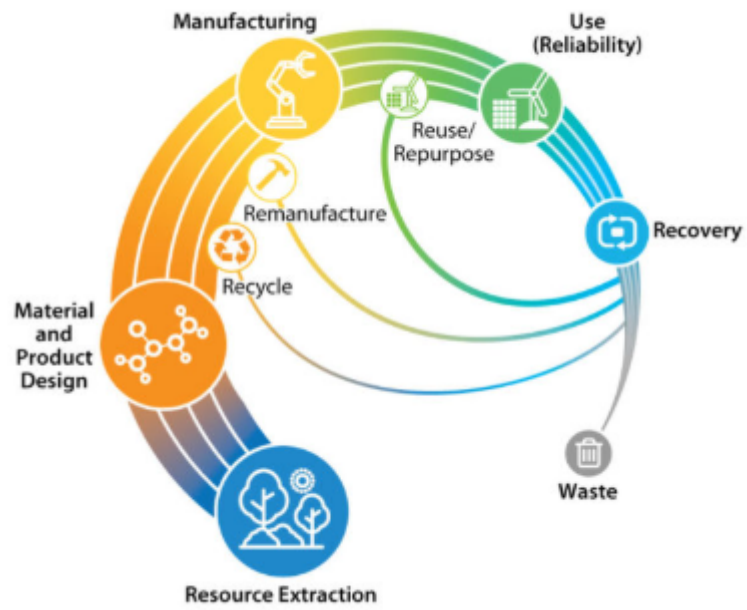


Circularity in Solar Sector

Why in News?

Recently, G20 Indian Sherpa India's Amitabh Kant said that circular economy could generate a market value of over \$2 trillion and create 10 million jobs by 2050.

- **Circular economy** - It refers to an economic system designed to eliminate waste, maximise resource efficiency, and maintain products and materials at their highest quality for as long as possible
- **3 principles of circular economy**
 - Eliminate waste and pollution
 - Circulate products and materials (at their highest value)
 - Regenerate nature
- **Need** - India's installed solar capacity is 66.7 GW as of FY23, has generated about **100 kilotonnes (kt) of waste**, which will increase to 340 kt by 2030.
- Around 67% of this waste is expected to be generated in 5 states- Rajasthan, Gujarat, Karnataka, Andhra Pradesh, and Tamil Nadu.
- The addition of new solar capacities by 2030 to meet India's nationally determined contribution targets under Paris Agreement could create cumulative solar waste of 19 million tonnes by 2050.
- **Circularity in solar sector** - It can be done through smarter product design, longer use, recycling and more, as well as regenerate nature.
 - Use recycled aluminium in frames
 - Use solar glass in new modules
 - Reduce use of critical minerals such as copper and silver
 - Eliminate use of toxic metals
 - Reuse components in new modules
 - Recycling of solar waste



Reference

[Hindustan Times| Circularity in Solar Sectors](#)