

Our approach to materiality topics

Material Topics

1. Occupational health and safety

Key Actions

- Safety is inculcated in the core values of NTPC; SAP Integrated NTPC Safety Framework developed
- Target of zero incidents by establishment of robust safety culture and policy
- Up-gradation of operating procedures to make the work environment safer
- Mitigation of potential safety hazards owing to diversification into new technologies and business areas
- NTPC Unchahar Safety Academy has been established to provide hands-on training on specific safety and emergency
- · Mandatory Periodic Occupational Health Check-ups for all employees and contract labour
- Record Keeping of medical history of employees and their family through online centralized HMS Framework "Jeevan Rekha"

SDG Linkages



Capital Linkages

Human Capital



2. Business ethics and integrity

- · Ethics being part of core values, all business processes are aligned to the principles of ethics and integrity
- · Policies of code of conduct, whistle-blower, complaint handling and banning of business dealings in place
- 100% compliance with laws and regulations ensuring a transparent and corruption-free work environment
- Display Boards at all offices exhorting any visitor not to succumb to pressure and report any case of corrupt practices directly to Chief Vigilance Officer





Social Capital



3. Energy management

- Stress on efficient utilization of resources and use of technological advancements for improving energy efficiency
- Dedicated groups (CenPEEP & CEETEM) created to improve the **Energy Efficiency Management**
- Energy Efficiency Management System (EEMS) consisting of periodic assessments, field tests, performance gap analysis, deviations analysis and updation of action plans at all stations.





Manufactured and Natural Capital





4. Climate change

- Enhanced geographical and technological diversification, inherently reduces our risks to any location-specific natural catastrophe
- Power plants and associated infrastructure are designed to withstand cyclones, heatwaves and increase in ambient temperatures
- Decommissioning of old thermal plants and a revised target of 60 GW of RE capacity by 2032
- Our current low-carbon based energy capacity is 10% and with further massive RE addition, we anticipate reducing our specific CO₂ emissions substantially over the next few years.

















5. Digital transformation

- Launched notable digital platforms for business approvals and Suppliers/Labour bill payments
- CPM & BI tool for data monitoring and reporting











Material Topics

6. Water & effluents management

Key Actions

- Optimisation of water consumption through advanced technologies and process reengineering
- NTPC is a signatory to the CEO Water Mandate
- · Implementation of "Water Policy" and "Rainwater Harvesting
- Implementation of "Zero Liquid Discharge (ZLD)" at all stations, including ensuring good quality freshwater availability in and around plant locations through community investments and capacity building
- Installation of Air-Cooled Condensers having potential to save 75% of water
- Cycles of Concentration (CoC) is being increased at all stations for reducing freshwater intake

SDG Linkages







Capital Linkages

Natural and Social Capital





7. Labour practices

- Uphold the best Global and Indian labour standards pertaining to wage determination, allocation of tasks, shifts & working hours, provision of training, incentive & reward schemes and occupational health & safety
- Dedicated Human Rights Policy in place to promote and safeguard all kinds of human rights, including organizational
- Operating bipartite collective bargaining forum (NTPC Bipartite Council) since 1982
- Implemented CLIMS for online labour payments, skill training and building health information profile















8. Air emissions

- Installation of FGD/ DSI system for SO_v control completed for ~3 GW while execution work for 56+ GW is in process
- Combustion modifications for $\mathrm{De}\text{-NO}_{\mathrm{x}}$ completed 44 units of ~19 GW, whereas execution work for rest of the capacity is in
- Retrofitting of ESP done at 13+ GW capacity to curb particulate emissions at stations
- Continuous Emission Monitoring System (CEMS) of all stacks
- Ambient air quality monitoring through an online Ambient Air Quality Monitoring System (AAQMS)







Natural Capital



9. Community engagement

- Dedicated CSR policy in line with Companies Act, 2013 and Department of Public Enterprises (DPE) Guidelines for CSR
- Key community-based programmes through NTPC Foundation
- · Our focus areas include Health, Sanitation, Water and Education
- One of the top CSR spending conglomerates in the country with expenditure of ₹ 352.79 crore in Financial Year 2022-23









Social Capital



10. Governance practices

- Committees of Audit, Nomination and Remuneration, Stakeholders Relationship, CSR and Risk Management
- Govt. nominated directors on our Board, ensuring stricter monitoring and transparency in our governance system
- Financial accounts are audited thrice including one by CAG with NIL comments
- NTPC's pay policies are governed by DPE
- Graded Excellent for Corp. Governance in DPE Rankings for Financial Year 2021-22



Social, Human and **Financial Capital**









Our Group's Overview

Innovating for Sustainability

Reporting Disclosures Statutory and Financial Results



Material Topics

11. Economic value creation

Key Actions

NTPC Group's economic performance during the Financial Year 2022-23 has resulted in a direct economic value generation of ₹ 1,77,608.87 crore

SDG Linkage

Capital Linkages

Financial Capital



12. Waste management

- Waste (Hazardous & Non-hazardous) generated is properly handled and disposed with approved agencies
- Specific guidelines and systems instituted for handling domestic waste and bio-medical waste
- The scrap and recyclable wastes are managed through auction on the MSTC e-platform
- Other solid waste is managed according to our Waste Management Policy & applicable govt. regulations







Natural Capital



13. Supply chain management

- Implementation of Sustainable Supply Chain Policy
- Capacity building programmes for suppliers on environment, social and economic fronts to create shared value
- · Capturing ESG data of suppliers on voluntary basis









14. New businesses and investments

- Transforming into an integrated energy player from a power generator only
- Diversified into Renewables, Green Hydrogen, Green Chemicals, EV Ecosystem, Power Trading etc.









15. Employee development and talent retention

- Continuously re-engineering HR systems to strengthen the relationship between business growth and systematic employee development
- Continuous engagement activities and training programs
- · Systematic job rotation and career development scheme to aid employees in their horizontal and vertical growth





Human Capital



Natural Capital

16. Biodiversity and natural resource management

- Implementation of dedicated Biodiversity Policy
- 38 Million saplings have been planted
- Currently implementing 16 Wildlife and habitat restoration projects









17. Innovation and R&D

- Delivering sustainable technology solutions through applied research and providing advanced scientific services through dedicated R&D centre (NETRA)
- · Independently developing patented technology
- Mitigation of greenhouse gas emissions by taking up the initiative to blend up to 10% of biomass-based fuels with coal at coalbased stations.
- R&D projects to increase the reuse of wastewater in our plants













