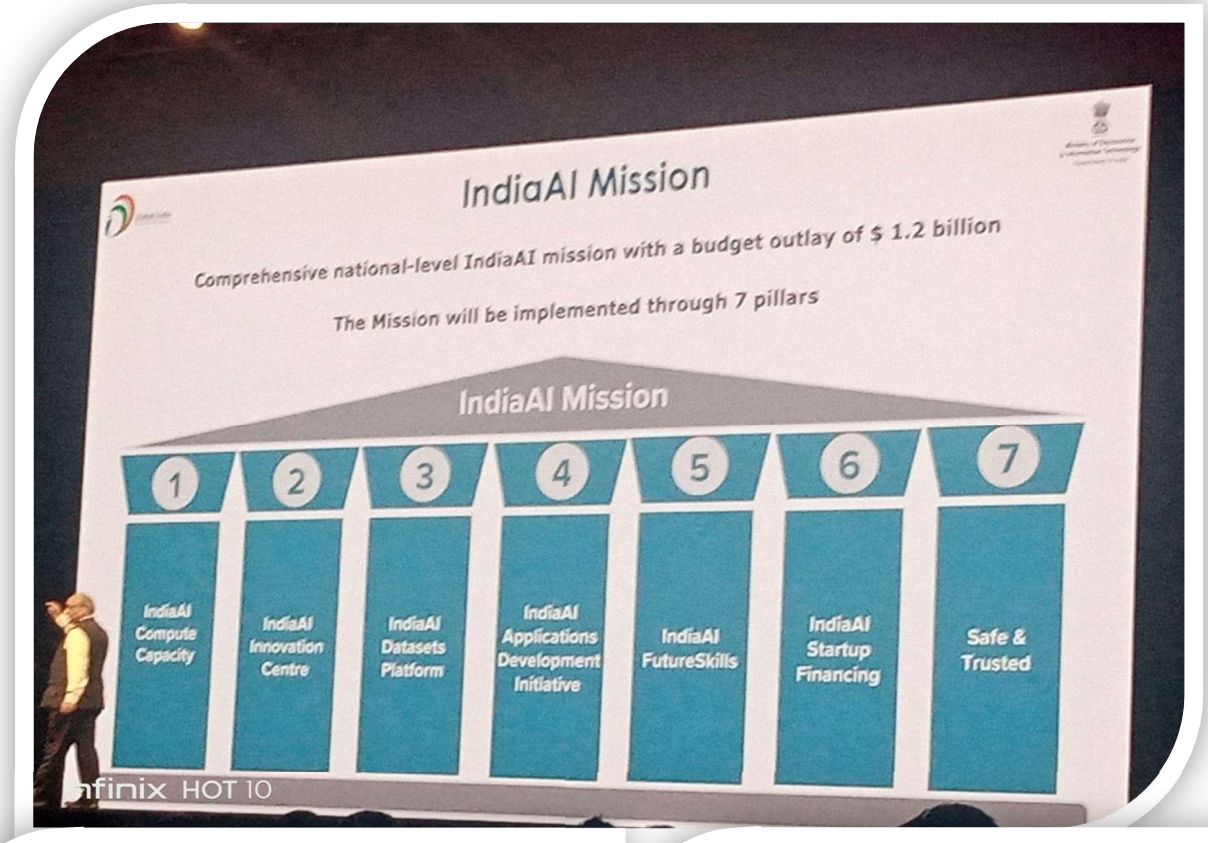
Kanpur, Uttar Pradesh, India — Santosh Kumar
Coimbra, Portugal — Vivek Kumar Singh

