Upskill for Green Jobs of the Future

India's year of G20 Presidency is an opportune time to highlight the need for accelerated transition to sustainable development.





India is poised for rapid economic growth in the coming years and climate change is front and center of business decision-making to ensure that the future is green and sustainable. The energy transition is fast gaining prominence and will be the pivot on which the new economic development models are to be built.

In India, the clean energy sector has seen an eightfold increase in growth in FY22 compared to FY21, setting the stage for achieving the country's ambitious goal of a 500 GW renewable energy portfolio by 2030. As a country, we have to deliver on our Net Zero goals, and to ease the transition towards a green economy, which is low-emission and resource efficient, the fostering of green capabilities and skills - alongside the creation of green jobs - will be critical. To achieve a faster, more effective transition towards a more sustainable economy, it is essential to strike a balance between the efforts of the government, educational institutions,

and private sector. All of these need to collaborate and work together towards common sustainability targets with forward-looking policies to achieve long-term goals.

According to the Green Economy Report 2022, the share of green talent increased from 9.6% in 2015 to 13.3% in 2021, representing a growth rate of 38.5%. To ensure this trend continues, it is vital that individuals upskill themselves in green and smart energy technologies through focused training and education programs. Clean-energy companies can collaborate with governing bodies like the AICTE or the UGC to create or modify existing curricula to ensure graduates from industrial training institutes, engineering colleges, science, and other research institutes have a solid understanding of this sunrise sector's needs.

It was encouraging to see the government's focus and emphasis on skilling in the Union Budget this year. As mentioned by Hon'ble Finance Minister, Ms. Nirmala Sitharaman, in the *Amrit Kaal*, we must incorporate skill-based training in schools and colleges for building an industry and domain-specific workforce with a global edge. The need of the hour is to establish more formal skill development institutes to impart skilling at a mass level. Industry players must encourage skill development and innovation through the creation of unique ecosystems that address the skill gap challenge faced by the Indian power sector both in conventional and new energy space. The Tata Power Skill Development Institute (TPSDI) and the Clean Energy International Incubation Centre which promotes clean energy-related innovations are some shining examples.

Institutes like TPSDI are bringing the country closer to energy security by offering the appropriate training to youth for green jobs. The institute provides an opportunity for people with various levels of education and skill to come and train across multiple locations in the country. Its pan-Indian presence is enabling upskilling opportunities for India's young brigade. The institute also has special all-women batches that are not only bridging the gender gap in the traditionally male-dominated power sector but also creating an opportunity for women to lead the green transition in India.

It is crucial to keep the curriculum updated on upcoming technologies like floating solar photovoltaic (FPV) systems, solar-wind hybrid projects, mini and micro-grids, battery storage, etc. The focus should be to work closely with the government and skill development agencies to create a strong value proposition based on need analysis and skill projection for the youth and their future careers.

As the world's energy companies transition to green alternatives and more countries commit to achieving Net Zero emissions, upskilling employees is becoming increasingly critical. The emergence of new industrial sectors and the growth of clean energy jobs necessitates India's attention to ensuring that no one

is left behind. There is a pressing need for India to focus on upskilling its workforce to prepare for this transition.

The International Labour Organization has predicted that India's shift to a green economy could create up to 3 million jobs in renewables alone by 2030. With women marking almost 50% of the world population, it is imperative that companies also ensure women's participation in the green transition. Tata Power is setting up a 4GW solar manufacturing plant in Tirunelveli, Tamil Nadu, where they aim to have women as 80% of the workforce. Initiatives like these will ensure that the future is not only green but also one where everyone has equal opportunity.

To future-proof careers and equip employees with relevant skills, it is imperative to tap into this vast opportunity and provide training for the businesses of the future, such as solar and wind. An emphasis on the upskilling and reskilling of our existing workforce through collaboration with the ITIs, ITCs, NSTIs, Polytechnics, and training schemes will help ensure that talent is up-to-date with technological developments.

India's power industry is poised to undergo a green transformation that will enable the creation of a sustainable ecosystem. The time is ripe for India's demographic dividend to take on the mantle of the "green army," equipped with the skills and knowledge necessary to lead the charge toward a sustainable future.