

SUSTAINABLE LIFESTYLE GUIDELINES

Purpose

As Tata Power strives to lead the energy transition for the sector, we are equally committed to safeguarding the environment for future generations and developing our business in a way that adds value to the local communities. Tata Power has identified three crucial sustainability thrust areas in alignment to UN SDGs which will help Tata Power to become a benchmark in sustainable practices. The three thrust areas are -

- **Decarbonization:** Tata Power aims to consistently reduce the carbon footprint and become carbon neutral by 2050
- **Circular Economy:** Tata Power has the aspiration to become water positive and contribute to zero waste to landfill by 2050
- **Thought leadership:** Tata Power plans to become a global sustainability benchmark in the sector.

We are setting forth a set of sustainability practices aligned to these thrust areas which will help each and every individual to transition to a more sustainable lifestyle to help fight the climate change.

Decarbonisation

Climate change is a reality and we are conscious of our Carbon footprint. Emission reduction through SBTi, rapid renewables expansion, and thermal phase-out at end-of-life, new energy efficient solutions for customers is our effort to contribute to fight climate change.



Sr. no.	Guideline	How it helps?
1.	Try out home automation.	• Help in real time tracking of electricity consumption around the household and reduce emission by approximately 13%
2	Reduce consumption of meat and poultry products by a quarter and substitute plant proteins	• Save about 82 million metric tons of greenhouse gas emissions per year at country level
3	Use electric vehicles and cycles	• Cycling benefits cardiovascular fitness and produces only 7% of CO ₂ as compared to a car. EVs produce zero direct emissions.
4	Use rooftop solar/solar panels where appropriate	• Solar panels reduce dependence on fossil fuel-based electricity leading to saving of 0.7kg of CO ₂ emission/unit. A 1kWh setup is equivalent to planting 2 trees in terms of carbon sequestration.
5	Buy BEE 5 star rated appliance	• Using BEE star rated appliances will reduce energy consumption, electricity bills and carbon footprint.
6	Regularly inflate vehicle tires	• Car with properly inflated tires give more mileage which leads to less fuel consumption and reduce CO ₂ emission by approximately 150kg per vehicle.
7	Heat food at one go to reduce unnecessary use of microwave	• Helps reduce annual CO ₂ emission by approximately 30kg per household

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8	Reduce gas usage by using fuel efficient cooking methods like cover cooking pots, using optimum quantity of water, etc.	<ul style="list-style-type: none"> • Help reduce annual CO₂ emission by approximately 62kg per household
9	Reduce the temperature setting on the geyser	<ul style="list-style-type: none"> • For a comfortable bath lower temperature is enough and helps reduce annual CO₂ emission by approximately 172kg per household
10	Reduce watching TV/laptops and go out and play or walk	<ul style="list-style-type: none"> • Playing outside will both improve health and reduce annual CO₂ emissions by approximately 62-93 kg per person
11	Prefer walking for shorter trips	<ul style="list-style-type: none"> • Reduce annual CO₂ emission by approximately 11-48kg per vehicle.
12	Ensure that AC is set at 26 degree centigrade. Better still, use fans or natural ventilation when possible instead of ACs.	<ul style="list-style-type: none"> • Each degree change in the AC temperature setting results in approximately 3-8% savings on electricity bills. • Hydroflouorocarbons used in most ACs are 1000 times more potent than CO₂ in contributing to climate change per unit of mass
13	Switch off lights, fans, ACs, geysers, electronic items and office equipment from the mains in a room that is not in use. Keep laptops in sleep/hibernate mode when not in use	<ul style="list-style-type: none"> • Simply turning off devices not in use can save more than approximately 100kgs of CO₂ per year
14	Keep the blinds open to maximize the use of natural light	<ul style="list-style-type: none"> • Natural light has numerous health benefits like Vitamin D production in body, maintaining circadian cycle, increased productivity in addition to energy savings
15	Use the stairs	<ul style="list-style-type: none"> • We contribute to half a metric ton of carbon emissions over a lifetime through elevator use
16	Replace regular bulbs by LEDs and provide enough light to work safely	<ul style="list-style-type: none"> • Replacing one regular light bulb with an LED will save approximately 68kgs of CO₂ per year
17	Reduce air travel by using phone, e-mail, video conferencing facilities	<ul style="list-style-type: none"> • A single travel between Mumbai to Delhi can contribute approximately 200kgs of CO₂ emissions per person

Circular Economy

The practice of 6R's is the basic framework of implementing circular economy in our lifestyle.



