

# NATURAL CAPITAL

Commitment to Environmental Stewardship  
ensuring Sustainability



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**331.86 %**

Increase in share of  
Renewables in total energy  
consumption

**41.59 %**

Increase in emission  
offsets

**90.95 %**

Waste recycled  
and reused

**42.41 %**

Groundwater recharge as % of  
total water consumption

**7.72 %**

Reduction in Emission  
Intensity

#### Performance of environmental parameters during FY 25

POWERGRID places a strong emphasis on environmental stewardship and sustainable resource management across its operations. The company is dedicated to minimizing its environmental footprint and fostering sustainability throughout its business operations. POWERGRID invests significantly in renewable energy, energy efficiency, and conservation initiatives to promote responsible resource use, reduce greenhouse gas emissions, and preserve biodiversity.

Our sustainability journey started way back in 1998 with the disclosure of our Environmental and Social Policy & Procedure (ESPP) after a Nationwide consultation process in association with The World Bank. Based on the cardinal principles of Avoidance, Minimization and Mitigation, the ESPP is a comprehensive document on Environmental & Social footprints of Transmission sector, the applicable regulatory framework, the requirements on the funding agencies as well as the best practices to avoid/minimize the associated impacts. Our ESPP can be accessed at <https://www.powergrid.in/sites/default/files/inline-files/ESPP.pdf>. We kept on building upon our sustainability efforts through disclosure of biennial Sustainability Reports aligned with Global Reporting Initiative (GRI) frameworks and standards. In 2022, POWERGRID decided to adopt the Environmental, Social and Governance (ESG) framework in line with the rising aspiration of stakeholders and to further improve our Sustainability efforts as well as to set concrete Sustainability goals for ourselves, in order to contribute to Global and National Sustainability efforts. Accordingly, we published our first Integrated report for FY 2022-23 and our second Integrated report for FY 2023-24 was externally assured based on ISAE 3000 standards.

Our operational strategies prioritize minimizing environmental impact, focusing on low emissions and energy intensity. The inherent nature of our business activities avoids chemical processes which release air, water and soil pollutants into the environmental matrices, thus ensuring a clean operational profile. However, the company realizes the threat of climate change and is committed to reducing its carbon footprint, actively mitigating both direct and indirect emissions. Accordingly, POWERGRID aims to achieve

the net-zero emissions status by 2047. The company is poised to play a crucial role in combating climate change while maintaining its commitment to environmental sustainability and corporate responsibility.

#### ENVIRONMENTAL AND SOCIAL POLICY & PROCEDURES (ESPP)

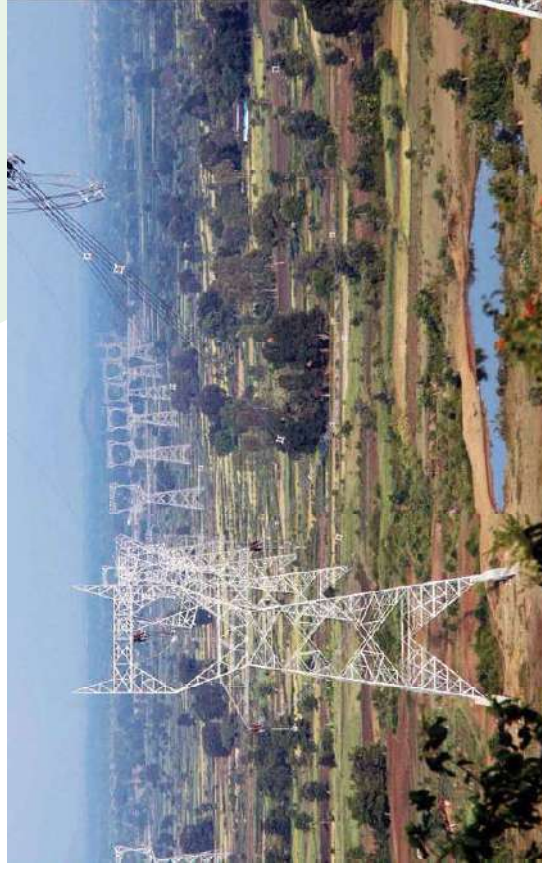


POWERGRID'S ESPP has been certified by two leading multilateral organizations; the World Bank & the Asian Development Bank under their policy of the use of country system and the country safeguard system respectively.

