

### Green Skills, Innovation, Entrepreneurship and Skilling Approaches for Management & Operations for Plastics

This session focused on the transformative potential of innovation, entrepreneurship, and skill development in tackling the challenges of plastic waste management. Experts from various sectors shared insights on cutting-edge solutions that are reshaping the plastics ecosystem, from advanced recycling technologies to entrepreneurial models that create economic and political value.

The discussion highlighted the urgent need for robust skill development platforms that empower individuals, particularly from marginalised communities, to participate in sustainable waste management initiatives. Innovative startups and enterprises working on plastic recovery, circular economy solutions, and waste-to-resource technologies were showcased as key drivers of change.

The session underscored the importance of public-private collaboration in fostering an ecosystem where technical expertise, policy support, and financial backing align to scale impactful solutions. By integrating skill-building with entrepreneurship, the session provided a forward-looking approach to making plastic waste management more effective, economically viable, and environmentally responsible.

#### Speakers

- Ms Karuna Singh, Regional Director Asia, EarthDay.Org
- Ms Rehana Riyawala, CEO of SEWA Green Initiative Hariyali
- Mr Japen Gor, Seasoned Expert, Solar PV Technologies
- Mr Ajinkya Dhariya, Founder and CEO of PadCare Labs
- Mr Raahul Tiwari, Vice President of Strategic Alliance and Enterprise Business at EcoEx Markets
- Dr Presha Ramsarup, Director at the Centre for Researching Education and Labour at the University of Witwatersrand, Johannesburg

#### Presentations and Key Messages

**Ms Karuna Singh (EarthDay.Org)** opened the session by emphasising the immense job opportunities in the green sector, referencing ILO projections that anticipate the creation of 24 million green jobs globally in the coming years. She highlighted the European Union's ambitious goal of achieving climate neutrality by 2050, illustrating how similar global initiatives could drive employment growth while tackling climate change.

**Ms Rehanaben Riyawala (SEWA Green Initiative Hariyali)** discussed the struggles faced by informal workers, particularly their dependence on expensive and often unsustainable energy sources, which exacerbates financial burdens and environmental risks. She introduced the SwachAkash initiative, which aims to combat air pollution and promote cleaner skies by integrating sustainable energy solutions into waste management systems. Furthermore, she presented the Surya Green Skilling Initiative, designed to equip young women with hands-on training in Solar PV installation, maintenance, and repair, helping them secure employment in the growing renewable energy sector. She highlighted the success of the initiative, which is supported by UNEP, ReNew Power, and the Skills Council for Green Jobs, showcasing real-life examples of women transitioning into stable, sustainable livelihoods.

**Mr Japen Gor (GORenewable Technology)** provided insights into India's evolving green skilling ecosystem, covering key sectors such as solar and wind energy, green hydrogen, ESG (Environmental, Social, and Governance), SDGs (Sustainable Development Goals), waste management, and the circular economy. He explained the critical role played by the Ministry of Skill Development and Entrepreneurship, along with the National Skill Development Agency and Corporation, in upskilling the workforce to meet industry demands. Gor also discussed future opportunities in green business sectors that are expected to generate high employment, emphasising the need for structured training programmes. He outlined various skilling programmes, ranging from short-term seven-day workshops to intensive four-month certification courses, catering to diverse learning needs and career pathways.

**Dr Presha Ramsarup (Centre for Researching Education & Labor, University of Witwatersrand)**, addressed concerns regarding the predominant reliance on private sector funding for green initiatives in India, noting that it excludes a significant portion of underprivileged youth from accessing training opportunities. She stressed the importance of active public sector participation to ensure long-term, sustainable career pathways rather than short-term capacity-building programmes with limited job prospects. Dr. Ramsarup criticised existing short-term skilling interventions, which often fail to create meaningful employment for non-graduate participants due to a lack of structured career progression. She called for a robust labour market data system to accurately identify beneficiaries, track skill development needs, and align training programmes with real job opportunities in the green economy.

**Mr Ajinkya Dhariya (PADCARE)**, drew attention to the environmental challenges posed by sanitary waste, which contributes nearly 8 million tonnes of non-biodegradable waste annually. He introduced PadcareX, the first-of-its-kind sanitary pad recycling machine that employs innovative 5D recycling technology to recover wood pulp and plastic for reuse in textiles and packaging. Dhariya explained the machine's efficiency, boasting a 99% separation rate and the capacity to process 50,000-60,000 pads per day, making it a scalable solution for urban waste management. He also discussed the potential for deploying smaller versions of the machine (100kg/day capacity) in rural areas, where waste management infrastructure is often lacking. Finally, he proposed collaborations with government bodies, including the Jammu Commissioner and Sanjeev Arora, to explore large-scale implementation of the technology in sanitation and waste management programmes.

**Mr Raahul Tiwari (ECOEX Markets)**, presented Ecoex, a digital marketplace designed to connect recyclers, manufacturers, and brand owners, fostering an integrated waste management system within a circular economy framework. He explained the platform's role in streamlining the plastics value chain, ensuring that materials move efficiently from resin suppliers to recyclers and back into production cycles. Tiwari identified key challenges in plastic waste management, including low collection rates, inadequate sorting facilities, and contamination, which hinder the effectiveness of recycling efforts. He also highlighted the advisory services offered by Ecoex to assist businesses in complying with waste management regulations, adopting advanced recycling technologies, and optimising their sustainability strategies.

Ms Karuna extended thanks to all the speakers, underscoring the valuable insights shared throughout the session, and expressed special gratitude to Mr Prabhjot Sodhi, Senior Programme Director, CEE, for his enriching contributions, which helped in shaping the discussions.

### Key Recommendations from the Session

- Explore the potential for integrating PadcareX machines into rural waste management systems to enhance sustainability and provide innovative solutions to waste disposal challenges.
- Initiate a partnership with the Jammu Commissioner and Sanjeev Arora for the successful implementation of PadcareX initiatives, ensuring wider impact and outreach.
- Focus on overcoming gaps in public sector participation in green initiatives, with special attention to involving a larger youth demographic to drive change.
- Develop robust and accurate labour market data to help identify and support beneficiaries in a more targeted manner, ensuring effective outcomes for green initiatives.
- Recommend strengthening platforms dedicated to skills training and entrepreneurial ventures, especially in green businesses, to empower individuals and encourage the growth of sustainable ventures.