VII. Digital Intelligence Initiatives

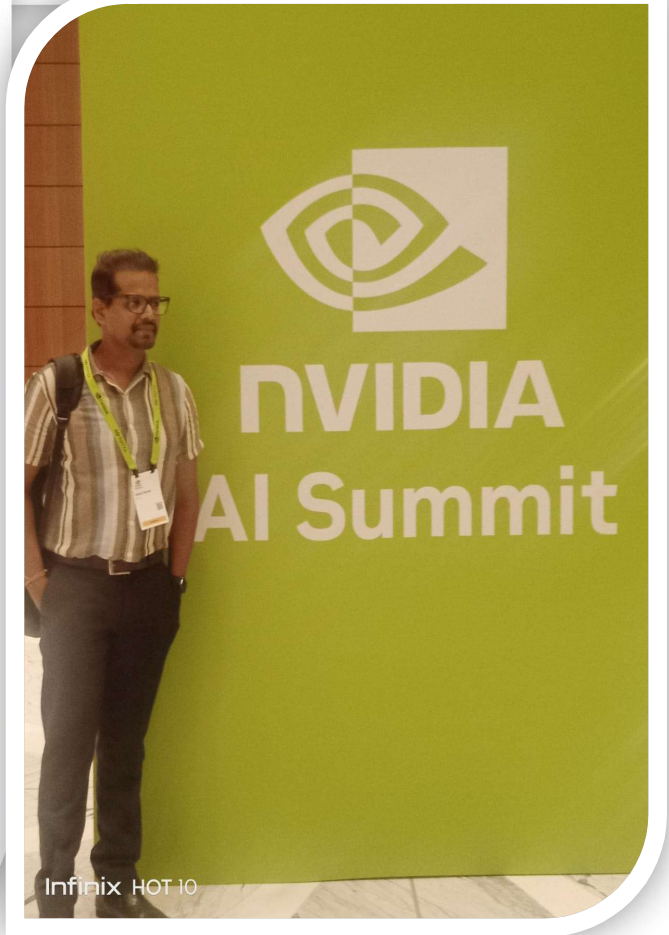
International conferences attending NVIDIA AI Summit India 2024

EGIF Global at NVIDIA AI Summit India 2024, Mumbai

Our EGIF Global team proudly participated in The NVIDIA AI Summit India 2024, held from October 23–25 at the Jio World Convention Centre, Mumbai, a landmark event in India's AI ecosystem that brought together global leaders, innovators, and industry experts. Thanks to the generous sponsorship of our advisor, Mr. Anand Kumar, three members of the EGIF Global team attended the summit, gaining invaluable exposure to cutting-edge AI technologies and industry trends. The event featured a fireside chat between NVIDIA CEO Jensen Huang and Mukesh Ambani, highlighting India's growing role in AI development, alongside the launch of Nemotron-4-Mini-Hindi-4B, a lightweight AI model supporting Hindi and regional languages. Partnerships with major Indian tech firms such as Reliance, Tech Mahindra, Infosys, TCS, and Wipro were emphasized to advance AI training and deployment. Hands-on workshops provided our team with practical insights into next-generation AI tools, while a unique cultural engagement with Bollywood actor Akshay Kumar offered thought-provoking discussions on AI's societal impact. This experience strengthened EGIF Global's understanding of AI innovations, local collaborations, and sustainable technology solutions, reinforcing our commitment to contributing meaningfully to India's growing AI landscape.


IndiaAI Mission
Comprehensive national-level IndiaAI mission with a budget outlay of $ 1.2 billion
The Mission will be implemented through 7 pillars
IndiaAI Mission
1
IndiaAI Compute Capacity
2
IndiaAI Innovation Centre
3
IndiaAI Datasets Platform
4
IndiaAI Applications Development Initiative
5
IndiaAI FutureSkills
6
IndiaAI Startup Financing
7
Safe & Trusted
Infinix HOT 10


NVIDIA
AI Summit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VIII. Environmental Excellence Initiatives

I. Understanding Climate Finance

https://egifglobal.org/blog_details.php?id=1

Navigating Climate Finance: Mitigation and Adaptation

Climate finance plays a pivotal role in addressing the global challenge of climate change by providing essential financial resources to support both mitigation and adaptation efforts. Each type serves a distinct purpose in the fight against climate change, and understanding their differences is crucial for grasping the comprehensive approach needed to address this global issue. Below, we will delve into both types of climate finance, providing concrete examples to illustrate their respective impacts and contributions to sustainable development.

Climate Mitigation Finance

Climate mitigation finance aims to reduce or prevent the emission of greenhouse gases (GHGs), addressing the root causes of climate change to limit its future magnitude. Key examples include investments in renewable energy projects, such as the Noor Ouarzazate Solar Complex in Morocco, which reduces GHG emissions by replacing fossil fuel-based power generation with clean energy. Energy efficiency programs, like those financed by the European Bank for Reconstruction and Development (EBRD) across Eastern Europe and Central Asia, also play a significant role by cutting

energy consumption and emissions. Additionally, sustainable transportation initiatives, including the rollout of electric buses in Latin American cities supported by the Green Climate Fund (GCF), help reduce reliance on fossil fuels and decrease urban air pollution. Carbon sinks inclimate finance, natural (forests, oceans) and artificial (CCS, biochar) carbon sinks absorb CO2, mitigating climate change. They generate carbon credits for trading, fund projects, and face measurement and permanence challenges.