#### SUSTAINABILITY THROUGH TECHNOLOGY

As India's largest transmission utility, POWERGRID leverages technology to drive innovation and sustainability. Our proprietary tower designs—featuring multi-circuit, narrow base, extra tall, and pole-type structures—reduce environmental and social impacts associated with our transmission lines by avoiding/minimizing involvement of ecologically and socially sensitive areas like forest/wildlife and residential & agricultural land. In land-constrained areas, we transition from Air Insulated Switchyards (AIS) to Gas Insulated Switchyards (GIS), optimizing land use and reducing social impacts. Another key innovation involves using power from earth wires of our transmission lines to power the telecom antennas, thus eliminating the use of diesel generators and reducing the associated CO<sub>2</sub> emissions by 40-50 tons annually per site as well as eliminating pollutants like nitrogen oxides. Our digital substations conserve

the precious natural resources like copper, while use of natural ester oil in our reactors and transformers is reducing the quantity of hazardous waste in our campuses as used synthetic oil is categorized as Hazardous waste in India. POWERGRID is also in the process of replacing the high GWP SF<sub>6</sub> gas with better and more environment friendly alternatives. These initiatives highlight our commitment to sustainability and climate change mitigation despite the associated additional financial implications they have.



Narrow Corridor/Multi-circuit/Pole type towers minimising Right-of-Way

# CLIMATE RESILIENCE

Climate change has emerged as the most pressing challenge before the world due to its very high and multifaceted impacts on various aspects of human life ranging from agricultural systems to extreme weather events. While our activities contribute minimally to global warming and climate change as evident from our very low emission intensity as compared to other organizations of similar size and financial output, we do get affected by climate events. Our infrastructure in the form of transmission towers and substations may become vulnerable to extreme climate events such as Cyclones and floods. Further our system operations may also get adversely impacted apart from our manpower. Accordingly, we have identified our key vulnerability areas and have already started addressing the same.

## CLIMATE RISK IDENTIFIED

Extreme weather events such as enhanced intensity and frequency of Cyclones, wind, floods and rainfall caused by Climate Change may adversely impact our physical infrastructure.

Increasing ambient temperature is likely to reduce the current carrying capacity of conductors.

Climate Change leading to drier weather and increased ambient temperature causes increased incidents of forest fires, which, in turn, poses additional risk to transmission lines passing through Forest area.

This phenomenon will also have direct or indirect impact on the health of the workforce such as working in extreme climatic conditions would be detrimental to the health and could lead to loss in productivity.

## MANAGEMENT MEASURES

- » Identification and Mapping of areas/locations vulnerable to climate risks.
- » Strengthening of existing infrastructure in vulnerable areas, in line with present climate scenario as well as future climate predictions.
- » Proper consideration and integration of present as well as future climate scenario in planning and design of upcoming transmission projects in Climate Vulnerable area.

Identification and use of better, resilient conductors with better current carrying capacity such as HTLS conductors.

Avoidance of forest wildlife areas in the route of transmission lines.

Maintaining proper vertical and horizontal clearances.

Safeguarding our workforce from impacts of extreme climatic change by taking reasonable measures.

# RESPONSIBLE ENERGY MANAGEMENT

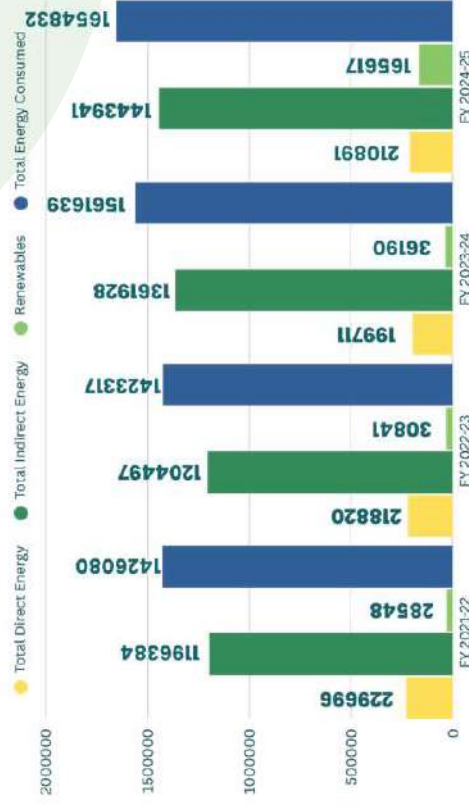
As a leader in the energy sector, POWERGRID is committed to efficient and sustainable energy management. Our focus is on delivering reliable electricity transmission across India and maintaining a resilient National Grid, while driving operational excellence and environmental stewardship. POWERGRID's energy management strategy includes optimizing energy efficiency, harnessing renewable energy sources, utilizing market renewable instruments and minimizing environmental impacts. By embracing innovation and adopting advanced technologies, we aim to adapt to the evolving energy landscape and support India's sustainable development goals.

