

Energy Transition

India ranked 74th out of 114 countries in Energy Transition Index of WEF, whereas it has one of the most ambitious global commitment of energy transition.

India committed to achieve 33-35% of GHG reduction by 2030 along with 40% non fossil electricity production. Some of the major constraints and possible solutions are :-

(i) supply-demand mismatch - India's energy consumption will grow at the rate of 4.5% for next 25 years, while it still depend on oil & coal sector for about 70% need.

(ii) Solar power - The target is 100GW and 40GW of which from solar roof top by 2022.

however, lack of manufacturing base for solar panel specially wafers, ignote etc made the country dependent on china.

SoT ⇒ There is a need of augmenting solar parks, KOSUM scheme, providing viability gap funding support

along with in technology like floating solar, smart metering.

(iii) Discom Health - Discoms are largely affected by transition in RE due to tariff reduction and renegotiation of Power purchase agreement.

→ The subsidy on FARM SECTOR, electricity theft,

UDAY scheme failure affected its health.

[Solo] ⇒ The need is to link Discom with standalone solar plants of FPOs and landloads.

also, this will divert power towards industry, which is profitable for Discom.

(iv) Electric mobility - the pandemic & Automobile slowdown affected target of achieving 30% e-mobility by 2020

- India does not produce Lithium Ion batteries and is dependent on China for 100% needs.

- multiple ministries like - MOP, MoNI, MORT&N, Niti Aayog, MNRE; requires coordination.

[Solo] ⇒ Thus India should augment clean energy fund through cess & taxes to support R&D in EV-storage etc.

⇒ An integrated ministry - Ministry of Energy & Environment is the need of the hour.

(V) Alternative fuel - India produces large waste and has largest live stock population in Rural India. however, the sector is mostly neglected, no coordinated approach of waste collection etc has met it.

[Sol] ⇒ National Biofuel Policy should be streamlined,
→ compressed biogas (CBG) can be alternative of CNG, thus SATAT initiative should be promoted.
⇒ Training of farmers, women in cooperative line like Hoshisapur, Punjab is needed.

(VI) Energy efficiency - Agriculture, industries, Real estate consume 80% of energy.

[Sol] ⇒ schemes like - Eco samhita, Green Building, Perform Achieve Trade (PAT), labelling of buildings and Appliances etc is needed to achieve SDG 7 (Affordable & clean energy).
⇒ Awareness generation by new policy like Energy and Environment Act in integrative manner can be adopted.

Thus, energy need multidimensional, multisectoral strategy, for transition, with top to bottom coordination.