Climate Adaptation Finance

Climate adaptation finance focuses on adjusting to the current and anticipated impacts of climate change, enhancing the resilience of communities, ecosystems, and economies to climate-related risks. Key examples include coastal protection projects like those funded by the World Bank in Bangladesh, which involve building seawalls, restoring mangroves, and implementing early warning systems to protect millions from coastal flooding and storm surges. Agricultural adaptation programs, supported by the Adaptation Fund in several African countries, invest in climate-resilient practices such as drought-resistant crops, efficient irrigation, and soil conservation to improve food security. Urban resilience initiatives, financed by the Asian Development Bank (ADB) in cities like Ho Chi Minh City, Vietnam, upgrade infrastructure to withstand climate impacts, including flood management systems, resilient h ousing, and green spaces to cope with heavy rainfall and flooding

Mitigation Finance

Seeks to reduce GHG emissions and slow the rate of global warming. Its outcomes are primarily measured in terms of emissions reductions and the deployment of clean technologies. Often focuses on long-term benefits and global impacts, as reducing emissions now will help prevent more severe climate impacts in the future.

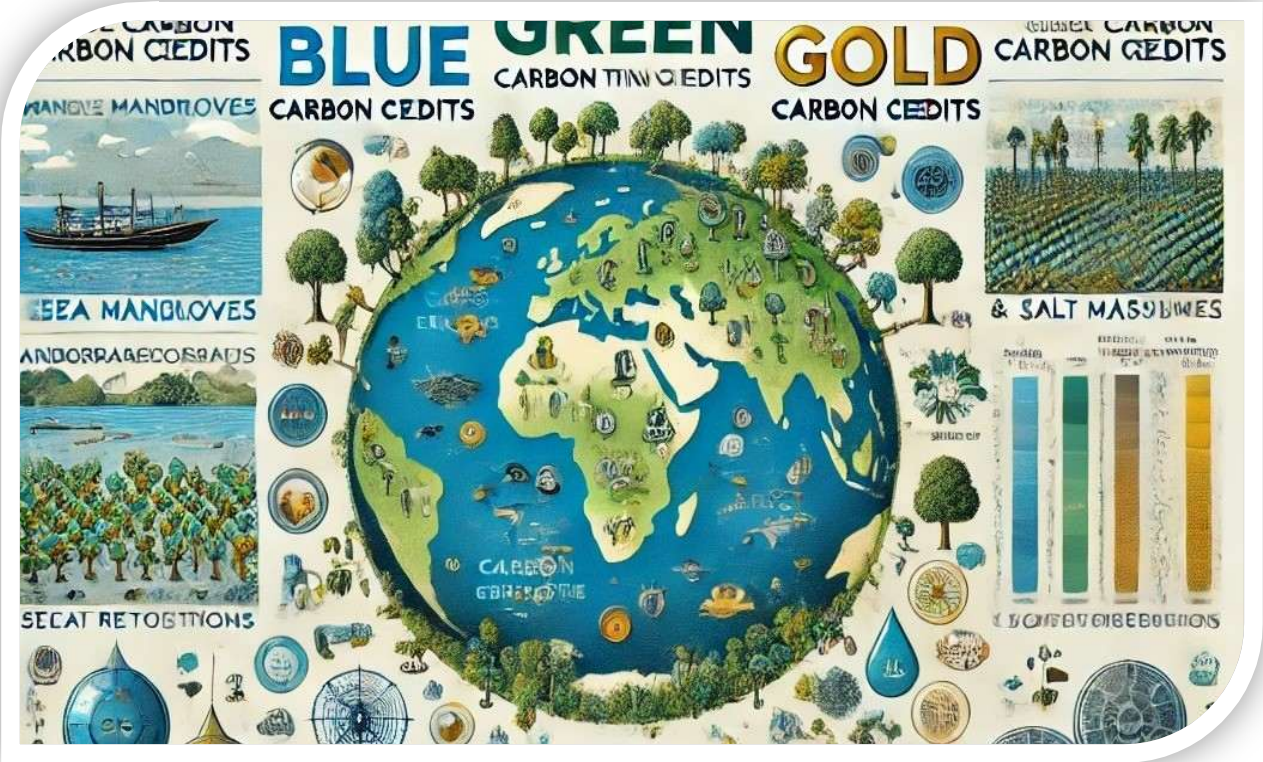
Adaptation Finance

Aims to build resilience and reduce vulnerability to climate impacts. Its outcomes are assessed based on improvements in adaptive capacity, reduced climate risk, and enhanced social and economic resilience. Tends to have more immediate and localized benefits, addressing the urgent needs of communities currently experiencing or anticipating climate impacts.