In FY 25, despite adding four new substations, our auxiliary power consumption from Grid decreased by 2.69%, while the renewable energy consumption increased by 357.63%. However, total energy consumption rose by 5.97% due to a 6.02 % increase in indirect energy consumption, primarily from new substations and STATCOMs

added to enhance grid stability amid the growing share of renewables. Our solar energy capacity has grown to 12.63 MWP, a 23.82% increase from the previous year. India aims to expand its non-fossil fuel electricity generation capacity to over 600 GW by 2032, and POWERGRID is actively contributing to this ambitious target by playing the role of a key enabler.

Our solar installation increases 23.82% in FY 25 standing at 12.63 MW and currently meeting 3.15% of our auxiliary power need.

## Energy Consumption (GJ)



## Energy Consumption Trend (GJ)



**Sourcing Power through Green Tariff Mechanism:** Green Tariff Mechanism is a progressive policy instrument introduced by Govt of India to ensure easy availability of green power to bulk consumers and enhance green power capacity in the country. Consumers have to pay an extra premium for availing this benefit. In spite of the additional financial implication, POWERGRID has already started utilizing this provision for sourcing of green power for its HVAC substations and offices. In FY 2024-25, 7.94% of our auxiliary power consumption needs were fulfilled by the electricity sourced through Green Tariff provision, thus further enhancing the share of green energy in our energy mix. The share of green tariff is expected to rise to 35% by the end of FY 2025-26.

**POWERGRID is an ISO 50001:2018 certified organization**, following a systematic approach in achieving a continual improvement of energy performance & the Energy Management System (EnMS).



POWERGRID continues its journey towards energy efficiency by implementation of various energy conservation measures, such as selecting conductors after detailed optimization studies, utilizing low-energy appliances like LED lamps, installing highest rated Air conditioners for our new units, employing fuel catalyst devices for DG sets, and integrating solar photovoltaic systems in office/substation buildings.

Our company is classified as a Grade-I Energy Service Company (ESCO) under BEE regulations, signifying our capability to invest in and implement energy-efficient projects.



Solar PV at RHQ, Shillong



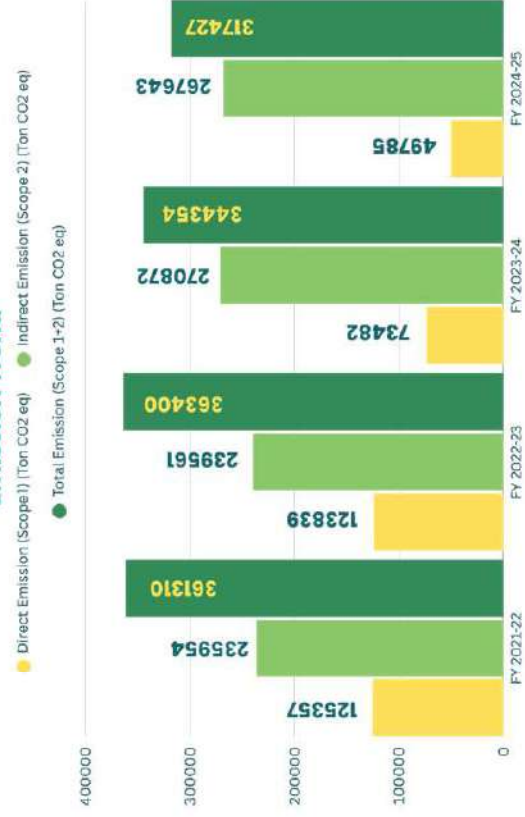
Solar PV at Bero S/s

## EMISSIONS REDUCTION AND MANAGEMENT

POWERGRID is committed to achieve Net Zero Emission status by 2047 as part of its strategy to combat climate change which in turn, is in line with its Board approved ESG Policy ([https://www.powergrid.in/sites/default/files/inline-files/ESG\\_Policy.pdf](https://www.powergrid.in/sites/default/files/inline-files/ESG_Policy.pdf)). Accordingly, we are striving towards carbon neutralization, despite having a relatively low carbon footprint. Our Scope 1 emissions are primarily driven by fugitive emissions, notably SF<sub>6</sub> leakage due to its high Global Warming Potential (GWP), with minor contribution from diesel consumption and leakage of refrigerant gases. In FY 25, POWERGRID achieved significant improvement in containing SF<sub>6</sub> leakage; reducing it by 41.87 % and consequently Scope-1 emissions by 32.25 % despite adding 4 new substations. These results were driven by stringent inventory management of SF<sub>6</sub> effective leak detection and mitigation strategies.