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1	Air dry hands to reduce use of paper towels	<ul style="list-style-type: none"> • Usage of ~10 paper towels a day amounts to 100kgs of CO₂ emissions per year
2	Conserving water by using it wisely and judiciously, at all locations. Replace taps and showerheads with water efficient fittings	<ul style="list-style-type: none"> • Up to 20% of water usage can be reduced by using low flow equipment
3	Save paper by using electronic documents and files instead of hard copies. Switch to online news, e-bills, e-visiting cards, e-greetings etc. If necessary, print using both sides and in black and white whenever possible.	<ul style="list-style-type: none"> • Subscribing to one newspaper contributes to 67kgs of CO₂ emissions in a year.
4	Reduce food wastage.	<ul style="list-style-type: none"> • Nearly 1/3rd of the food produced in India is wasted leading to a carbon footprint larger than most countries (next only to US and China).

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5	Use common office supplies from a shared unit.	<ul style="list-style-type: none"> Reusing used envelopes for internal couriers and using common supplies reduces wastage
6	Implement rainwater harvesting.	<ul style="list-style-type: none"> Collecting and reusing rainwater reduces dependence on municipal water (saving cost) and restores the hydrological cycle.
7	Reduce use of plastic/paper bags, cups, plates, spoons, bottles by stocking reusable cups, plates, bowls, utensils	<ul style="list-style-type: none"> Plastic takes up to 1000 years to degrade into smaller bits which then contaminate soil, water and our food. Microplastics also lead to myriad health issues.
8	Use rechargeable batteries.	<ul style="list-style-type: none"> Rechargeable batteries consume 23 times less non-renewable natural resources than disposable batteries.
9	Reuse packaging – tins, containers, bottles etc.	<ul style="list-style-type: none"> Limits the use of new natural resources and reduces waste to landfill
10	Use recyclable plastic where possible and segregate waste appropriately when discarding to enable processing.	<ul style="list-style-type: none"> There is a numerical classification from #1-#7 indicating most to least recyclable plastic marked on plastic ware.
11	Recycle e-waste through recognized vendors.	<ul style="list-style-type: none"> India is the 5th largest E-waste producer in the world (2 mill tones annually) growing at ~30% CAGR. Only 12.5% of e-waste is currently recycled.
12	Recycle all envelopes, paper, newspaper and magazines.	<ul style="list-style-type: none"> Recycling one ton of paper can save 17 trees, 27,000 liters of water, 1500 liters of oil, 2.5 cubic meter of landfill space and 4000 kW of energy
13	Donate clothes, toys, books, electronic goods, utensils etc. to the needy.	<ul style="list-style-type: none"> Disposing in landfills releases CO₂, CH₄ to the atmosphere and leaches chemical into the soil. Making new goods takes gallons of water and resources.
14	Compost organic waste and use as manure to improve soil quality and water retention.	<ul style="list-style-type: none"> Using organic manure from composting avoids synthetic fertilizers avoiding N₂O which is 310 times more harmful than CO₂
15	Waste segregation.	<ul style="list-style-type: none"> The Solid Waste Management rules, 2016 mandate segregation of waste into three streams- Biodegradables, Dry (plastic, paper, metal, wood, etc.) and Domestic Hazardous waste (diapers, napkins, mosquito repellants, cleaning agents etc.) before handing it over to the collector.
16	Remodel out of fashion but in-condition clothes rather than buy fast fashion.	<ul style="list-style-type: none"> Production of new textiles accounts for 10% of all carbon emissions on earth

Thought Leadership

Contribute to the movement to limit the warming below 2°C and lead the green movement by educating others on resource conservation, energy efficiency and lowering of carbon footprint.



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1	Create a green space	<ul style="list-style-type: none"> • One tree will absorb about 1000kgs of CO₂ over its lifetime. • Planting trees is the most cost-effective solution to carbon mitigation with numerous other ecological benefits
2	Monitor energy savings (https://www.tatapower.com/sustainability/calculate-carbon-footprints.aspx)	<ul style="list-style-type: none"> • Energy savings of 5-15% can be achieved by monitoring usage and corrective action.
3	Volunteer for Climate Action	<ul style="list-style-type: none"> • Earth Overshoot Day marks the date when humanity's demand for ecological resources and services in a given year exceeds what Earth can regenerate in that year. • In 2020, EOD was observed on August 22.
4	Be a sustainability champion	<ul style="list-style-type: none"> • Educate others (family and friends) about the need to adopt sustainable lifestyle

Let us "Live Sustainability" by living sustainably!

For any suggestions or clarifications, please write to tatapower@tatapower.com