Climate mitigation finance aims to reduce greenhouse gas emissions and deploy clean technologies to slow global warming, focusing on long-term benefits and global impacts such as stabilizing the climate system. Conversely, adaptation finance seeks to enhance resilience to current and anticipated climate impacts, providing immediate and localized benefits such as improved community resilience, food security, and protection from natural disasters. Mitigation finance benefits are global, with local co-benefits like improved air quality, while adaptation finance primarily benefits vulnerable communities and ecosystems, addressing their specific climate-related challenges and enhancing their socio-economic resilience. Mitigation finance often receives more attention, but adaptation finance is equally vital, especially for vulnerable nations. Balancing investments in both forms of climate finance is crucial for comprehensive climate action and sustainable development.

II. Decoding Blue, Green, and Gold Carbon Credits: India's Perspective & Global Trading Models

https://www.linkedin.com/pulse/decoding-blue-green-gold-carbon-credits-mqlwc/?trackingId=S%2Fark2iyPPlwCq1QQoWY0w%3D%3D



As the world pushes toward net-zero emissions, carbon credits have emerged as a key tool for mitigating climate change. But did you know there are different types of carbon credits—Blue, Green, and Gold—each linked to specific ecosystems? Let's break them down and explore their relevance for India and global markets.

Types of Carbon Credits

🔵 Blue Carbon Credits

Generated from coastal and marine ecosystems like mangroves, seagrass meadows, and salt marshes.

These ecosystems store vast amounts of CO_2, helping combat climate change while protecting biodiversity.

Blue carbon projects focus on conservation and restoration, backed by global standards like Verra's Blue Carbon Initiative.

Indian Context: With its vast coastline and mangrove-rich regions like the Sundarbans and the Andaman & Nicobar Islands, India has immense potential for blue carbon initiatives.

🌿 Green Carbon Credits

Associated with land-based ecosystems such as forests, grasslands, and regenerative agriculture.

Generated through reforestation, afforestation, and soil carbon sequestration efforts.

Traded in Voluntary Carbon Markets (VCMs) under standards like the Gold Standard and Verified Carbon Standard (VCS).

Indian Context: India's Green India Mission and afforestation programs align well with green carbon projects. Initiatives like REDD+ (Reducing Emissions from Deforestation and Degradation) are already in play.

🏅 Gold Carbon Credits

Premium offsets that provide additional social and environmental benefits beyond carbon reduction.

Often certified under Gold Standard or Climate, Community & Biodiversity (CCB) Standards.

Support projects like biodiversity conservation, clean cooking solutions, and community development.

Indian Context: Cookstove projects in rural India, solar electrification in villages, and sustainable agriculture models could generate gold-standard credits while improving livelihoods.

Global Carbon Trading Models & India's Role

🌍 Compliance Carbon Markets (CCMs)

Regulated by governments, where companies must buy allowances if they exceed emission limits.

Key global examples: ✅ EU Emissions Trading System (EU ETS) – The world's most established carbon market. ✅ China's National ETS – The largest by volume. ✅ California Cap-and-Trade – A leading North American market.

India's Approach: While India does not yet have a formal carbon cap-and-trade system, initiatives like the Perform, Achieve & Trade (PAT) scheme and Renewable Energy Certificates (RECs) serve similar roles in incentivizing emissions reductions.

💡 Voluntary Carbon Markets (VCMs)

Businesses buy credits voluntarily to offset their carbon footprint beyond regulatory requirements.

Leading platforms include: ✅ Verra's Verified Carbon Standard (VCS) – The largest voluntary carbon registry. ✅ Gold Standard – Ensuring strong social and environmental impact. ✅ American Carbon Registry (ACR) – Known for rigorous verification.

India's Growing Presence: Indian companies like Tata, Reliance, and Infosys are exploring voluntary carbon offsets, while startups in the clean energy and afforestation sectors are tapping into carbon finance.

Both compliance and voluntary markets play a critical role in funding climate solutions and driving global sustainability. As India advances its carbon market policies and net-zero targets, the scope for carbon credit projects and international trade is expanding rapidly.

Are Indian businesses ready to integrate carbon credits into their sustainability strategy? Let's connect and explore opportunities!