Diesel consumption in our premises is primarily on account of vehicular uses followed by boom/scissor lifts and Diesel Generators. Even though our diesel generators are operated mainly for testing purpose for very short durations, systematic maintenance under a Preventive Maintenance System (PMS) ensures minimal emissions. This is possible due to reliable power sources: dedicated feeders from DISCOMs and direct grid power. We are progressively replacing diesel vehicles with electrical/hybrid vehicles. Despite addition of 4 new substations, full electricity load realization of substations commissioned late in FY 2023-24, addition of STATCOMs and slight increase in Grid Emission Factor of Indian Grid, our Scope-2 emissions fell by 1.19%. This significant improvement became possible due to sourcing electricity through Green Tariff Mechanism for our HVAC substations and offices, though the same entails additional financial implications. Overall, our total emissions fell by 7.82% encompassing a reduction in both Scope-1 and Scope-2 emissions. Additionally, the green cover developed by POWERGRID comprising of around 10.79 lakh trees, which includes both in campus plantations as well as plantations under various CSR and other schemes, is accountable for offset of 7.40% of our total emissions registering an increase of 41.59% from the previous financial year.

### Emission Trend



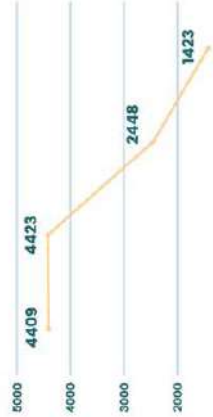
By March 2025, 197 diesel vehicles have been replaced with electrical vehicles.

POWERGRID planted 1,35,644 trees under "Ek ped Maa ke Naam" scheme of Govt of India.

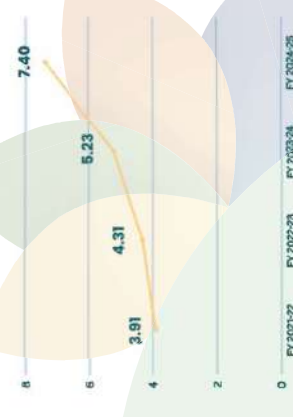
## MANAGEMENT OF SF<sub>6</sub> GAS IN POWERGRID

SF<sub>6</sub> gas a highly potent greenhouse gas, is used in electric substations largely due to its excellent arc quenching and insulating properties. Leakage of SF<sub>6</sub> gas in our establishments forms the bulk of our Scope-1 emissions standing at around 84% in FY 2024-25. Considering its significant contribution to company's emission profile, a focussed program was initiated with a goal to reduce its leakage. The program consisted of sensitizing the substation staff members about the importance of preventing SF<sub>6</sub> leakage and its direct relation with Climate Change, dedicated training programs on technical knowledge & best practices to be employed during operation & maintenance of the substation equipment, tight inventory control and prompt leakage detection & addressal system. The results of these concerted actions are extremely encouraging. SF<sub>6</sub> leakage which was 0.15% in FY 2021-22 has reduced to 0.04% in FY 2024-25. In absolute terms, this translates to reduction of SF<sub>6</sub> leakage from 4409 Kg to 1423 Kg which amounts to reduction of around 67.73%.

**SF<sub>6</sub> Leakage Trend (kg)**



**% Emission Offset**



Green Cover at Banka Substation



Green Landscaping at Biharsharif Substation



Green Cover at Jamshedpur Substation

## WATER MANAGEMENT

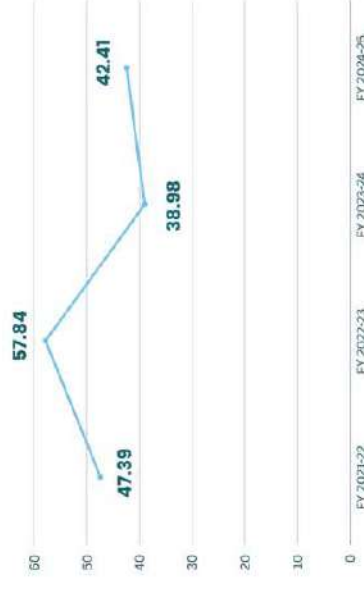
India faces a significant challenge with its water resources as it has about 18% of the global population but only 4% of the world's water resources. With increasing concerns over water quality, rapidly depleting ground water levels in various parts of the country, unequal access as well as growing competition between various user groups, water has become a critical natural resource. Although our water usage is primarily domestic in nature, POWERGRID as a responsible corporate entity understands its social responsibility and hence, aims to become a Net Water Positive organization by 2030 in line with its Board approved Water Management Policy ([https://www.powergrid.in/sites/default/files/inline-files/Water\\_Policy\\_2.pdf](https://www.powergrid.in/sites/default/files/inline-files/Water_Policy_2.pdf)). The basic tenets of our water management policy guide us to optimize our water consumption, treat, recycle & reuse water whenever possible and preserve & enhance the water resources.

