

→ Environment Impacts on 6 Indian Co.'s :-

① Marico :-

a) Initiative :- a) Reduction in lamination based paper packaging.

b) Eliminating the use of single plastic.

c) Usage of recyclable packing material.

d) Water conservation.

b) Jalashay :- a) More water for the community.

b) Created 263 crore litres of water conservation capacities (FY22).

c) Aim to build 412 crore litres of total water harvesting capacity (FY24).

c) ESG 2.0 Framework :- a) Phase out hazardous substances such as PVC's

b) Introducing atleast 30% r-PCR in the packaging portfolio.

c) 100% recyclable, reusable or compostable packaging portfolio.

② Mindtree :-

a) ESG Goal :- a) High score on ESG goal & has won several awards for the same

b) Zero discharge locations.

b) WOW Initiative :- a) Recycling waste is scientifically disposed & sent for recycling.

- b) 3R Strategy → Reduce, Reuse, Recycle → minimal freshwater usage.
- c) Rainwater harvesting & installation of recharging pit initiative at Bengaluru reduced private water purchase by 12.370 KL in FY 22.
- c) Other Initiative :- a) Invest in green new building.
b) Increase EV vehicle.
c) Large scale data command centre.
- d) Future Goal :- a) 100% renewable energy for internal operation by 2030.
b) 30% reduction in scope 1 & scope 2 emission
c) 20% reduction in scope 3 by 2025.

③ Ultratech Cement :-

- a) Cement Industry :- Massive CO₂ emitter.
- b) Steps for lower emission :- a) Solar & wind power generating capacities.
b) Water heat recovering system (WHRS).
c) Blend cement to reduce by 22% clinker ratio to reduce emission.
d)
- c) Future Goal :- a) Net zero concrete by 2050.
b) SBTi - Scope 1 reduce its intensity by 27% by 2032.
e)
- d) Action :- a) 9.1% reduction of scope 1 CO₂ intensity against SBTi target.
b) Rain water harvesting.
c) Water recharge within manufacturing unit.

d) Give back 73+ million M3 of water to nature in FY 22.

④ Infosys :-

a) Achievement :- a) Crisil's ESG ranking for 2nd year
b) Place in Dow Jones sustainability index
(Assess ESG performance of companies globally)

b) Climate Action Journey :- a) Started in 2008
b) Co. turned carbon neutral in 2020
c) 30 years ahead of the timeline set up by the Paris agreement.

c) Scope 1, 2, 3 (by 2030) :- a) Reduce scope 1, 2, Emission by 75%
b) Reduce scope 3 emission by 30%.
c) Recycling 100% used water.
d) Zero waste to landfill

⑤ Dr. Reddy's Labs :-

a) 2010 :- Identified first set of ESG goals:

b) 2020 :- a) Met three goals fully → Water, Consumption, waste reduction, shipping hazardous waste
b) Met 3 goals partially → Water neutrality, energy consumption, renewable energy.

c) SBTi (Science Based Target Initiative) :-

1st in India } Join SBTi
3rd in Asia } ↓

Reduce Carbon Footprint

e) d) Bloomberg Gender Quality Index:- Only Indian Pharma Co. to be featured on.

e) ESG goals 2030:- a) 100% renewable power.
 b) Carbon neutral in direct emission (scope 1 & 2)
 c) 12.5% reduction in scope 3.
 d) Water positive by 2025.

g) ⑥ Welspun Group:-

a) Type of Industry:- Textile

b) Initiative:- a) Ecological balance in the domain of air, water & land.

b) Reduce energy & carbon footprints.

c) Monitor scope 1 & 2 emission.

d) Reporting in public domain.

e) Initiated scope 3 emission calculation & reporting.

c) Project at Anjar:- a) Unique project in the area of water management.

b) Establishment of 30 MLD sewage treatment plant to meet water requirement.

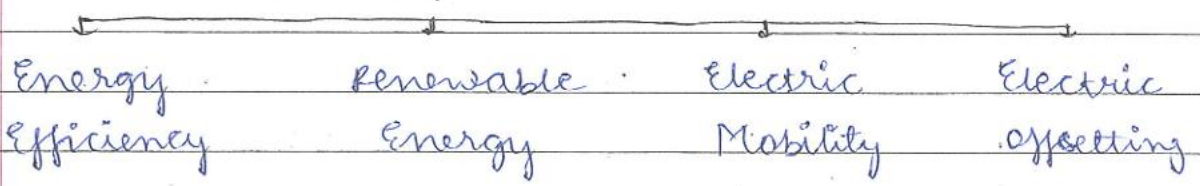
Table. 6: Consumption of petroleum product (sector wise)

- (a) High speed Diesel oil → The growth rate has increased in transport sector, i.e., 25.55%. & it is negative growth rate in private imports i.e., -14.28%.
- (b) Light Diesel oil → It is highest growth rate in retail & resale sector, i.e., 64.99%. and it is negative growth rate in private imports i.e., -35.91%.