III. Empowering Startups Through CSR: A Game-Changer for India

https://www.linkedin.com/company/99199597/admin/page-posts/published/

The Evolution of CSR in India

Corporate Social Responsibility (CSR) has become a critical driver in supporting India's thriving startup ecosystem. Previously, CSR funding was restricted to technology incubators housed in government-approved academic institutions, leaving many innovative startups and incubators outside this framework. However, the Companies (Amendment) Act, 2020, redefined the role of CSR, broadening its scope to include incubators funded by Central and State Governments, government agencies, and Public Sector Undertakings (PSUs). This shift has opened up new avenues for startups to access essential funding and support.

Creating a Win-Win Ecosystem

The updated CSR framework benefits multiple stakeholders:

Corporates fulfil their CSR obligations by investing in incubators that nurture innovation.

Incubators gain critical resources to empower startups through mentorship, infrastructure, and financial aid.

Startups receive the support necessary to scale their operations and address real-world challenges.

Society benefits from CSR initiatives aligned with the UN Sustainable Development Goals (SDGs), tackling global challenges such as climate change, education, and healthcare.

The Growing Trend of Collaboration

Corporations are increasingly prioritizing CSR projects that align with SDGs, fostering partnerships with incubators to support entrepreneurial innovations. These collaborations ensure that CSR funding has a ripple effect, driving both business growth and societal progress. By nurturing startups that focus on sustainability and impact-driven solutions, corporations amplify their contributions to the larger community.

A Vision for the Future

As the startup ecosystem in India continues to evolve, the role of CSR is poised to expand further. The integration of CSR into entrepreneurial innovation not only provides startups with a strong foundation but also contributes to creating a more inclusive, sustainable, and equitable society. This growing synergy between CSR and startups is shaping a future where corporate ambitions and societal needs align seamlessly, fostering a robust ecosystem of innovation and impact.

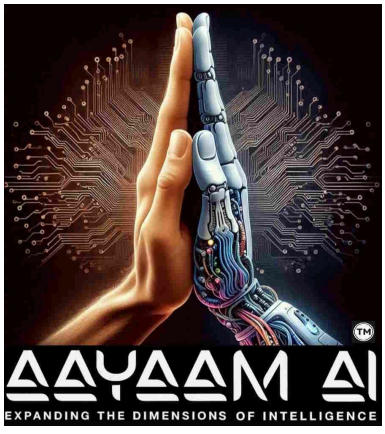
IV. Capacity Strengthening initiatives

Empowering Young Minds: EGIF Global and Anuradha Welfare Society Conduct Sustainability Workshop for Underprivileged Girls in Bhopal, MP

Empowering Young Minds: EGIF Global, in collaboration with the Anuradha Welfare Society, recently conducted a dynamic sustainability workshop for underprivileged girls in Bhopal, Madhya Pradesh. The initiative focused on educating and empowering young girls about the importance of sustainable living practices and environmental stewardship. Through interactive sessions and hands-on activities, participants gained insights into renewable energy, waste management, and the critical role of sustainability in combating climate change. By fostering awareness and practical knowledge, the workshop aimed to inspire these young minds to become catalysts for positive environmental change in their communities. This event reflects EGIF Global's commitment to fostering sustainable development and social equity through education and community engagement. The partnership with Anuradha Welfare Society underscores the collaborative effort to reach marginalized groups, ensuring inclusive access to sustainability education for a better future.

Partners & Outreach

At EGIF Global, we believe collaboration is the cornerstone of meaningful change. Our Partners and Outreach program serves as a platform to connect innovators, institutions, and communities working toward a sustainable future. Through strategic alliances with non-profit organizations, government bodies, academia, and the private sector, we drive initiatives that foster sustainability, public health, and climate resilience. From joint research and capacity building to educational outreach and policy advocacy, our partnerships amplify impact and enable shared growth. Together, we strive to empower communities, advance innovation, and shape a more equitable, sustainable, and resilient world.



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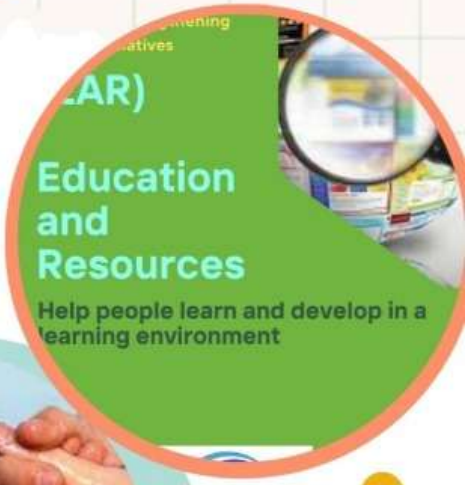

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