## Water Consumption & Rainwater Harvesting Trend



In FY 25, our water withdrawal grew by 5.36% largely due to addition of 4 new substations and associated residential complexes as well as due to increased construction activities. However, due to enhancement of Rainwater Harvesting capacity, we were able to preserve 14.63% more rainwater compared to last financial year.

## Ground Water Recharge as of Total Water Consumption %



Drip irrigation is a proven technique for saving water needed for agriculture and horticulture. In this system specified volume of water is delivered precisely to the rootzone of the plants resulting in significant saving of water by reducing unnecessary wastage through runoff and evaporation. This technique also promotes optimal plant growth and reduces the chances of water logging. Considering these benefits and larger interest of the society, our Mogga substation which is located in the overexploited zone as per the classification of CGWA, decided to implement Drip Irrigation system for the green cover existing in the substation. Accordingly, 3 units of drip irrigation system were installed in the substation for a total cost consideration of ₹31,50,000. This intervention resulted in 60% reduction in total water consumption for horticulture purpose, which translates to an annual saving of 2160 KL of water.



Pond at Bihar Sharif S/s for collection of Rainwater & Groundwater recharge



Pond at Sitamarhi S/s for collection of Rainwater & Groundwater recharge



Digital Water Meter at Bishwanath Chariali S/s for accurate reporting of water consumption



Recording water meter reading at Leh S/s



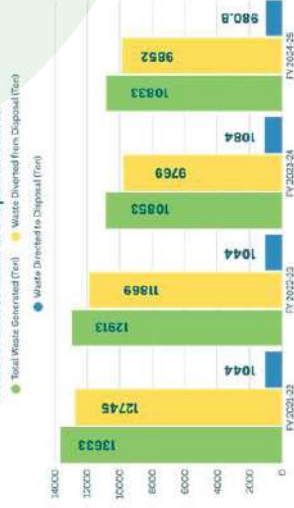
Pond at Bihar Sharif S/s for collection of Rainwater & Groundwater recharge

## WASTE MANAGEMENT

POWERGRID is committed to responsible waste management, guided by the 3R principles—Reduce, Reuse, Recycle—as outlined in our Board-approved Waste Management Policy ([https://www.powergrid.in/sites/default/files/inlinefiles/Waste\\_Policy.pdf](https://www.powergrid.in/sites/default/files/inlinefiles/Waste_Policy.pdf)). We aim to achieve and maintain 'Zero Waste to Landfill' status by 2030.

It's important to note that POWERGRID's operations do not involve chemical processes. The waste from our business activities primarily consists of construction and demolition debris and scrap materials such as Batteries, transformer oil, metallic scraps etc generated after their useful life from operation and maintenance activities. Accordingly, no clear trend in the quantity of different kinds of waste generated across the years would be possible. However, all waste generated is managed according to applicable regulations and our waste management policy. For the last 4 Financial Years, more than 90% of the waste generated in our campuses have been diverted from disposal through the processes of Recycle & Reuse.

### Waste Generated & Disposal Trend



Vermicomposting pit at Banka S/s

Conscious consumption of natural resources and responsible material management are important not only for environmental sustainability but also for long term economic security specially in view of emerging global constraints in supply chain of rare earth metals. Not only do they significantly impact a country's economy, but their extraction and usage also incur environmental and social costs. In transmission projects, essential raw materials used include metals like steel, aluminum, copper and concrete. POWERGRID has undertaken both technological and policy initiatives to conserve these precious natural resources including optimization of designs, implementing digital substations, employing efficient conductors with higher capacity, utilizing a judicious mix of HVDC and HVAC transmission systems, transmitting power at higher voltage levels, and prioritizing multi-circuit/narrow base towers whenever feasible.

With a view to enhance efficiency, safety and sustainability, POWERGRID has taken the initiative to shift from conventional substations to digital substations. Two such substations have already been implemented while one is under implementation.

In traditional substations, data from primary equipment (like current transformers, voltage transformers, circuit breakers) is transmitted using copper wiring to protection and control equipment. A process bus, defined by IEC 61850-9-2, replaces this analog wiring with a digital communication network, enabling sampled values (SVs) and control signals to be exchanged over fibre-optic cables between intelligent electronic devices (IEDs).

This initiative has reduced our Environmental footprints by reducing the need of copper cables by upto 80% and reducing the air conditioning requirements. Additionally, it has also reduced the substation commissioning time by 2-3 months and has ensured ease in Asset Management and optimized deployment of the skilled manpower.