→ Energy Conservation scenario - Cases of selected Indian Co.'s

① Mahindra Group:-

(a) Carbon Neutrality 2040:- 4 big drivers



(b) SBTi :- 20 Mahindra Co.'s have committed to SBTi

(c) Other group institute :- ① Adoption of technology for energy-efficient lighting, air conditioning, motor appliances

- ② Business process re-engineering to reduce energy requirements.
- ③ Heat recovery projects to re-use waste energy.
- ④ Construction to reduce the need of energy.

- (d) Key initiative & success :- (a) Mahindra holidays, Mahindra heavy engineers Ltd. (MHEL) becoming India's first & world third manufacturing unit to double its energy production by 2020.
- (2) Deployed more than 100 energy efficiency projects within auto group alone.

(2) HDFC Bank :-

(a) Goal :- Become carbon neutral by 2031-32

(b) Initiative :- Reduce emission, energy & water consumption. ~~consumption~~ conservation.

- (c) Various Initiative :-
- 3 star & above appliances used
 - Replacement of tubelight with LED
 - Implementation of switch room at 384 branches resulting into reduced A/C usage.
 - Replacement of UPS with energy efficient device.
 - Replacement of bottled drinking water with water purifier.
 - Installation of sensor tap.

③ ITC Group:-

① Renewable Energy:- 4.17% of co's total energy consumption is from renewable energy.

② Target:- Co. has a target of achieving 50% of the share of renewable energy ⁱⁿ of total energy & 100% electricity from renewable energy.

③ Bifurcation of renewable energy:- 41.03% energy requirement was met from renewable sources like, biomass, wind and solar

④ 2020-21:- ① Co. invested in energy conservation equipment -

② There was decrease in energy consumption by 6.02%.

③ It also reduce the green house gas emission 21,468 tonnes.

⑤ Various energy conservation measures:-

① Installation of new energy efficient electric boilers.

② Installation of Vapour Absorption Machine (VAM)

③ Installation of air loss moisture removal traps from for compressed air system.

④ Advanced dirt separator system in chilled water line of HVAC.

⑤ Replacement of cooling tower ARMs chillers, compressors, motors, fans, pumps & agitators.

(4) Godrej & Boyce :-

- (a) Outlook :- They believe that energy is vital gear for driving a cleaner & greener future.
- (b) Energy efficient culture :-
- ① improved operational efficiencies.
 - ② energy conservation mechanism.
 - ③ Increased focus on inclusion of renewable sources into the energy mix.
- (c) Goal :- To improve energy productivity by 100% by 2030.
To use 40% renewable energy in manufacturing over next 3 years.
- (d) Revenue :- generated 23% from Good & Green products.
- (e) Sources of energy :- Fuel consumed includes high speed diesel, piped natural gas, liquefied petroleum gas, furnace oil, biomass energy, energy from grid electricity & solar energy.
- (f) Co. investment & saving of electricity :- ₹. 6.7 cr. during the reporting period in various energy efficiency initiatives that resulted in savings of over 21 lakh KWh of electricity per annum.

⑤ Tata Consultancy services :-

- ① Year on year reduction :- TCS saw a year on year reduction in absolute energy use by 46.6% and absolute carbon footprint reduction by 48.0%.
- ② Roof top solar & purchase of solar :- 15.6% of the total electricity consumption is coming from roof top solar power plants & power purchase agreement
- ③ Situation in Pandemic :- GHG has been declined 53% but there was increase by 0.23% in the FTE (working out of TCS office)

→ ICMA Green Product Categories :-

①

Renewable Energy

Transition & Net Zero	Green Hydrogen	Battery Energy storage system	GOBAR-dhan
↓	↓	↓	↓
Outlay	• Budget outlay INR. 197.44 Billion	• Goal is to set up capacity of 4000 MWh, supported by viability gap funding.	• 5% compressed biogas mandate is to be introduced for all org marketing natural & bio gas
↓	• Annual production of 5MMT by 2030		
• INR. 350 B. for energy security, transition and net zero objective	• Meet atleast 10% of the global demand for green hydrogen by 2030.		
• INR. 207 B. for renewable energy from Ladakh.	• Mission → India become energy		