

## **2. Renewable Energy**

### **Why in News?**

- Recently, India's solar and wind energy sectors added 52,700 new workers, an eight-fold increase from financial year 2021-22

### **Highlights**

- The study was jointly conducted by the Council on Energy, Environment and Water (CEEW), NRDC India (Natural Resources Defence Council India), and Skill Council for Green Jobs (SCGJ).
- Nearly 99% of the new workforce (52,100 workers) were employed in the Solar Energy Sector, with the Wind Energy sector registering very small growth (600 new workers).
- India's solar and wind energy sectors jointly employed 1,64,000 workers as of FY'22, showing a 47% increase from FY'21. 84% of this workforce is in the solar energy sector.
- However, there has been a "huge shortage" of workers trained in upstream manufacturing segments such as making polysilicon, ingots, wafers and cells. The bulk of the current jobs are in assembling solar modules.
- This segment is the focus of the recently launched Rs. 19,500 crore (USD 2.43 billion) Production-Linked Incentive (PLI) scheme, which targets 65 GW of domestic manufacturing capacity.
- If these trends continue, new on-grid solar (238 GW) and wind (101 GW) capacities can potentially create about 3.4 million temporary and permanent jobs.
- The potential for green energy in India is substantial, but the country must address the challenges to fully realize that potential.
- With the right policies, investment, and training opportunities, the green energy sector in India could play a major role in driving economic growth, reducing GHG emissions, and improving energy security.
- Collaboration of public and private sectors is essential to provide the necessary investment and training opportunities.
- The government could incentivize private sector investment by providing tax breaks, subsidies, and other benefits.
- At the same time, private sector companies could provide training and development programs to help workers acquire the skills they need to succeed in the green energy sector.