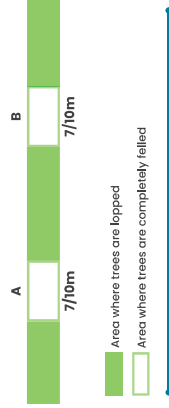
# BIODIVERSITY MANAGEMENT

## POWERGRID's Commitment towards Biodiversity Conservation

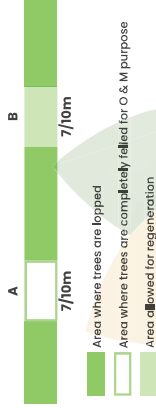
Conservation of Biodiversity is non-negotiable priority for POWERGRID. As such endeavour towards conservation of forest, wildlife and other ecologically sensitive areas begins at the project conceptualization stage itself and continues through the life cycle of the project. This includes selection of best route, ensuring minimum disturbance to forest/wildlife and implementing end of pipe solutions such as equipping our lines with bird diverters, providing tower extension and barbed wire fencing in towers while passing through elephant corridors etc wherever required. Even when traversing through forest becomes inevitable, we keep the actual damage to biodiversity by clearing vegetation only in strips of bare minimum area below our conductors and allow revegetation growth in all strips except for one for maintenance purposes.

### RIGHT OF WAY IN FOREST: 765 KV

During Construction (Stringing)

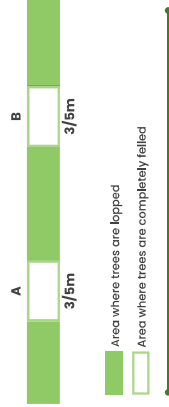


After Construction/Stringing

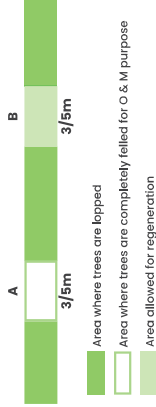


### RIGHT OF WAY IN FOREST: 400 KV

During Construction (Stringing)



After Construction/Stringing



Schematic depicting actual damage to vegetation limited to 2 strips of 3-10 meters below conductors

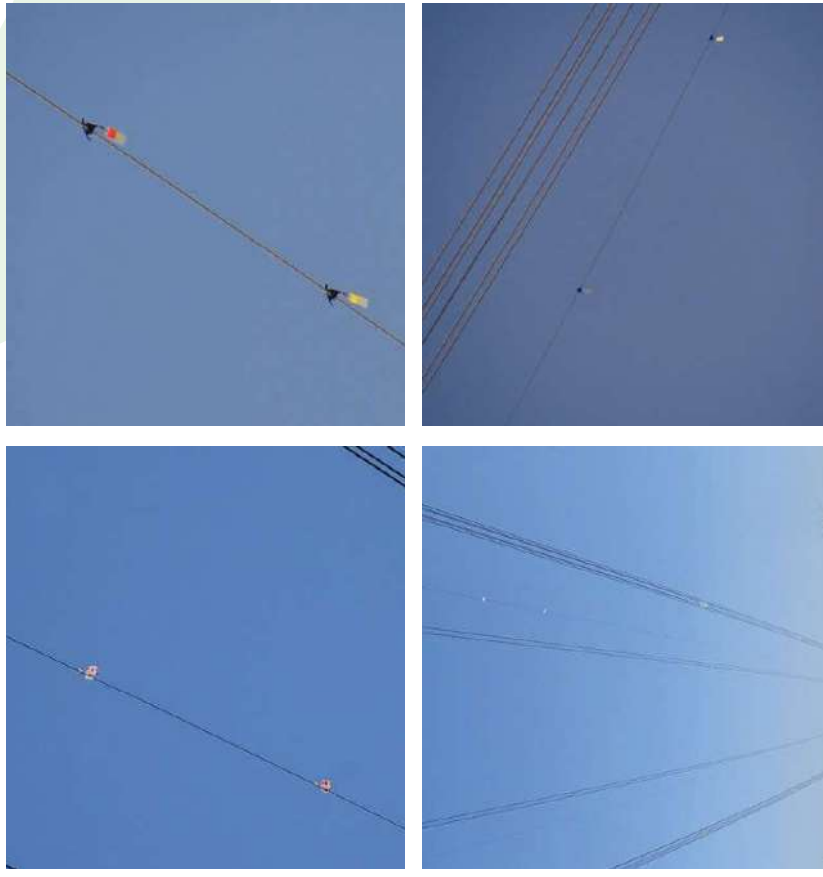
## PRIORITIZING ECOLOGICAL CONSERVATION

POWERGRID assigns top priority to protection and conservation of ecologically sensitive areas like Forests, Wildlife Sanctuaries, National Parks and other ecologically rich areas as they play a critical role in maintaining the environmental equilibrium. Apart from acting as a carbon sink by absorbing Carbon Dioxide, the most prevalent Green House Gas (GHG) in the atmosphere, they also serve as the hotspots of biodiversity. Avoidance/Minimization of such ecologically rich area has been made an integral part of the route selection criteria, in line with the basic principles of Avoidance, Minimization and Mitigation as enlisted in our ESPP (<https://www.powergrid.in/sites/default/files/inline-files/ESPP.pdf>) and our ESG policy.

## PROACTIVE ENVIRONMENTAL AND SOCIAL ASSESSMENT

Even before the initiation of construction activities, an Environmental & Social Assessment (ESA) of each upcoming project is conducted through the analysis of at least three feasible routes/sites considering Environmental and Social parameters applicable such as involvement of Forest/wildlife areas, wetlands including Ramsar sites, important animal habitats, identified bird areas and elephant corridors etc. Based on this analysis, the most optimum route/site with least E&S impacts is recommended for construction. This methodological approach has not only helped us in avoidance/minimization of ecologically sensitive areas such as Forest & Wildlife but has also facilitated in reducing the social footprints of our projects by avoidance/minimization of socially sensitive areas

such as residential/populated areas, religious places and places of historical & Archaeological importance. The effectiveness of this approach is demonstrated by the fact that the cumulative forest involvement in our lines has reduced by more than 60% since 1998, resulting in a saving of forest areas to the tune of 28109 Ha.



POWERGRID's lines equipped with bird diverters in ecologically sensitive areas.

## MANAGEMENT OF RESIDUAL IMPACTS

We realize and appreciate that despite our best intents and actions complete avoidance of involvement of Forest/wildlife areas in our lines may not be possible due to peculiarity of terrain and geographical constraints. In all such cases we obtain the required clearances/permissions such as Forest/wildlife clearance as required under the applicable regulations and comply with every associated stipulated condition imposed by the concerned authorities including the payment of financial levies in the form of charges against Net Present Value (NPV), Compensatory Afforestation (CA), Medicinal Plantation etc. Additionally, to manage any residual environmental impact associated with our projects, we prepare a comprehensive Environmental Management Plan (EMP) with measures to address such residual impacts. This EMP becomes a part of the contract conditions and as such its provisions are obligatory for contracts. Similarly, whenever substantial portion of protected area are involved in our lines, we mandatorily conduct a third-party biodiversity assessment study to pre-empt the impacts and accordingly a management plan is prepared and implemented to restore the ecological value of these serene ecosystems.



## HIERARCHY OF OUR SAFEGUARD ACTIONS

### AVOIDANCE

We make every effort to avoid Environmental & Social impacts of our operations by avoiding involvement of ecologically/socially sensitive areas by carefully conducting an alternative route/site analysis.

### MINIMIZATION

In case complete avoidance is not possible due to peculiarity of terrain or geographical constraints, we attempt to minimize involvement of forest/wildlife areas through optimization of routes/location of our transmission lines/substations.

### MITIGATION

To mitigate the leftover Environmental & Social impacts:

- » We comply with conditions imposed by the concerned authority such as payment of financial levies such as NPV, CA on degraded forest land double in extent and other non-financial conditions.
- » A comprehensive Environmental Management Plan (EMP) is made part of the contract conditions.
- » For mitigation of social impacts, we prefer encroachment free government land or securing private land for our substations on willing buyer willing seller basis in place of involuntary land acquisition on market/mutually agreed rate.
- » For Right of Way (RoW) damages, apart from compensation for damages to tree/crop, we also provide land compensation at rates provided by revenue authorities/market rate.

### RESTORATION

Voluntary activities like plantation of native species and impactful CSR interventions, based on Need Analysis of the local population in and around our operation areas.

The ±800 kV 6000MW HVDC bipole system between Champa (in Chhattisgarh) and Kurukshetra (in Haryana) is unique in terms of being the first in the world to deploy Dedicated Metallic Return (DMR) conductor in place of conventional ground electrode resulting in saving of the land resource (about 75-85 acres).

Given the massive line length 1,288 km (2,576 ckm) spread across States of Chhattisgarh, Madhya Pradesh, Uttar Pradesh and Haryana, it was huge challenge before POWERGRID to manage the Environmental & Social (E & S) aspects particularly avoidance of ecologically and socially sensitive areas along line routes. Through meticulous route planning, POWERGRID was successful in complete avoidance of protected areas (wildlife sanctuaries/National parks) in the line route, involvement of some major forest stretch in Chhattisgarh and Madhya Pradesh was inevitable due to Geographical constraints. Accordingly, employing the cardinal principles of our ESPP, all out attempts were made to restrict the involvement of forest area involvement to the minimum extent possible. As a result, we were able to save a huge tract of high biodiversity area, which include –

» Complete avoidance of Achanakmar Wildlife Sanctuary as well as minimization of forest/tree felling requirement in Kodri Forest Range, Marwahi Division of Chhattisgarh State (lower location 298-307) involving 17.6 ha. (2.55 km) of dense forest dominated with Saal, Soja & Tendu species.

» Additionally, POWERGRID used extended towers in these forest stretches to reduce the tree felling requirement to the extent possible. Out of total 10 towers in this forest stretches 8 towers were provided with an extension from 3m to 25 m {(298 (D+25), 300 (D+9), 301 (D+9), 303 (C+9), 304 (D+3), 305 (D+3), 306 (D+7.5), 307 (D+6)}]. Due to this initiative, only 590 trees were affected in place of 1953 trees estimated to be felled by the State Forest Department, resulting in saving of 1363 fully grown matured trees.

» Even in case of non-contiguous/small forest patches, POWERGRID adopted more longer route to avoid such area to minimize impact on forest involvement particularly to reduce felling of trees. One of such examples can be best depicted between tower locations no. 346-360 wherein approx. 1.5 km line length was increased to avoid involvement of around 7 ha. of additional forest area as well as saving of at least 1500-1700 trees.



## PUBLIC CONSULTATION & GRIEVANCE REDRESSAL

Public consultation/information is an integral part of the POWERGRID project cycle. POWERGRID follows a well-defined procedure for conducting public consultation involving different techniques as laid down in its ESPP, which is also approved by The World Bank under the Use of Country System (UCS) and by ADB under Country Safeguard System (CSS). There are different techniques which are used either independently or in combination appropriately at different milestones of the project depending on field conditions. The location for public meetings is usually selected at every 50-100 km involving major villages/inhabited area enroute the line. However, in other villages/parts, informal group meetings or other techniques are applied for consultation. The consultation and feedback processes are continuous and are implemented regularly at different milestones of project cycle.

The process of consultation and information dissemination of information begins even before the start of construction as POWERGRID informs the general public by publishing in 2 (Two) local newspapers in vernacular language on implementation of project indicating the selected route of the transmission lines with name of the town /villages it is passing through and invites their suggestion, if any. During the route survey also, POWERGRID site officials meet people and inform them about the routing of transmission lines. During construction, every individual, on whose land line is constructed and people affected by RoW, are consulted. Apart from this, public consultation using different techniques like Public Meeting, Small Group Meeting, Informal Meeting are carried out during different activities of project cycle. During such consultation the public are informed about the project in general and in particular about the following:

- » Complete project plan (i.e. its route and terminating point and substations, if any, in between)
- » Design standards in relation to approved international standards
- » Health impacts in relation to Electromagnetic Field (EMF)
- » Measures taken to avoid public places such as school, hospitals, etc
- » Other impacts associated with transmission lines and POWERGRID approach to minimizing and solving them
- » Compensation process to be followed for paying compensation to Project Affected People (PAPs)

Additionally, questions, doubts and apprehensions of members of the public are heard and answered. Queries raised by participants mostly concentrate on improvement in power availability to their villages, safety and RoW compensation. Some of the queries generally raised are presented below:

- ✓ Whether this line will improve the power supplies in our village and remove frequent interruption/ outage?
- ✓ Whether these lines are safe for the nearby dwellers without any problems of electrocution while working in the fields?
- ✓ What is compensation policy for the standing crops damaged and compensation for the land occupied by the tower footings?
- ✓ What about employment for local people and procedure for same?
- ✓ What is the width of RoW for cutting trees. How much compensation for the trees will be given and when?

All the queries raised by community members are answered to their satisfaction. During the reporting period, public consultation was conducted for all our projects as mandatorily required by our ESPP.

**Public Grievance redressal Mechanism:** To further smoothen the relationship with community, we have developed an effective Grievance Redress mechanism to resolve any leftover grievance of community/public. The GRM has two tiers, the first being Project/Substation level Grievance Redressal Committee (GRC) and the second being the Corporate Level GRC chaired by the Director (Projects) of the company. All written and verbal complaints received by Project level GRC are to be resolved within 20 days of receipt of complain. If the complainant is not satisfied with the outcome of the project level GRC, he/she can approach the Corporate Level GRC, which in turn, has to resolve the complain/grievance within 45 days.

Moreover, public can also directly raise their queries/questions/concerns with POWERGRID at <https://www.powergrid.in/public-complaints-0>

